TORNADO IN THE CATHEDRAL:
Decolonial Forest Imagination and the Cathedral Pines

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Paper Buck

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Approved By:

[redacted]

Imin Yeh, Project Advisory Committee Member

[redacted]

Angela Washko, Project Advisory Committee Member

[redacted]

Noah Theriault, Project Advisory Committee Member

[redacted]

Jon Rubin, MFA Program Director

[redacted]

Charlie White, Head of the School

[redacted]

Dan Martin, Dean, College of Fine Arts

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ABSTRACT

Keyswords: Cathedral Pines, myth, white pine, romanticism, decolonization, settler colonialism, forests, reciprocity, conservation, wilderness, tornado, New England, American landscape

This essay is focused on the story of an old growth forest preserve in Cornwall, Connecticut known as the Cathedral Pines. The author, who grew up beside the forest, looks at the lifecycle of the forest as a case study in settler constructions of forests, conservation, and the American landscape. The author uses archival research and outreach to local indigenous and environmental activists to explore the social and ecological processes that have shaped the Cathedral Pines, within broader regional histories. The text looks at the political economic history and symbolism attached to white pine trees to explore the impacts of racial colonialism on the present ecology of forests within the Housatonic and Hudson River valley regions. The author argues that settler mythologies of wilderness continue to structure discourses of conservation. The concluding sections of the text draw on decolonial discourses of "reciprocity" to think about the potentialities embedded in efforts to align forest restoration efforts with indigenous-led environmental justice movements.

Paper Buck, 2020.

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INTRODUCTION: Myth and Imagination at the Cathedral Pines

In my practice as a visual artist, I am often fascinated by the situated production of cultural myths and narratives, and their circulation from the personal to the political, or between intimate, collective, and national spheres of discourse. The stories we tell carry the residues of the legacies we've inherited, and they also suggest our emergent desires. They signify ruptures or continuities within memory and identity, and they become embedded in the materiality of our political and ecological surround. In this essay, I peer out the back window of my childhood home towards the myths and narratives spun of a significant landmark in the forest landscape that surrounds it.

Significant landmarks are often constructed as repositories for memory, myth, and identity. Residents of Cornwall, Connecticut, a rural town of 1400, set in expansive forests, adopted a local old-growth white pine forest behind my childhood home—the Cathedral Pines— as a collectively beloved, permanently conserved, shrine-like space, of local historicity and ecological connection.
My own identities were certainly shaped by the woods I grew up beside, which I, as a young tomboy, connected to a woodsman masculinity modeled by my father and uncles through their shared love of wood chopping, woodworking, and afternoons spent logging. This somewhat particular familial wood-fetishism grew from an intergenerational romantic identification with early American pioneer cultures. It was accompanied by a public-school curriculum that continued to center white, male, and certainly straight, settler narratives of New England and American history. When I came out as a teenager— first, as a dyke and later as transgender— I drew from the signifiers I found in my environment

1 Undated cyanotype featuring the "Tree in the Rock," the most iconic singular place within the Cathedral Pines, and certainly the most photographed. This image is undated and the photographer is unknown. The image likely taken in the mid to late nineteenth or early twentieth century, based on dated comparisons. "Tree in the Rock," Archives of the Cornwall Historical Society. Box 33, folder 41. Accessed October 2018.

to construct my emerging masculine and queer identities. I embraced an iconic uniform of the American cultural panopticon; the lesbian in flannel— and tweaked it for my own generation. I wore brown Carhartts, a red and blue plaid flannel, a ballcap, and a chest binder, most days for at least the next decade. A former partner once joked that I would likely dress like a lumberjack for the rest of my life.

I lived away from Cornwall for much of my teens and twenties. I needed queer culture and it was no where to be found in my life there. I lived in Minneapolis, Minnesota, and Oakland, California, for fourteen years after high school. Queer culture offered me new visions of kinship that recrafted my sense of purpose. I became involved in community organizing and anti-racist political education. In particular, I began working to support indigenous-led decolonial struggles. Place is often central within discussions that center decolonization. I began to think about my own politics as relational and contextually responsive to the places and place-histories I exist within. Queer culture, for me, is more about creating space than identity. It is about practices of interdependency, and an expansive concept of kinship. These orientations have been my guides in approaching this text and research.

Despite my need to live elsewhere for a time, I always missed home. I would return for work each summer, when Cornwall's undeveloped ponds, rivers, and forests verge towards the utopic and the youth employment options, (childcare, landscaping, gardening, and camps), otherwise quite nonexistent, bloom amidst the increased population and affluence that comes with a regional summer-based second-home economy. As I wandered the Pines during these summers in Cornwall, I began to think, in the woods, about the role that white settler nationalism has played in shaping narratives of the American landscape, and by extention, ideas of conservation and forests— both historically, and in the present. Without initially intending to take on this project, I slowly began to research the history of the land surrounding my home, including the area today known as the Cathedral Pines.

Loss and transformation are significant themes in the myths and narratives of the Cathedral Pines. Across the twentieth century, the Pines were considered the largest old-growth forest in southern New England, but their history was dramatically altered by a devastating 1989 tornado. Ninety percent of the old forest fell in just minutes. Eulogies were written, trails rerouted. The forest became an impenetrable jungle gym of fallen giants. It grew quieter. The destruction caused many tears across town, and spurred debates into the politics of conservation and forestry practices. The Pines became a forest ecology study site. Thirty years after the Tornado, I return to this significant landmark of my childhood landscape to contemplate what we might learn from the dramatic lifecycle of the Cathedral Pines.

The mangled trees and upturned soil that the tornado induced presented regional ecologists and environmental historians with the opportunity to research the material site history. While their studies essentially unanimously suggest that this was not a virgin, pre-settlement, uncut forest, scientific findings don't necessarily yield to the inertia of local lore, and it continued to be constructed as such across my childhood. My own interest in the myths and narratives attached to the Cathedral Pines might be better presented as an impulse to demythologize, renarrate, unthink.

Amnesiac myths of a romantic settler-past frame my earliest endearments with the forest that is the subject of this text. A generative and constructive undoing is the journey we are on here. In one canonical text, *Mythologie*s, Roland Barthes says, "myth has the task of giving an historical intention a natural justification… What the world supplies to myth is an historical reality, defined, even if this goes back quite a while, by the way in which [cultures] have produced or used it; and what myth gives in return is a natural image of this reality." Myth, as a carrier of "historical intentions," acts as a social-political force upon imagination; the ideas and desires cemented by myth become action and interactions that form and circulate within politicized cultural environments.

Myth in this sense, acts as a structural support to propel collective values, ethics, and worldviews into use, and justify or compel socio-ecological interactions. We might even say that myth is a form of social technology; Donna Haraway says that "'Ideas' are themselves technologies for pursuing inquiries. It's not just that ideas are embedded in practices; they

are technical practices of situated kinds."[2] Ideas act as substrates that concatenate to form ideologies or narratives that are situated— that is to say, contextual in origin. Haraway, years later, further says, "It matters which stories tell stories, which concepts think concepts….narratively, it matters which figures figure figures, which systems systematize systems."[3] It matters that, specifically, settler colonial intentions have been the driving force in the construction of the "New England" and "American" landscape; the pollical economy of the United States is one that has calcified and continually reproduced racialized disparities, indigenous erasure, and exploitative ecological practices that primarily benefit western settler imperialist elites. In Haraway's framework ideas are world-making devices; political discourses— such as white supremacy or settler colonialism— function as social technology. Myths, as social discourses, thus reflect situated locations of power that are culturally and often, geographically, quite specific. Myths are contextual and temporal—of a place and time. They may endure as embedded residues or fragments despite evolving ontological and material conditions.

Mythology reflects a conceptual landscape of cultural consciousness, a place of social emergence and inherited collective baggage, that mirrors the material and social legacies that carry it into present circulation and perpetuate a production of meaning around it. Mythologies, in Barthes conception of them, do the work of carrying "historical intentions" into human material relations, ultimately, for this discussion, with the earth, or in the landscape. This framing resonates with a concept from the field of geography used by the artist Trevor Paglen, who calls his work "experimental geography" and speaks of the concept of the "production of space." He says, "In a nutshell, the production of space says that humans create the world around them and that humans are, in turn, created by the world around them. In other words, the human condition is characterized by a feedback loop between human activities and our material surroundings. In this view, space is not a container for human activities to take place within, but is actively "produced" through human activity. The spaces humans produce, in turn, set powerful constraints upon subsequent activity."[4] I would not myself say that humans create the world, persay, but what is important here is how Paglen points to the interdependency of cultural activities and physical materiality. His discussion of "human activity" resonates with Haraway's concept of ideas as technology—both act as prefigurative forces that in effect, shape and construct space. I use these arguments to make a case for the production of myth; as a feedback loop between myth and space. Myths reflect the situated ideas and political narratives that compel landscape interaction. The material consequences of these interactions then frame our knowledge, and provide precedence, or a status quo, for subsequent activity. Myths carry historical intentions within contextual, temporal, and material land-use patterns, which may self-perpetuate beyond their situated origins, and simultaneously, evolve.

This is all to say; mythologies of place persist in our imagination, even as the social meaning shifts, and the spaces they attach to, change. The myth of the Cathedral Pines as an old growth forest is enmeshed in a history of settler wilderness discourse that haunts environmental justice movements and our efforts to address ecocide— or, climate change. Our histories are embedded in our present; I unpack the history of this place I care for, because our visions of the future depend on the nuance and character of our relationships to the past. I write this text to my community of origin, conceptualized broadly—its target is the settler cultural imagination that continues to dominate the political and cultural institutions, and land base, of present-day New England.

The construction of the Cathedral Pines as an old growth forest preserve carries political implications that might not be quickly apparent. Across this essay, I look at the construction of old growth forests in relation to historical narratives of wilderness and conservation. While projections of white settler supremacy are certainly embedded within the commodification of forests as raw materials, even land management practices involved in conservation are marked by colonial constructions of space; wilderness and preservation as hands-off zones devoid of human activity. Many of the decolonial scholars and environmental justice organizers I cite argue against this binary framework of conservation. I

[2] Donna Haraway. *When Species Meet.* (Minneapolis: University of Minnesota Press, 2008), 282.

[3] Donna Haraway. *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 101.

[4] Trevor Paglen, "Experimental Geography: From Cultural Production to the Production of Space," in *Experimental Geography*, (New York: Independent Curators International, 2008), 3.

will look at the idea of reciprocity, which has been used by indigenous scholars and organizers to describe socio-ecological interrelationships of care and tending. These practices work to sustain human needs while actively repairing unbalanced ecosystems.

Across this text, I look at the Cathedral Pines as a case study in the evolution of settler ecological imagination – of the forest, of conservation, nature, ecology, and the American Landscape. The first sections orient readers to the site of the Cathedral Pines by focusing on the debates that surrounded the Tornado of 1989 to unpack modernist constructions of conservation as boundary between "man" and "nature." I then look at the ecological history of the Cathedral Pines and broader Housatonic river valley within the political context of early settlement and colonialism in southern New England. The text explores the formation of the site as a distinct, conserved forest in response to the adoption of romantic wilderness discourses, arising within lineages of capitalist industrialization and manifest destiny. A second thread within this essay looks to environmental justice movements, decolonial thinkers, and regional indigenous organizers who are actively working to rehabilitate battered ecologies and build multi-racial movements for historical and ecological justice in the broader region of the Housatonic and Muhheakunnuk/Hudson River Valleys. I argue that organizing broad-based collective support for the work of contemporary regional indigenous organizers is a fundamental necessity of effective work to address the paired social and ecological crises produced by white settler supremacy in contemporary New York and New England. Decolonial frameworks offer buoyant thinking tools that can be put to use as natives and non-natives alike engage the work of reimagining justice in our social relations alongside the futurity of the ecosystems we cohabitate. The task is to reimagine our interdependencies, and even—potential roles as healers— in the spaces and relations we are integrally part of.

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A SEA OF SAPLINGS

I was nine in 1995, when I moved to Cornwall from the Hudson River Valley. We moved into a winding house on a rolling hill in the middle of the woods, because my father had spent his early life on a farm in the country, and the rest of it trying to find his way back. My father is a writer— highly idiosyncratic, a "traditional American guy," by his own account, and an avid, daily, woodchopper. I got my love of the forest and its details, initially, from him. My dad is a time capsule of sorts—born in 1950, he grew up on a nostalgic baby-boomer-era-white-Americana; his favorite artists are Hudson River School painters, his favorite books come from the nineteenth century canon, he knows more about the civil war than most historians. "My only problem seems to be that I was born in the wrong century," he quips.

5 Pat Blakey. "Storm Chronicle," *The Cornwall Chronicle*, Summer 1989. Archives of the Calhoun Family. Accessed October 2018.

My mother, who I thought of as more of an urbanite in my youth, was eventually won over by the woods. She is a sculptor, and over time her practice came to reflect the land around our home. Her most common materials are twigs and found objects collected in the woods. We moved north based on the miscalculation that my father's first novel's success would absolve him of the need for his nine to five as a journalist. This was not so—he quickly found a new commute, but the idea was, that at least he was coming home to some version of the mythical Thoreauvian *cabin in the woods*.

At nine, I knew I'd hit the jackpot. The remaining pines were a miraculous upgrade on the suburban brambles previously zoned for my world-making. Even in their glory days, the Cathedral Pines were a succinct gem; forty-two acres of two- and three-hundred-year-old White Pines and Hemlocks. Across the twentieth century, tourists and hikers poured in from all over. The Appalachian trail routed itself from along the banks of the Housatonic, up into the mountains, in order to catch the quarter-mile stretch of exceptionally quiet and tall Pines. When we first moved to town, Appalachian trail hikers still emerged from the woods on the front edge of our lawn most summer days. We sometimes got to talking and invited them in. But the path was eventually rerouted, and the flow decreased. The Pines were reintegrating into another trail—the Mohawk Trail— but this is a lesser known path and most of the foot traffic today is local.

[6]

The storm hit six years before my family arrived. At that time, the swindled hillside was covered in a scruffy fuzz that obscured the felled timber from the valley below. It wasn't until about a decade later, when the new forest began to reach above my head, that I finally wandered, one day, into the heart of the wreckage. It is no leisurely hike in there— more like a cross between an obstacle course and a sculpture park. My usual, more easily trod destination is the humble hilltop summit where the remaining old pines tower— a small plot, about five acres. I call it the "last stand," because it was the only section still upright after the Tornado.

6 Found image of the "scruffy fuzz" covering hillside in the Tornado blowdown area, seen from Cornwall Village, probably about five years after the storm. You can see a sharp edge of the forest, demarcating the areas felled by the Tornado. Some dead standing white pine trees in the blowdown area visibly depict the former height and range of the stand. Nativetreesociety.org, accessed October 2018.

[7]

It's been almost 25 years now that I've hiked this little trail to the "last stand." My interest in digging deeper into the history of the site was piqued when I began to notice a drastic shift there over the last two summers. All my life this was an open, mature forest floor— the type of forest you could see distant hills through. The crowning foliage had slowly walked itself upwards, clearing the lower levels of canopy, providing a view through the trees.

Last summer, walking in the last stand, I noticed a couple large pines had fallen. I wasn't around for the storms that took them down, but there is a large opening now, filled with light and space. The mature and open forest floor transformed rapidly in response. It is now a sea of black birch saplings.

[7] Photograph taken by the author, during a hike with my father in the "last stand" prior to the rapid transformation of its ecology. Coltsfoot Mountain is visible through the trees. 2012.

[8]

The yellow-green foliage obscures the interface of roots and soil as tall pines lift from a groundless screen of green. I won't deny it— an aversion to change arose within me. My attachment took shape simply and reactively; I did not want the forest to change. Of course, I realized quickly that I was being silly; forests, and all living communities, change. I began to wonder what these thickets of birch might imply for the future of the pines. Alas, I am no forester. I found myself unsure where exactly to direct my questions. Tiny aluminum markers pinned to many of the largest trees in the last stand caught my eye. I had wondered about these tags many times before. It was time to finally figure out who left the tags. Maybe they can tell me why, thirty years after the tornado, the forest has begun a new stage of transformation.

[8] Photograph taken by the author. "The yellow-green foliage obscures the interface of pine and soil as tall pines lift from a groundless screen of green." August 2018.

[9]

CONSERVATION AND THE TORNADO OF 1989

The story of the Cathedral Pines became associated with contemporary forest ecology research when the Cathedrals fell en masse, in a 1989 Tornado that was among the more significant wind storms in twentieth century Connecticut. Slashing across the entire eastern longitudinal reach of the state, it crawled up the Housatonic Valley, causing widespread damage. The Cathedral Pines drew wide attention as a significant casualty of the storm.

The felling of the Cathedrals was an emotional loss for Cornwall. Regional newspapers reported on locals weeping openly in the streets as the sun rose the following morning over the nearby village.[10] A potent regional debate came to brew over the forestry and conservation practices being considered in response to the destruction. Townspeople and elected officials clashed with conservationists over the desire to salvage lumber, which was estimated to be of significant value. Some locals thought it criminal to let these rare and massive pines rot in place. Other residents worried excess downed tinder would increase the possibility of forest fires. Prominent ecologists argued that Cathedral Pines should be left to take its "natural course."[11] The final decision, to clear a protective fire break around roadways and adjacent homes and otherwise leave everything as it fell, reflected the organizational mission of the Nature Conservancy, who continue to own the site today.

[9] Photograph by the author depicting the markers placed in the last stand by Yale School of Forestry researchers.

[10] Ryan Hanrahan, "Forest Destroyed by Tornado Makes A Comeback," NBC Connecticut, November 15, 2010. https://www.nbcconnecticut.com/news/local/21-years-later-a-forest-comes-back/1854882/, accessed April 2020.

[11] Micheal Pollan. *Second Nature: A Gardener's Education*. (New York: Grove Press, 1991), 211.

CATHEDRAL PINES

Continued from preceding page

the Nature Conservancy wasn't going to do any cleanup because they wanted to just leave the Pines alone," he says. He could see the broken forest from his office. "All those trees were down, with air space beneath them because of the big branches — perfect conditions for a big fire. And we couldn't possibly fight a fire there, could never get the trucks up there to do it." He called the Conservancy.

THE CONSERVANCY'S VIEW

Since 1954, the Connecticut chapter of the Nature Conservancy has acquired 23,000 acres and created 65 preserves, and has transferred more than 75 other parcels to the state or to land trusts. "Preserve" is the key word: Hikers are welcome on most Conservancy land, but the group's first priority is the preservation and study of wildlife, not the comfort and recreation of people.

The Conservancy obtained Cathedral Pines, 42 acres, in 1967. The tornado demolished 80 percent of the trees there and also caused a storm within the Conservancy. Some people urged the board not to "chicken out," to hold to the pure line: that is, what nature hath wrought on Conservancy land, let no human hand counteract — no clearing of fallen logs, no reforesting, no interference in the natural cycle. Others warned that this stance would breed lawsuits, public ill will, and a reputation for the Conservancy as lunatic greenies who put bugs and dead trees above endangered people. The moderate faction felt that the Conservancy's philosophy should be bent in cases of natural disaster, while the the doctrinaire faction considered "natural disaster" a contradiction in terms.

People sent letters asking the Conservancy to clean up the Pines as a fire hazard, a threat to property values, and a public eyesore. Some suggested selling the fallen timber and using the proceeds to reforest or buy another unique parcel of land. None of the Conservancy's 1,000-plus preserves across the nation had ever been struck by a natural disaster, so the issues raised by Cathedral Pines posed a new test, and other chapters were watching closely.

On Sept. 18, two months after the tornado, after consulting with foresters, entomologists, ecologists, firemen, and the citizens and officials of Cornwall, the Conservancy board recommended that Cathedral Pines be left untouched for scientific study, with the exception of a cleared 50foot firebreak around the perimeter. It was a compromise that Diskin and the neighbors could live with.

Steve Kemper writes Northeast's weekly "Conversations" column and the occasional series on parenthood.

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Loggers cleared a 50-foot firebreak around Cathedral Pines, but it troubles them that thousands of dollars worth of rare timber is being left to rot at the site.

THE NEIGHBORS' VIEWS

"We watched two dozen giant pines go down. Tons and tons of trees, like dominoes, in less than a minute. Wham!" Nancy Calhoun lives with her husband, John, and their two young daughters on the edge of Cathedral Pines. "That's when we realized it was more than a thunderstorm, so we ran down to the basement. When we came up 10 minutes later, our world was irrevocably changed. It looked like a war zone."

John spent his boyhood in the Pines. His family bought the forest in 1883 when loggers threatened it. "Bought it so it would never be destroyed — ha!" remarks John's wry mother, Polly, who lives with her husband Frank just down the hill from their son. In 1967, the Calhoun family donated the 42-acre tract to the Nature Conservancy to preserve it from human depredation.

The tornado spared John and Nancy's house, barn, and livelihood — their herd of llamas — but trees from the Pines cluttered their pastures and wrecked a mile of fencing. Their two biggest worries were fire and a devastating parasite transmitted to llamas by deer, which were now foraging all over the unfenced farm. The agreement signed by John's family, stipulating that the Pines should remain undisturbed by humans, was now threatening his way of life.

John and Nancy are almost satisfied with the compromise offered by the Conservancy, but think it's wasteful to leave all that beautiful timber rotting on the ground. Polly Calhoun, on the other hand, who was enjoying the storm as "a real crackerjack" before it pushed the rain inside her house, thinks it's a good idea to leave the Pines alone and study what happens. She and Frank are tough old hardwoods, and survivors. Polly wrote to friends about the storm, and so many people liked her laconic account that she had it printed and sold it for $2.50 a copy, proceeds going to the Cornwall Village Improvement Society, which is replanting trees around town.

The Calhouns' neighbor, Ann Peterson, had a similar idea. She took an old photo of the Pine in the Rock, which the tornado had abbreviated into the Stump in the Rock, and asked the people at Tech Style Graphics in West Cornwall to print T-shirts and sweatshirts featuring the old symbol. The printer gave half the proceeds to the Improvement Society for new trees.

Before the storm, John and Nancy Calhoun had been hidden from the village by a wall of towering trees, some more than 150 feet tall. Now their privacy is gone, replaced by a 180-degree vista over tree stumps, all the way across the valley. "It's depressing," says Nancy. "If Mother Nature gave me the choice, I would give up the house and get back the trees. They were the background for our life." John hopes that over time they'll begin to appreciate the new view instead of mourning the old one. "But not yet. We've been too busy cleaning up, and there's still a lot to do."

Peterson's children never went to summer camp. No need to, with the Pines right there. She and the kids knew every inch of it. But it's OK with her if the Nature Conservancy thinks it should be a science project, and in some ways she's enjoying the altered topography. "I have a much better view now. I get sun and light. The house was awfully closed in. I do have those awful stumps sticking up, though, and my property has been devalued $52,000. I was up in the Pines yesterday, and it's sad. But in the spring things will sprout up again."

THE LOGGERS' VIEW

The Conservancy hired John and Tom Trowbridge, loggers out of Hampton, to clear the 50-foot firebreak, and the Trowbridges hired Jim "Smitty" Smith and his two stepbrothers, Tom and Mike Ernst, to do the heavy work. Like the 18th- and 19th-century lumberjacks who felled New England forests of primeval pine, they didn't begin work until mid-December, after the ground froze. The old loggers waited for winter because snow and ice made it easier for oxen to drag the huge timbers. Smitty and the Ernsts waited because the equipment they use, huge pole trucks and chain-studded skidders, can tear up the land, and the Conservancy wanted as little man-made damage as possible. Conditions were bad. December was bitter cold, so the machines often refused to work, and when they did they slid around on the frozen mountain. Then came the January thaw, and the steep slope turned as slippery as an eel's back. Slow going. By the time the job ended, the saplings in the Pines were budding.

It took the loggers about two minutes to cut down the corpse of a 100-foot pine, and 10 more to buck it up into logs. They cut up quite a few 130-footers that must have been 200 years old. Tom Trowbridge says it usually takes 50 or 60 logs to fill a trailer truck. They filled one trailer at Cathedral Pines with just four.

Some of the best timber went to Mystic Seaport and specialty mills. Most went to Canada to be milled into boards, then hammered and glued into furniture. As Thoreau remarked in *The Maine Woods*, even the most magnificent white pine can end up as kitchen matches. Trowbridge says the hemlock, as usual, was "too shaky." That's logger shorthand for "too much internal stress when it grows, so when you saw it, it falls apart on you." So most of the high hemlock went for pulp. The big unmarketable chunks at Cathedral Pines, such as trunks, were hauled to the dump. Most logging operations leave behind "slash" — woodchips and small branches — but slash would be a fire hazard here, so Smitty and the Ernsts blew the chips into box trailers destined for the pulp factory. Tom Trowbridge calls it ironic that he always needs a handful of permits to remove or cut down trees, but the Nature Conservancy can leave "thousands and thousands of dollars worth of timber on the ground." That bothers him.

THE CRAFTSMEN'S VIEWS

When Dana Hewson heard of the blowdown at Cathedral Pines, he envisioned a windfall for Mystic Seaport, where he is vice president of watercraft preservation and programs. His best find: a 70-foot pine with a 24-inch diameter at the tip. "When I saw it, I said, 'That looks like a spar tree.'" At some

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The debate made its way to the editorial section of the New York times in the summer of '89, and thus, attracted considerable attention from a variety of academics, scientists, and historians over the following decade. One town resident at the time of the storm, the author, Micheal Pollan, returned national attention to the Cathedral Pines in an essay, "The Idea of a Garden," published in his popular 1991 book, *Second Nature*. He discusses the cultural construction of ideas of wilderness in relation to the debates that followed the tornado:

> "Everybody enjoys a good local fight, but I have to say I soon found the whole thing depressing. This was indeed a classic environmental battle, in that it seemed to exemplify just about everything that's wrong with the way we approach problems of this kind these days. Both sides began to caricature each other's positions: the selectman's "terrible mess" line earned him ridicule for his anthropocentrism in the letters page of The New York Times; he in turn charged a Yale scientist who argued for noninterference with "living in an ivory tower."
>
> But as far apart as the two sides seemed to stand they actually shared more common ground than they realized. They both started from premise that man and nature were irreconcilably opposed, and that the victory of one necessarily entailed the loss of the other. Both sides, in other words, accepted the premises of what we might call the "wilderness ethic," which is based on the assumption that the relationship of man and nature represents a zero-sum game. This idea, widely held and yet largely unexamined, has set the terms of most environmental battles in this country…" 13

12 Steve Kemper, Northeast Magazine. Hartford Courant. May 20, 1990, 16. Hard Copy found in the Archives of the Calhoun Family. Accessed October 2018.

13 Pollan, *Second Nature*, 212.

As the essay continues, Pollen works to undermine "unexamined" notions of wilderness by resituating our imagination of the Cathedral Pines in terms of what he calls "a garden ethic." His garden ethic questions the demarcation of "man" and "nature" embedded in traditional American notions of "wilderness" and "conservation." He draws attention to the complex cultural construction of a space that has attracted a cornucopia of vague terms; "old-growth," "virgin," "wilderness," "primeval," "pristine," and "pre-settlement," to name just a few. Old-growth is a hard term to define in a permanently polluted, industrialized, and fundamentally interconnected planet ecosystem. It attempts to define those forests untouched by capitalism and human cultural use— and this is essentially, impossible to do.

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Pollan argues that the entire framework of American wilderness protection is built on a division of man and nature, or wilderness and development, that no longer serves us; "Useful as [the wilderness ethic] has been in protecting the sacred 8 percent, it nevertheless has failed to prevent us from doing a great deal of damage to the remaining 92 percent. This old idea may have taught us how to worship nature, but it didn't tell us how to live with [it]."[15] Pollan argues that the blunt anthropocentrism of the "garden" more honestly reflects the land histories that have sculpted the materiality of the site. Pollan's garden ethic is one that cuts loose dualistic conceptions of wilderness and human activity in favor of ecological restoration practices that acknowledge the integration of human and other-than-human interests in forest vitality. One environmental historian, Paul Kelsch, later described that for Pollan, "gardening is not an act of imposing one's will on the landscape, but of interacting with the forces of nature."[16] As Pollan excavates the histories of settlement that have sculpted the stand, he insists that non-intervention would in fact constitute the most major break, to date, in the site's history of consistent, selective human use.[17]

[14] Depicts a postcard printed inthe late nineteenth or early twentieth century. "The Forest Primaeval, Cornwall, Conn." Cornwall Historical Society Archives. "The Cathedral Pines," Archives of the Cornwall Historical Society. Box 19, folder 17. Accessed October 2018.

[15] Ibid., 224-225.

[16] Kelsch, Paul. "Constructions of American Forest. Four Landscapes, Four Readings." *Environmentalism in Landscape Architecture*, Bumbarton Oaks Research Collection. Washington, D.C., 2000. 168.

[17] Pollan, Second Nature, 213.

Pollan puts forth the idea of literally approaching the shattered Cathedrals as a "garden"— spaces of intentional human interrelationship with ecological processes. But that opens up another can of worms; What should the Cathedral Pines be restored *to*, exactly?

> "What if the conservancy was willing to intervene just enough to erase any evidence of man's presence? It would soon run up against some difficult questions for which its ethic leaves it ill-prepared. For what is the "real" state of the Cathedral Pines? Is it the way the forest looked before settlers arrived? We could restore that condition by removing all traces of European man. Yet isn't that a rather Eurocentric (if not racist) notion of wilderness? We now know that the Indians were not the ecological eunuchs we once thought. They too left their mark on the land…for true untouched wilderness we have to go a lot further back than 1640 or 1492. And if we want to restore the landscape to its pre-Indian condition, then we're going to need a lot of heavy ice-making equipment (not to mention a few wooly mammoths) to make it look right." [18]

This awkward attempt to pinpoint a moment in time where wilderness ends and human cultural impacts begins quickly becomes a comical and problematic pursuit. I expect that in this section Pollan is in conversation with a text by William Denevan, "The Pristine Myth," which was published the same year as Pollan's text and made quite a splash, in its time, within environmental discourse. Denevan's essay is a critique of the idea that the landscape of early America was a "pristine" space of "wilderness." He argues that massive indigenous population declines within the sixteenth century made indigenous presence and land use practices less visible to settlers by the time settlement moved from coastal towns to into the New England interior. Genocidal violence accompanied by mass viral epidemics transmitted by Europeans to Native peoples created a situation in which Native "presence was less visible in 1750 than it was in 1492."[19]

Denevan begins his essay with this question: "Was the landscape encountered in the sixteenth century primarily a pristine, virgin, a wilderness, nearly empty of people, or was it a humanized landscape, with the imprint of Native Americans being dramatic and persistent?"[20] Denevan argues that the landscape witnessed in 1492 was by no means a pristine, uninhabited wilderness— it was a product of extensive environmental modification.[21] He further argues that the landscape of 1492 and of 1750 were remarkably different: "the Indian landscape of 1492 had largely vanished by the mid-eighteenth century…because of the demise of the native population. The landscape of 1750 was more "pristine" (less humanized) than that of 1492."[22] Denevan seeks to "sufficiently dispel any notion of 'empty lands.'"[23] and describes expanding Native populations up until 1492; "European entry into the New World abruptly reversed this trend [of population growth]. The decline of native American populations was rapid and severe, probably the greatest demographic disaster ever." [24]

Dina Gilio-Whitaker, a Native scholar from the Colville Confederated Tribes, responds to Denevan in her 2019 text, *As Long As the Green Grass Grows: The Indigenous Fight for Environmental Justice, from Colonization to Standing Rock.* Written in conversation with the #NODAPL water protector movement, her analysis reflects a fresh generation of discourse that seeks to indigenize environmental justice frameworks. [25] Gilio-Whitaker uses Denevan's pristine myth to

[18] Ibid, 221.

[19] Denevan, William. "The Pristine Myth." *Annals of the Association of American Geographers*, Vol. 82, No. 3, (Sep., 1992), 369.

[20] Ibid, 369.

[21] Ibid, 370. Denevan describes some of the impacts observed in his research; "By 1492, Indian activity throughout the Americas had modified forest extent and composition, created and expanded grasslands, and rearranged microrelief via countless artificial earthworks. Agricultural fields were common, as were houses and towns and roads and trails. All of these had local impacts on soil, microclimate, hydrology, and wildlife."

[22] Ibid, 370.

[23] Ibid, 370.

[24] Ibid, 370.

[25] The term environmental justice appeared in the United States in the mid-1980s, in response to black-led activism against toxic dumping in poor southern black communities. Environmental justice is predicated on the idea that ecological and social harms are inseparable. Pam Tau Lee, an anti-toxics activist speaking within the early days of the movement, says that environmental justice is "able to bring together different issues that used to be separate. If you are talking about lead and where people live, it used to be a housing issue, if you are talking about poisoning on the job, it used to be a labor struggle…environmental justice is able to bring together all of these different issues to create one movement that can really address what actually causes all of these phenomena to happen and gets to the root of the problem." (Di Chiro, Giovanna and William Cronon, ed. "Nature as Community: The Convergence of Environmental and Social Justice." *Uncommon Ground.* W.W. Norton and Company, 1996. 301.) Environmental justice considers social and environmental concerns as fundamentally interconnected; "people are an integral part of what should be understood as the environment." (Ibid, 301.) Environmental justice movements have emphasized

unpack settler mentalities embedded in the history of the concepts of wilderness and conservation. She says, "Conventional narratives of early US history have long been based on the virgin wilderness hypothesis, or what William Deneven (drawing on a well-established literary trope) in 1992 famously called the 'pristine myth.' The virgin wilderness myth construct presupposes a landscape unadulterated by human intervention, which imagined the Indigenous inhabitants incapable of (or unwilling to) alter their environments. At the same time, paradoxically, it implied a landscape largely devoid of human presence."[26] She continues this line of thought with reference to canonical figures of American wilderness discourse; "Thoreau seemed never to have grasped that the New England wilderness, already so altered by European settlement in his time, had in the precolonial period been a cultural landscape shaped by centuries of Indian intervention on the land, not the untouched pristine environment he and many of his contemporaries imagined."[27] Gilio-Whitaker draws from the scholarship of the ethnobnotanist M. Kat Anderson, describing her argument that, "much of the landscape in California that so impressed early writers, photographers, and landscape painters was in fact a cultural landscape, not the wilderness they imagined. While they extolled the natural qualities of the California landscape, they were really responding to its human influence…"[28]

Gilio-Whitaker argues that wilderness narratives arise within a cultural context built on genocide and dispossession. She references the Dakota scholar Philip Deloria, whose arguments within the 1998 book *Playing Indian*, she summarizes as such; "He explained that Americans were torn between their desire to be like Indians, who represented perfect freedom and an authentic connection to the continent on the one hand and the need to extirpate them on the other. Virgin wilderness narratives are a way to discursively eliminate indigenous peoples from the land as a form of erasure or extirpation."[29] Gilio-Whitaker looks to early conservationist movements to explore how colonialism is embedded within environmental consciousness. She says …"applying the lens of settler colonialism to the topic of environmental justice sheds a different light on the processes of history, providing irrefutable linkages between all eras and aspects of settler and Indigenous contact, environmental injustice, and genocide; they are inseparable[30]…unpacking the philosophical foundations of the early conservation and preservation movements is crucial to understanding how the formal, organized environmental movement would unfold throughout the twentieth century, informed as it was by…the overarching master narrative of white supremacy, and also by wilderness as a historically contingent, socially constructed idea…White supremacy…[is] a foundational worldview constructed by centuries of white European settlement of the United States…"[31] For Gilio-Whitaker, wilderness as a fundamentally "white-settler social construct."[32] Her analysis certainly raises the stakes involved in Pollan's discussion.

the leadership of people of color and working-class communities since their inception. Recently, however, Indigenous leadership has become a more prominent aspect of the movement.

[26] Dana Gilio-Whitaker. *As Long As the Green Grass Grows: The Indigenous Fight for Environmental Justice, From Colonization to Standing Rock. (*Boston: Beacon Press, 2019), 39.

[27] Ibid, 96.

[28] Gilio-Whitaker. *Green Grass*, 97.

[29] Ibid, 175.

[30] Ibid, 39.

[31] Ibid, 98-99.

[32] Ibid, 100.

[33]

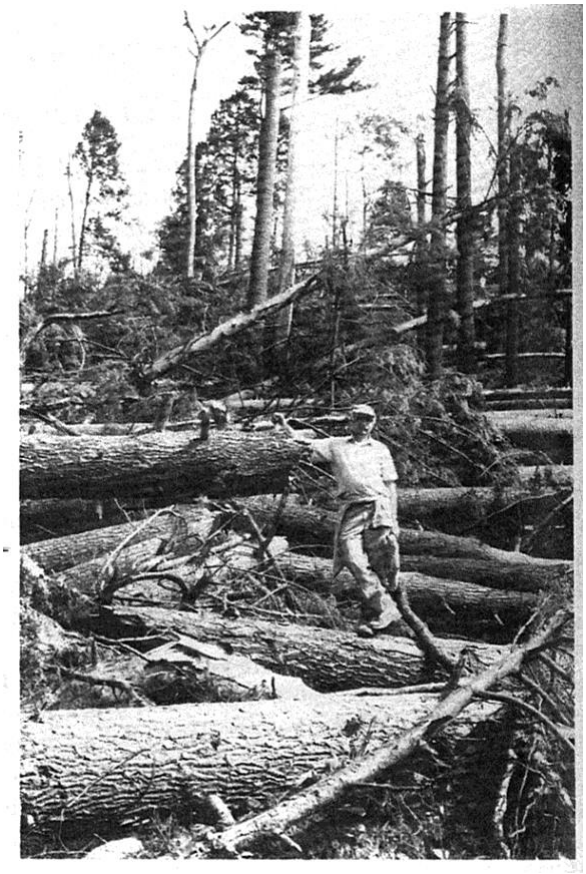
DEMYHTOLOGIZING OLD GROWTH: FOREST SUCCESSION AND OLD FIELD THEORY

Before the tornado, across the nineteenth and twentieth century, the enigmatic origins of the Cathedral Pines provided locals with a consistent topic of speculation: Why didn't the early settlers clearcut this forest, as they did all others? Ironically, it was the physical upheaval brought on by the tornado that became an opportunity to dig deeper— literally, into the historical record of the site. In this case, the historical record is the site itself. The forest is its own archive.

The tornado rendered the forest all the more interesting to forest ecologists across New England, who were well aware of the stand prior. In 1983, just six years before the storm, it was named a National Natural Landmark. You can still find it on the National Park website.[34] One researcher at Yale School of Forestry, the late Dr. Thomas Siccama, took a particular interest in the site. Drawing on existing partnerships between the university and the state chapter of the Nature Conservancy, he began to use the Pines as a forest ecology study site in his work with students.

[33] Photograph of the "Tree in the Rock," taken six months after the Tornado in 1990. "Aftermath of the Tornado." Archives of the Cornwall Historical Society. Box 35, folder 27. Accessed October 2018.

[34] "National Natural Landmarks: Cathedral Pines," National Park Service website, accessed September 24, 2018, https://www.nps.gov/subjects/nnlandmarks/site.htm?Site=CAPI-CT.



[35]

According to his former research assistant, Ellen Denny,[36] Siccama's practice as a forest researcher was often focused on "stochastic" events— those that fundamentally alter the structure and composition of an ecosystem. Denny, who led the most recent field research trip to the site, has held Siccama's research since his death,[37] and told me that Siccama "often took advantage of natural disturbances and wind storms. He would be the first one there."[38] Among Siccama's core interests were the "forest succession" processes through which forests replace and rebuild themselves across stages, species, and generations, after significant disturbances or 'stand-replacing' events. This is the core focus of the research that has been conducted at the Pines. The marking tags in the last stand were placed by Denny and Siccama and had begun to lead me in the right direction.

The tornado catalyzed a decade of scientific and historical interest in the pines, focused on both its past and future. Across the literature produced in this period, a general consensus points to the idea that the Cathedral Pines exist on a site that was logged during the initial phase of settlement—in 1740.[39] William Cronon, an environmental historian and author, chronicles the rapid ecological transformation of New England in the early colonial period, saying bluntly that

[35] Dr. Thomas Siccama at the Cathedral Pines after the Tornado. Photographer unattributed. From the book; George F. Peterken. "Natural Disturbance," Natural Woodland: Ecology and Conservation in Northern Temperate Regions. (Cambrigdge University Press, 1996), 90.

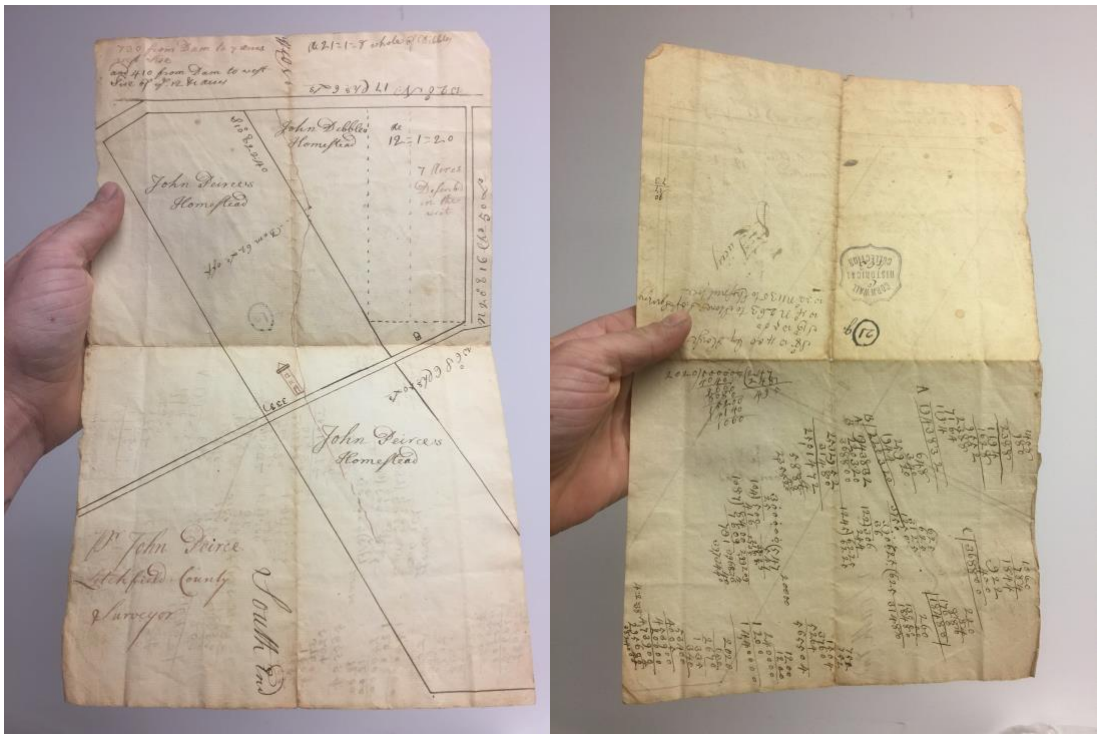
[36] Ellen Denny, Forest Scientist, in conversation with the author on December 18, 2018.

[37] Which, sadly, was long ago—in 2003. No further research is planned, but I was able to view an unpublished essay that synopsizes the research findings addressed there—we will get to that later.

[38] Ellen Denny, Forest Scientist, in conversation with the author on December 18, 2018.

[39] Cromie, George. "A Longer Life for Cathedral Pines," *Connecticut Woodlands*, Connecticut Forest and Park Association. New Haven, Connecticut, 1945. 11. See Also; Navitsky, Scott. *Pines In A Pasture: The History of the Cathedral Pines, Northwestern Connecticut, and the Blowdown of July 1989.* Academic essay, Harvard University, November 1990. *6-9.*

"New England lumbering used forests as if they would last forever."[40] Certainly, Cornwall was no exception— in its first decades of settlement, the town sustained greater ecological change than we have probably seen since. Clearcutting was essentially the first act of settlement, and originally part of the process of clearing land for agriculture. Town Records and archival sources suggest that the first settler to live in the vicinity of the Pines was a man named Seth Pierce.[41] I was able to find a map that he created of the land in the mid to late 1700s, when the family established a mill on the brook that runs through the contemporary Cathedral Pines. The southern edge of the pines coorelate to the right side of the map.



[42]

The trees that would grow to become the Cathedrals Pines began their life in a clearcut, under conditions that ecologists today call "old field theory." Old field theory is a form of forest succession which posits that in abandoned, sun-filled fields where white pine seeds are present, that white pine will outpace other first-succession responders and dominate regrowth processes. Old field and forest succession theories, geeky as they may sound, do provide a generative window to peer forwards, and backwards, towards the social context of the dense white pine regrowth that took place across New England, and at the site of the Cathedral Pines.

Henry David Thoreau was among the early voices to speak of a theory of forest succession, in an 1860 essay, "The Succession of Forest Trees." Thoreau's approach to both forest ecology and his broader practice as a writer, was often focused on slow attention and observation of ecological phenomena surrounding him. He did not deal in data and categorization, in fact, he commented once that his studies in ornithological identification turned out to be of no use to him.[43] His opus exists in a phenomenological world of observation and experience. Thoreau was an eccentric, and a man of privilege, whose off-beat artist life was supported by the inheritance of a pencil factory. His relationship to this small, mundane, and industrially mass-produced *wood* product may have been an essential irony in his character. It was the

[40] William Cronin. *Changes in the Land: Indians, Colonists, and the Ecology of New England.* Hill and Wang, New York, 1983. 111. Cronin further notes that; "So voracious was eighteenth century settler consumption of the original, second-growth, and subsequent forests, that by 1794, the cost of wood doubled across New England. Most major cities of the East Coast shared this problem, which was a key reason for their eventual shift to coal in the nineteenth century."

[41] Personal Archives of the Calhoun Family & the Land Records of the town of Cornwall, Connecticut. Both accessed October 2018.

[42] Photographer by the Author. "Maps and Surveys of the Pierce Estate; 1750-1797," Cornwall Historical Society. Box 3, Folder 33. Accessed October 2018.

[43] John R. Knott. *Imagining Wild America.* (Ann Arbor: University of Michigan Press, 2002), 51.

industrial pencil that initially supplied Thoreau his time to haunt the woods behind neighbors' houses, tracking squirrels and scribbling about the comparative acorns yields of their storage burrows,[44] as part of his research into forest growth.

By 1850, Concord, Massachusetts, where Thoreau was writing, had been transformed by white settlement and agriculture for two-hundred years.[45] At that time, agriculture and logging were in decline across New England as rural populations fled towards urban centers and farmers followed the energy, timber, and agricultural industries that logged their way across the continent. Thoreau was witness to the earliest stage of a reforestation process that has continued since. Between 1850 and today, the percentage of New England that is forested has risen from roughly twenty-five, to seventy-five percent.[46]

White Pine is prominent in Thoreau's observations of forest succession. He developed an articulation of staged growth processes that resembles what twentieth-century ecologists later termed "old field theory."[47] Speaking before the phrase was coined, Thoreau says, "When you cut down an oak wood, a pine wood will not at once spring up there unless there are, or have been quite recently, seed bearing pines near enough for the seeds to be blown from them. But, adjacent to a forest of pines, if you prevent other crops from growing there, you will surely have an extension of your pine forest."[48] Thoreau's remarks begin to describe a dynamic long observed of white pine; it is a sun-loving tree that requires light-filled spaces to succeed once germinated.

Old field theory draws attention to the interaction between this sun-loving characteristic of White Pine, and its context within the political economy. Old Field theory articulates a phenomena initially observed within the specific landscape of New England, but it cannot be understood outside its relationship to contemporaneous social trends which fueled the it; westward expansion, indigenous removal, and industrialization. These histories compose the backdrop for farm abandonment that birthed early phases of regional reforestation, beginning in the 1850s. As settlers continued cyclical practices of clearcutting, or migrated west, abandoned pastures acted as magnets for White Pine seeds already present in the environment. Old Field theory thus reflects a process as much social as material; it lives at the intersection of emergent ecological processes and their situation within processions of power in the socio-political world. Many of the more mature white pine groves in New England today are descendants of this particular moment.

As a caveat, however, I must state that in many ways, the Cathedral Pines are not a standard case of old field theory. There is a difference between logging, especially when done selectively, and the establishment of agricultural fields. I consulted one prominent botanist, Peter Del Tredici, who lives in Cornwall, and joined me last summer for a community hike in the Pines which I organized in collaboration with the Cornwall Historical Society, to mark the thirtieth anniversary of the tornado. I asked Peter what he thought about the terms "old growth" and "old field" with respect to the Cathedral Pines. He said, "What matters here is that the human impacts that have occurred within the Cathedral Pines are relatively minor. We really do not know what the early settlers did in this forest, but I do not see stone walls that would imply its use for agriculture. Logging can be a relatively minor disturbance compared to agriculture, because the soil, which contains the seeds of the various species present in the ecosystem, as well as the fungi, remain intact. I don't know how useful the idea of old growth is in New England. When you get out west it becomes more relevant, but here, the impacts of agriculture over hundreds of years are significant. What is important here, in the Cathedral Pines, is that the soil was never tilled."[49]

[44] Thoreau, Henry D. "The Succession of Forest Trees," 1860. http://monadnock.net/thoreau/trees.html. Accessed October 2018.
[45] David R. Foster. *Thoreau's Country: Social Change and Farm Abandonment in New England.* Harvard Press, 1999. 122-148.
[46] "Four Centuries of Change in Northeastern United States Forests." Thompson JR, Carpenter DN, Cogbill CV, Foster DR. Published 2013 in Pone online journal. Accessed October 2018. http://e72540. https://doi.org/10.1371/journal.pone.0072540.
[47] Old Field theories arose within ecological research of the late nineteenth century, and are particularly associated with the writings of Frederic Edwards Clement, and his 1938 book, "Plant Ecology." Clements idea of old field theory became controversial in the late 20th century. One dissident ecologist, who was brought to my attention by Peter Del Tredici, is Frank Egler. Egler disagreed with what he termed the "relay floristics" embedded in Clement's theories. He theorized instead the concept of "initial floristic composition," which Peter Del Tredici described to me as a more accurate theory of old-field succession.
[48] Thoreau, Henry David. *Succession of Forest Trees.* 1860. http://monadnock.net/thoreau/trees.html. Accessed October 2018.
[49] Peter Del Tredici, Botanist, in conversation with the author on July 13, 2019.

A clearcut space, even when untilled, will still promote the conditions involved in old-field phenomena; these two characteristics of the site history are both important factors in the early lifecycle of the Cathedral Pines. Core samples taken at the Cathedral Pines after the tornado found two dominant age cohorts within the stand, born around 1780 and 1840.[50] Cornwall was settled in 1740, so these dates have led most researchers to conclude that at least one clearing took place at the site in the earliest phase of settlement. I would imagine it was more like two— given that the oldest cohort took root forty years after settlement, and that typically, wholescale clearing was practiced in thirty-year cycles.[51] The 1840 cohort is speculated to be the result of the removal of hardwoods from the stand in the mid-nineteenth century. This may have been an act of, shall we say, "gardening," intended to produce a pine dominant stand. More likely, however, it had to do with a market demand for hardwood that was strong in that period, which we will soon discuss. A small number of white pines that predate the 1740 settlement of Cornwall were, however, found in the core sampling that followed the storm. In Scott Navitsky's detailed research into the site history, he recounts that during a large windstorm in 1938, Frank Calhoun, then the primary landholder, counted the rings of one of the largest white pine trees in the stand, which had fallen. His ring count dated the tree to 1689. Many of the Cathedral Pines still standing today are tall, straight, and narrow morphologically, as a result of competition for light within a dense grove. This particular tree, however, was morphologically distinct; Frank described it as thick and "gnarly." This led one Yale forest ecologist, J.L. Deen, in 1933, to conclude the tree had grown within an open field, and to speculate that white pine may have been selectively excluded during the initial clearing of the site.[52] By 1740, the tree would have been only a few inches in diameter, according to the 1938 ring count. It may simply have been too small to be worth the effort of clearing.

INDUSTRIAL DEFORESTATION HISTORIES

Just a few survivors were all that was needed for the grandparents of the not-yet-cathedrals to fan themselves across the hillside, taking advantage of the sunlight provided by clearing, and the conditions involved in old field theory. There is, however, yet another major factor that likely impacted the maturation of the stand across the nineteenth century; the regional "Salisbury District" iron industry. The Cornwall Historical Society is in possession of a series of undated photographs, (likely from the mid-nineteenth century,) taken in Cornwall during a period of heavy logging—in this case, for charcoal production.[53] They depict a denuded, almost-clear-cut landscape— dotted with white pine. After the initial clearing of large white pine trees within New England, loggers moved westward, seeking uncut old-growth. Subsequent— younger, smaller— generations of white pine had no utility on the commodity market. In fact, for the next century, logging shifted towards hardwoods that were used for charcoal production within the iron kilns. The high sap content of white pine is unsuitable for charcoal production or use in iron kilns.

50 Navitsky, *Pines In A Pasture, 6-9.*

51 Straka, Thomas. "Historic Charcoal Production in the US and Forest Depletion: Development of Production Parameters," *Advances in Historical Studies,* Vol.3 No.2 (2014); DOI:10.4236/ahs.2014.32010. Accessed October 2018.

52 Navitsky, Scott. *Pines In A Pasture, 7.*

53 Photographers and dates unknown. Cornwall Historical Society Archives. Box 34, Folder 22. Accessed October 2018.

54

The Historical Society images depict what would have been a typical nineteenth-century vista in Cornwall, dominated by cyclical clearcuts and small patches of standing pine. The iron industry developed simultaneously—even preceded— the settlement of the region, and exponentially increased extractive demands on forest resources. The local iron industry was known as the Salisbury Iron district and encompassed Western Massachusetts, Northwest Connecticut, and adjacent areas of New York. Clearcutting that began for pasture was cyclically repeated at an industrial scale well after fields were established. The Salisbury district furnaces used only charcoal, not coal. Charcoal is produced by slow-charing hardwoods within large earthen mound structures, and requires massive deforestation. The iron industry attracted large numbers of colliers—charcoal makers. The colliers were ethnically diverse poor and itinerant migrants and immigrants— many of whom were black or native.[55] Colliers flocked to the region at the height of the industry, using indigenous paths, newly cut roads, and the railroads that were developing as a result of Salisbury Iron. It's hard to imagine today, but one hundred and seventy years ago, before the decline of the Iron industry, Cornwall was twice its current size by population, much more racially and ethnically diverse than it is today, and only sparsely forested. [56]

The Salisbury Iron District became the single-most critical source of Iron in early and colonial America. Salisbury ore was known for its particular composition—high in manganese and low in phosphorus. This combination of traits supports shock resistance when forged as Iron, and expedited the development of railroad train wheels[57] and arms manufacturing technologies. Settlers weaponized the land; their success in the settler revolt – the "American revolution"

[54] Cornwall Historical Society. Photographer Unknown, date unknown. "Colliers," Box 34, Folder 20. Accessed October 2018.

[55] Lucianne Lavin, *Connecticut's Indigenous Peoples: What Archeology, History, and Oral Traditions Teach Us About Their Communities and Cultures. (New Haven: Yale University, 2013), 340.*

[56] Cronin continues; "So voracious was eighteenth century settler consumption of the original, second-growth, and subsequent forests, that by 1794, the cost of wood doubled across New England…Most major cities of the East Coast shared this problem, which was a key reason for their eventual shift to coal in the nineteenth century."

[57] Ed Kirby. "Salisbury Iron Forged Early Industry." Connecticut History.org website; https://connecticuthistory.org/salisbury-iron-forged-early-industry/ Accessed October 2018.

— grew materially from voracious consumption of ore and forests. The entire region was a smoky and barren place for much of the eighteenth and nineteenth century.

The invention of the Bessemer process in 1855 allowed iron makers to further refine ore and manipulate its composition with mineral inputs. This innovation birthed the American steel industry, and rendered Salisbury's kilns obsolescent and significantly less cost-effective beyond the local market. The Salisbury Iron district peaked and declined in 1856, in direct response to Bessemer's innovation. The next tilling of Appalachia; the Carnegie Empire, Pittsburgh steel, and West Virginia's coal industry, were born on the advantages of this technological process. As charcoal production diminished and the kilns shut down, the air cleared and the mass reforestation of the region commenced.

ROMANCING THE PINES

The physical conception of the trees living at the site of the Cathedral Pines is just one aspect of its inception. Just as critical to the development of the forest was the process of socially constructing it as a bounded space of old growth conservation. This aspect of the site history takes place in conversation with emerging conservationist movements that utilized romantic discourses to construct ideas of wilderness and conservation. We need not look terribly far to notice how national conversations impacted the construction of meaning at the site of the Cathedral Pines— the name itself is a good place to start.

There is no specific documentation of a moment or person who decided to start calling the site "the Cathedral Pines." I find this lack to be significant; it supports the idea that the name developed as part of a synchronous social phenomena. If you type "Cathedral Pines" into an internet search engine, you will find sites with this name scattered thoroughly across the entire northeastern forest bio-region, from Maine to Minnesota. The social construction of forests in American political and ecological imagination is the subject of a book by John Knott, *Imagining the forest: Narratives of Michigan and the Upper Midwest*. Knott looks across eras of American history to assess the socio-political implications of the metaphors and practices through which relationships to forests have been understood and enacted. Knott uses trees and forests as narrative agents, saying;

> "Not only is white pine (Pinus strobilis) Michigan's state tree; its history over the last two centuries is interwoven with that of the state and offers dramatic evidence of the evolution of cultural attitudes toward Michigan's forests from the beginnings of European settlement to the present…We need to ask how these forests have been imagined over time, how they have evolved in the cultural imagination, and what preconceptions and desires have colored our perceptions of them, as well as how their composition has evolved. And we need to consider how the interplay between our perceptions of forests and the ways in which they have changed physically has affected how and why we value them."

Knott's remarks emphasize the discursive impacts of "settler preconceptions and desires" on the social construction, and resultant materiality, of North American forests. The synchronous phenomena through which the Cathedral Pines received its name was connected to romantic discourses which project Christian notions of the sublime onto well-aged forest stands as manifestations of the divine. Knott creates a useful analysis of the impacts of romanticism on post-industrial constructions of forest as temples, within a section of his book discusseing the emergence of preservation discourse. Speaking of William Cullen Bryant's 1825 poem, "Forest Hymn," he says; "His hymn helped to establish in America habits of imagining impressive stands of trees, particularly old-growth forests, as sacred and of describing them as cathedral-like…the metaphor of the forest as cathedral can still carry an emotional charge, even when it has become a cliché. The fact that a stand of old-growth white pines in northwestern Connecticut protected by the Nature Conservancy was known as the Cathedral Pines raised stakes in the debate about how to respond to the devastation of these pines by a violent wind storm."[58] Projections of Christian divinity upon forests were used to frame the value of conservation in an era when the destruction of American ecology became a subject of widespread criticism within the settler society.

The cultural backlash against industrialization and logging is evident in the primary source documents held by the descendants of a prominent family in Cornwall, who are central figures in the story of the Cathedral Pines. The Calhoun

[58] John Knott. *Imagining the Forest: Narratives of Michigan and the Upper Midwest.* (Ann AArbor: University of Michigan Press, 2012), 5.

family became stewards of the stand well before it was named, in 1883. They bought this land from a neighbor, the Frederic Kellogg, who had bought the land forty years earlier from the Pierce family— who had made the map I shared earlier. In hand-drafted letters meticulously digitized by his great-grandson, John E. Calhoun noted his intention to acquire the forest in order to "save them from the destroyer."[59] The land John E. Calhoun purchased was land he had essentially grown up on, regardless of ownership. Kellogg's remarks at the time of sale indicate that his family, and the Pierce's before them, had made an intentional decisions to let the forest grow. The site may have been used as a "woodlot" – which was common in that era, and is exactly what it sounds like— a cultivated forest managed by the family to suit their own needs for wood (as a fuel and building material). By 1883 the stand would have been about one hundred years old, and probably beginning to assume its later elegance—especially when we remember that the general landscape was significantly less forested than it is today. His choice of "the destroyer" signifies an awareness of environmental concerns. Calhoun, a well-educated young man attending Yale at the time of the purchase, was certainly aware of Thomas Cole, the famous Hudson River School painter, who was already dead and canonized by that time. In white settler genealogies of environmentalism, Cole is often seen as a pioneer of American environmental consciousness. Towards the later half of his career, Cole became an outspoken writer and advocate for the "preservation" of "American Scenery."[60] Scenery is a curious term that was common in the early nineteenth century. It is one that I believe, reveals the dualistic tendency of romantic discourse to regard the land as a distant object, separated from the social world. Nonetheless, in Cole's 1841 poem, the "Lament of the Forest," Cole personifies the forest, speaking from its voice, against the acts of "man," "the destroyer."[61] Calhoun may have been referencing Cole directly, but it is also possible that the term had disseminated and come into common usage in a period where criticism of the most rampant and mass-scale ecological exploitation yet witnessed by humanity began to emerge within settler society.

In Roderick Frazier Nash's classic study of changing attitudes towards ecology, *Wilderness and the American Mind*, he locates Cole's conservationist stance as part a romantic cultural movement tied to the formation of whiteness, masculinity, and nationalism in the United States. Nash aims to illustrate the ways that the concept of wilderness was developed by white male intellectuals as part of a project of settler nationalism defined in response to an inferiority complex[62] extant within the early republic. Early settlers sought to elevate their national status against commonly accepted notions of European cultural superiority;

[59] Archives of the Calhoun Family: Letters between Frederic Kellogg and John E. Calhoun, 1882.

[60] Thomas Cole. *Essay on American Scenery.* American Monthly Magazine, January 1836.

[61] Roderick Frazier Nash. *Wilderness and the American Mind.* Fifth Edition. (New Haven: Yale University Press, 1967), 97.

[62] Nash argues that American national identity was built around an insecure relationship to European culture, which was understood as refined and tasteful; "Confident trumpeting obscured the anxiety many Americans felt about the relation of their country to Europe. In spite of their hopes and official pronouncements, nationalists could but covertly regard the old world as the mecca of all that was tasteful, refined, and creative. Theirs was the dilemma of provincials who desired cultural independence and yet were unable to tear their eyes from the European sun or to resist going abroad for training and inspiration." (72) In the early nineteenth century, American cultural autonomy was not yet established, and the white men who formed its political leadership insecurely perceived themselves in competitive relationship to their European counterparts. Nash's argument is that the construction of American ecology as wild, in contrast to the domesticated antiquity of Europe, was appropriated as basis for a distinctly white and nationalist self-esteem esteem issue.

Nash further draws argues that wilderness was constructed as a space to aggrandize white masculinity. He quotes Washington Irving, a nineteenth century American writer; "we send our youth abroad to grow luxurious and effeminate in Europe; it appears to me, that a previous tour on the praires would be more likely to produce manliness, simplicity, and self-dependence most in unison with our political institutions." (73) American nationalists constructed concepts of wildness to claim parity with Europeans in response to their own gendered and racialized insecurities. Nash summarizes the dynamic as such; "By the 1830s some intellectual patriots were seizing on America's very lack of history— its wilderness condition—as an answer to Europe's claims and their own doubts." **(73)**

The insecure masculine, nationalist posturing Nash digs into can be seen in the printed "scenery" albums that became a popular commercial phenomena in romantic period; "One of the manifestations of the emphasis on America's wild landscape was a series of illustrated 'scenery' albums reflecting the nationalism of nature. In 1820 plans were made for a volume entitled *Picturesque Views of the American Scene* that would show 'our lofty mountains…the unexampled magnitude of our cataracts, the wild grandeur of our western forests…unsurpassed by any of the boasted scenery of other countries." (71) He surveys a number of the scenery albums from the period, all of which reiterate this association between wildness and American identity. In "…the *Scenery of the United States Illustrated*…as usual there was an introductory essay defending the American landscape as being 'as wild, romantic, and lovely as can be seen in any other part of the world. And certainly, our forests,' exulted its author, 'fresh as it were, from the hands of the creator, are, beyond dispute, incomparable."(71)

> "realizing that the natural environment was one of the few bases on which a favorable comparison could be made with other nations, Americans were quick to defend nature in their country against the aspersions of Europeans… In the early nineteenth century American nationalists began to understand that it was in the *wildness* of nature that their country was unmatched. While other nations might have an occasional wild pea or patch of heath, there was no equivalent of a wild continent. And if, as many suspected, wilderness was the medium through which God spoke most clearly, then America had a distinct moral advantage over Europe, where centuries of civilization had deposited a layer of artificiality over [God's] works."[63]

Romanticism was a nostalgic phenomena that spanned the western world. Industrialization induced rapid changes in western cultural landscapes. Romanticism utilized Christian cultural narratives to construct nature as a space of morality. Nash suggests that Americans used the social construction of American wilderness as "unmatched" to support their desire for an elevated cultural status, or "moral advantage" that could be located the vast natural resources and the undeveloped character of the landscape. These discourses serve as ideological foundations for narratives of manifest destiny.

My own best guess is that the use of "Cathedral" to renarrate the landscape in Cornwall was an intertexual, synchonous trend influenced by romantic discourses that dominated settler conservationism throughout the nineteenth and twentieth century. Up until the 1950s, postcards and documentation that reference the site also use the name "Calhoun's Pines." The Calhoun family gave the land to the Nature Conservancy in 1967, hoping to ensure the ongoing protection. I believe that 1967 thus represents the moment when the Cathedral Pines were first officially titled as such. The name had been commonly adopted, though, well beforehand.

WHITE PINE SYMBOLOGIES AND LAND ONTOLOGY

Earlier, I cited John Knott's discussion of "interplay between our perceptions of forests" and "how and why we value them." In this next section of the text, I'll look at constructions of forests and white pine trees across native and settler historical accounts of the region. White pine casts a tall shadow in the earliest colonial forest histories. For Natives, settlers, and the British crown alike, white pine was uniquely prized. That said, the relationship each group held towards the species evinces radically divergent concepts of land interrelationship that are at play in the formation of the colonial landscape. Each group mobilized their relationship with this tree as part of a symbolic order representing their ontologies towards the landscape in a period when settler induced-deforestation of native places was increasing exponentially.

The relative scarcity of white pine in the early colonial landscape meant that old growth white pine groves were quickly depleted by colonial logging. White pine logging thus, became a subject of heated political strife that reflected the differing land ontologies held by natives, settlers, and the English crown. "Historically, white pine has been one of the most valuable tree species because of the large volume of standing timber and its multiple uses as a lightweight building material…intensive logging for the highly preferred white pine started in New England in the 1700s and moved westward to the Great Lake states by the mid 1800s. Indeed, white pine has been called the 'tree that built America'…ironically, white pine was a relatively small component of the pre-European forests of the Northeast…"[64] As the largest, aged trees became scarce, white pine became a commodified instrument of power and a status symbol within the settler forest imaginary.

In 1711, legislation was passed in the Connecticut colony prohibiting the felling of White Pine trees greater than twenty-four inches in diameter; the minimum girth of a ship mast. Rights to all White Pine twenty-four inches and larger were claimed as property of the crown within the colonies.[65] The law was no surprise—the same decree had taken effect twenty years earlier in England and Massachusetts, where the forests were rapidly emaciated under the pressures of an increasingly powerful English navy and ship building industry. British empire was built on naval might across this

[63] Nash, *Wilderness and the American Mind*, 69.

[64] Abrams, Marc D. "Eastern White Pine Versatility in the Presettlement Forest." Bioscience: Vol. 51 No. 11. November 2001. 967.

[65] Del Tredici, Peter. "The Upright White Pine." Boston: Arnoldia Arboretum, vol. 53, (24-25). 1993.

period[66], but a combination of deforestation in England, and imperial conflicts within Europe, rendered English access to mast-building timber problematically unreliable. Securing white pine was an imperial priority; "Naval stores and masts had a strategic importance to England because of the precarious nature of [their] supplies from the Baltic."[67] White pine was a critical early target of English imperial resource extraction interests; royal forestry scouts travelled English-claimed territories, marking white pine intended for use as masts with what was known as the "kings arrow," or "broad arrow," a three-part, arrow-shaped symbol of Crown property used throughout the empire. Three axe marks were made on a tree, deep enough to remain visible when milled, should the authorities be inclined towards questioning.

This was a point of serious contention— settlers also placed a strong demand on White Pine as a most-desired material for settlement and home construction. Forestry was a fundamental industry to settlers; "Timber and forests were too important an ingredient in the life and livelihood of colonial North American to be dealt with lightly…Every settlement, almost without exception, had its small water-powered sawmill that was considered an indispensable adjunct to pioneering life, and it would be true to say that every farmer was a part-time lumberman."[68] In a conflict known as the 1772 'white pine riots,' numerous New Hampshire colonists were convicted of milling white pine bearing the kings arrow in an event seen by historians as an antecedent to the settler revolt that soon followed.[69] White pine served as the first flag of the (British) colony of New England, and was soon re-appropriated by George Washington for his ships, as an official flag of settler revolt when the war began.[70] Crown efforts to control settler logging represented an affront to autonomy from the perspective of the settlers who increasingly identified as settler-nationals, as opposed to imperial subjects. The use of the white pine tree as a symbolic order within the colonial flags of both the British and the settlers represents reveals a sense of identification marked by the shared interest in controlling the commodification and dispossession of native land. British claims on white pine reflected the English intention to utilize forests as food for empire in the form of imperial property. Settlers appropriated white pine as a symbol of protest to generate a symbolic order of white-settler-nationalist resistance to English authority. Despite their conflicts, both groups utilized white pine as a symbolic reference to supremacist claims on territory.

[66] Cronon, *Changes to the Land*, 110.
[67] Michael Williams. *Deforesting the Earth: From Prehistory to Global Crisis.* (Chicago: University of Chicago Press, 2002), 230.
[68] Williams, *Deforesting the Earth*, 231.
[69] Andrew Vietze. *White Pine: American History and the Tree that Made America.* (Globe Pequot, 2018), 71.
[70] Vietze, *White Pine*, 100-102.

THE GROWTH OF OUR NATIONAL FLAG.

1. Colonial Flag, used chiefly by Colonies of New England previous to Revolutionary War. 2. Bunker Hill Flag, used by New England troops at battle of Bunker Hill.
3. Pine-tree Flag of the Navy, *used by the American ships early in Revolutionary War.* 4. Rattlesnake Flag, *used early* in Revolutionary War.
5. First National Flag, used in 1776, before the Declaration of Independence. The thirteen stripes signified the thirteen colonies.
6. The present "Star Spangled Banner." The stripes signify the original thirteen colonies; and the stars, the present number of States.

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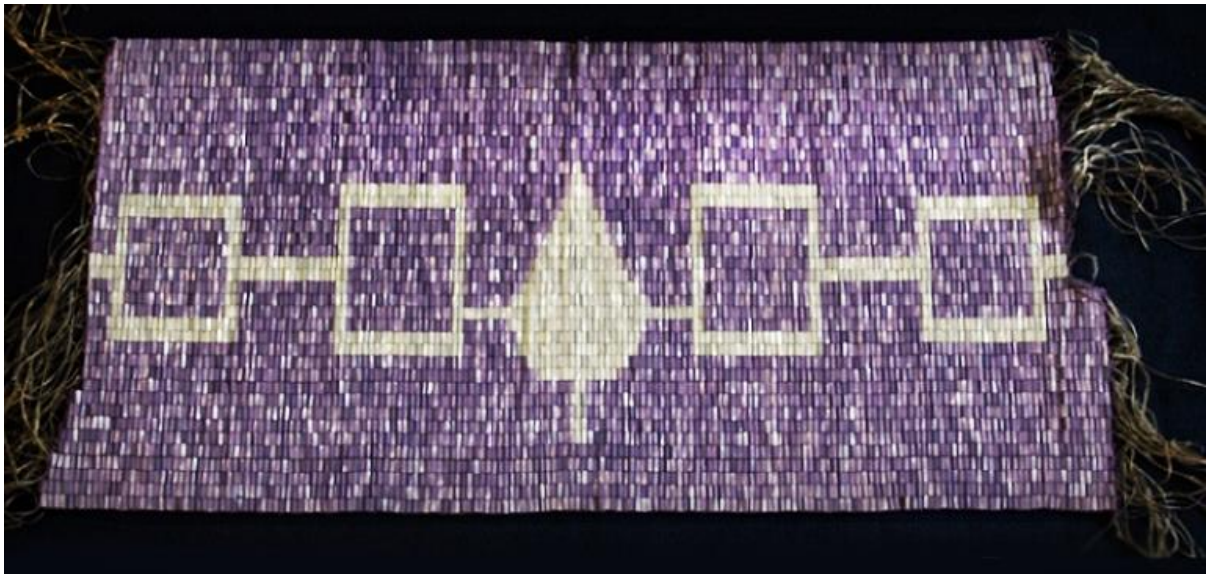
For regional Native nations, then, and now, white pine carries an entirely different set of meanings. It is an equally charged species and symbol that is interwoven with Native spiritual, cultural, and political-economic life. Massive deforestation posed a direct threat to Native culture, life, and sovereignty within the colonial period. White pine is a key species within the complex ecosystems northeastern Native cultures both depend on, and understand themselves as integrally part of. Traditional northeastern Native ontologies of land interrelationship are entirely oppositional to the dualism of "man" and "nature" I have traced within wilderness discourse.

The Haudenosaunee, or Six Nations, whose territories lay north of the Housatonic river valley, have an incredibly well-documented historical relationship to white pine. It is symbolically associated with one of the most critical Haudenosaunee stories; the formation of the Six Nations confederacy. The Seneca historian Darren Bonaparte has written extensively on the history of the Haudenosaunee confederation story.[72] His narrative is one that emphasizes the importance of oral history traditions, and the value of multiplicity and divergence within narrative accounts. He opens his book on the confederation stories by asking; "What would it say about our confederacy if we all told the same story the exact same way?"[73] His survey of the historical records of the confederation narrative is an exhaustive examination of extent sources, which date the inception of the confederacy sometime between the 1100 and 1500— a common range across many accounts. The Great Law of Peace is the central agreement adopted by the Haudenosaunee at the founding of the confederacy. White pine is the symbolic referent associated with the Great Law of Peace; it is referred to as the Great Tree of Peace. White pine is prominent within confederation narrative; it was under a white pine tree that the chiefs of the various nations within the confederacy met to lay down arms and create the alliance persists to this day. For the Haudenosaunee, white pine is a symbol of sovereignty that references a that distinct ontological interrelationship with the land.

71 Found image attributed to an unnamed 1885 American high school textbook. Wikipedia Commons, https://en.wikipedia.org/wiki/Pine_Tree_Flag#/media/File:1885_History_of_US_flags_med.jpg, accessed October 2018.

72 Bonaparte, Darren. *Creation and Confederation: The Living History of the Iroquois*. (Awkwesasne: The Wampum Chronicles, 2006).

73 Bonaparte, *Creation and Confederation,* 7.



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The use of white pine as a symbol of sovereignty references Haudenosaunee cosmologies that link human and non-human beings inseparably. Speaking of Haudenosaunee concepts of environment, Onandaga Chief Irving Powless says, "Being at meetings with environmental people, I've been asked, you know, how do we relate to the environment? And I say: 'Well, we don't relate to the environment; we are the environment. We are one...the trees are part of us.'"[75] He illustrates the concept further by telling a story about going into the woods with students to teach them to make a drum.

> "We picked out a cedar tree…so we built a fire and burned tobacco for the tree, and we explained to the tree that we were taking his life, but that the tree would live on because it would provide music for the ceremonies of the Onondaga nation. And we thanked the tree for being there and for all the things he had done. He provided shade, he provided a home for the birds, he had done everything he was supposed to do…This is how we connect everything. We pay respect…This is all part of our concept of closeness to the environment…the spirit and life of the tree lives on and will continue to live on in the concept that we have, that all the environment has a life: trees, plants, grass, flowers, whatever. Whatever's out there in the environment has a life and is part of us. Very important matter, because in the mandates of the Haudenosaunee and in the nations of the Haudenosaunee, we are required to make sure that the trees continue. And we make sure the plants and the medicines continue…into the future for the seven generations. So that our great-grandchildren will be able to enjoy the same things that we have today." [76]

Powless's story illuminates a conception of environmental interrelationship that views trees as intimate extensions of Haudenosaunee selfhood. He describes Haudenosaunee cultural mandates towards forest interrelationships as predicated on the idea that resources should be tended so as to remain stable across seven generations.

Jack Forbes, a formative native studies scholar and American Indian Movement activist of Powhatan and Lenape descent, goes even further to link the human body with the body of trees in response to own his question "where do our bodies end?" Forbes says,

> "I can lose my hands, and still live. I can lose my legs and still live. I can lose my eyes and still live. I can lose my hair, eyebrows, nose, arms, and many other things and still live. But if I lose the air I die. If I lose the sun I die. If I lose the earth I die. If I lose the water I die. If I lose the plants and animals I die. All of these things are more a part of me, more essential to my every breath, than is my so-called body. What is my real body?
>
> We are not autonomous, self-sufficient beings as European mythology teaches…we are rooted just like the trees. But our roots come out of our nose and mouth, like an umbilical cord, forever connected to the rest of the world…Nothing that

74 Image depicts the historic Hiawatha belt made from wampum, to honor the founding of the Six Nations Confederacy. The belt is speculated to atleast 400 years old, butt estimates vary significantly. The Great Tree of Peace is represented in the center. Image found on the Onieda Nation website; "Wampum: Memorializing the Spoken Word": https://www.oneidaindiannation.com/wampum-memorializing-the-spoken-word/, accessed April 2020.

75 Chief Irving Powless. *Who Are These People Anyways?* (Syracuse: Syracuse University Press, 2016), 178.

76 Powless, *Who Are These People Anyways?,* 176-178.

> we do, do we do by ourselves…That which the tree exhales, I inhale. That which I exhale, the trees inhale. Together we form a circle."[77]

Forbes asserts that the human body cannot be understood outside its interdependency on forests and broader ecosystems. Settler practices of commodification, exploitation, and clearcutting of white pine as well as wholescale forest ecosystem function in past and present contexts as an attack on the integrated body of native life. Within Native ontologies of land interrelationship, human and non-human bodies are inseparably interdependent. Forbes names European ideas of "autonomous, self-sufficient" human bodies, and the binary division of "man" and "nature" as a hegemonic "mythology" to be resisted. His use of the term myth here is quite appropriate; the narrative of dualism that he rejects is one that fundamentally references western ontologies that sought separate humans and the land within a cultural hegemony predicated on racialized dispossesion. He uses native thought to deconstruct façades of settler myth. Seen from these divergent perspectives, white pine symbology draws attention to forests as both subjects and objects of power in a contest of myth and narrative that have direct implications on the formation of the (neo-)colonial landscape.

CONCLUSION: FOREST FUTURITY AND DECOLONIAL JUSTICE IN SCHAGHTICOKE TERRITORIES

In this last section of the text, we will shift our attention towards the present and future potentiality for people to participate in forest biodiversity restoration as an aspect of the work involved in addressing the interconnected social and ecological crises faced today across the globe, and in the Northeast. Much of my concern thus far has been oriented around the question of what old growth wilderness myths occlude; what have they enabled settler cultures not-to-see-and-do? Gilio-Whitaker's answered this question sharply; extirpation, erasure. Conservation on stolen land is a massive political and ethical problem that haunts the functional integrity of coalitional movements to address ecocide within the United States.

The myth of the Cathedral Pines as a space of pristine, primeval, wilderness developed as part of a trend within settler culture towards amnesiac relationships to violence, which both appropriate indigenous relationships to place, and erase native peoples and histories. Pristine myths enable what the scholar Alexis Shotwell calls "practices of forgetting." They give license to forgetfulness. Shotwell describes practices of forgetting as those that elide "our implication in colonialism," [78] and says that "we need to shape better practices of responsibility and memory for our placement in relation to the past, our implication in the present, and our potential creation of different futures… if we want a world with less suffering and more flourishing, it would be useful to perceive complexity and complicity as the constitutive situation of our lives, rather than as things we should avoid."[79] Forgetting trauma, and healing it, are in no way the same. We cannot simply let nature take its course. We must craft that course.

An emphasis on complexity and complicity as a "constitutive" condition and point of entry, is a humble proposition that I must say, I like. If I have learned anything in my own experiences organizing, it is that humility is not only fundamental to growth, learning, and collaboration, but also, a required tool when reckoning with the violence of American history. Purity, like old growth, is an irrelevant concept in the social ecology of the region this text is concerned with. The Potawatomi author and forest biologist Robin Wall Kimmerer rethinks perceptions of old-growth in a short story that meditates on forest futurity. This essay, *Old Growth Children*, is a true story about a white man named Franz who sets out to replant an old-growth forest in Oregon that was beloved to him as a child. Late in life, he returns to his hometown to find the forest has been clearcut. He begins to replant it by hand, one pile of saplings at a time. Kimmerer says, "Old-Growth cultures, like old-growth forests, have not been exterminated. The land holds their memory and the possibility of regeneration. They are not only a matter of ethnicity or history, but of relationships born

[77] Jack Forbes, "Finding A Good Path, A Path with Heart," *Columbus and Other Cannibals*, (New York: Seven Stories Press, 2008), 181-182.
[78] Alexis Shotwell, *Against Purity: Living Ethically in Compromised Times*, (Minneapolis: University of Minnesota Press, 2016), 7.
[79] Shotwell, *Against Purity*, 8.

out of reciprocity between land and people. Franz showed that you can plant an old-growth forest, but he also envisioned the propagation of an old-growth culture, a vision of the world, whole and healed."[80]

For Kimmerer, reciprocity is a concept of land interrelationship that acknowledges the critical role of culture in shaping ecological vitality. This term is one I encountered again and again in my research within decolonial scholarship. Gilio-Whitker references the white ethnoecologist Kat Anderson in her own discussion; she says, "land management is not a viable term to describe indigenous ecological practice, [Kat] uses instead the concept of 'caring for,' which she defines as 'deeply experiential relationships of reciprocity…' [81] Reciprocity implies a vital and necessary exchange of intentioned care between human and other-than-human life. Kyle Powys Whyte, a Potawatomi scholar and environmental activist, describes "systems of responsibility" as an aspect of what is lost when reciprocity cannot be practiced. He says "environmental injustice cuts at the fabric of systems of responsibilities that connect people to humans, nonhumans, and ecosystems…Injustice, here, involves one society robbing another society of its capacities to experience the world as a place of collective life that its members feel responsible for maintaining… Environmental Injustice can be seen as occurring when these systems of responsibilities are interfered with or erased by another society... Settler colonialism can be interpreted as a form of environmental injustice that wrongfully interferes with and erases the sociological contexts required for indigenous populations to experience the world as a place infused with responsibilities to humans, nonhumans, and ecosystems."[82] Systems of responsibility are the daily cultural practices that characterize relationships to place, culture, and identity. Whyte speaks to the impacts of dispossession on indigenous cultures of reciprocity, but he also implies that combatting environmental injustice *requires* systems of responsibility through which cultures can build reciprocal, sustainable, connections between "humans, nonhumans, and ecosystems."

Survivance is a term a that the Chippewa scholar Gerald Vizenor uses to describe the desire of Native people to "move beyond our basic survival in the face of overwhelming cultural genocide to create spaces of synthesis and renewal."[83] Survivance is a relevant term in the Schaghticoke territories this text is most intimately concerned with; the Housatonic and Muhheakunnuk, or Hudson river, valley. I reached out to Sachem Hawk Storm, the hereditary leader of the Schaghticoke First Nations, to learn more about Schaghticoke history and his work as a leader and organizer.

Hawk Storm was incredibly generous towards me, and invited me to spend a weekend with him to discuss my research. Schaghticoke history has been subject to an incredibly thorough process of erasure that must be discussed in some detail before we can move further. Schaghticoke translates as "mingling of the waters" and references the reformation of Algonquin peoples following waves of genocidal dispossession that culminated in King Philip's War of 1675 to 1678. King Philip's war was a multi-tribal Algonquin struggle for survival that raged across New England, drawing in settlers and natives from Maine to Massachusetts to the Muhheakunnuk, and down into Delaware and Lenape territories. Algonquin peoples banded together to attempt to push settlers out of their territories in present-day New England, when it became clear that settlers did not intend to respect the treaties they were making.[84]

In our conversations, Hawk Storm emphasized the ways that contemporary American nation-state structures provide unhelpful analogies when trying to understand what indigenous governance looks, and looked, like in this region – from before colonial invasion to the present. He said, "the Wampanoags, the Tunxis, the Pequot, the Potatucks, the Quinnapiac, the Narrangasetts, the Pototuck, the Nipmuc, the Mahicans, the Paugusetts, the Niantic, and more— these were all our people. We were distinct villages, not distinct tribes. We are a part of the Wabanaki Confederacy and a vast

[80] Robin Wall Kimmerer. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*. (Milkweed Editions, 2013), *291.*

[81] Gilio- Whitaker, *Green Grass,* 187.

[82] Kyle Powys Whyte. "Indigenous Experience, Environmental Justice, and Settler Colonialism." April 25, 2016. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2770058. Accessed December 2019.

[83] Gerald Vizenor. *Manifest Manners: Post-Indian Warriors of Survivance.* (Middletown, CT: Wesleyan University Press, 1994), 53.

84 Two excellent books I would recommend regarding this history are; *Our Beloved Kin: A New History of King Philips War*, and *The Common Pot: The Recovery of Native Space in the Northeast*, both by the Abenaki historian Lisa Brooks. These are fascinating and in-depth historical texts that were suggested to me by Sachem Hawk Storm. The rough sketch of Schaghticoke history I have provided here is strongly influenced by Brook's interpretation of King Philip's War and Schaghticoke formations.

interconnected cultural continuum. For example— the people of Hartford or Albany may have their own city, regional, or state governments, but would you say these states or cities represent culturally or ethnically different peoples? Not really."[85] Following the military defeat of various Algonquins within King Philips war, many survivors were enslaved and exiled to Bermuda.[86] Those who managed to escape, followed the rivers northward, westward, and inland as refugees, to join existing Algonquin settlements in parts of Mahican territories not yet settled by whites. These various Algonquin groups were relatives to each other, and to the Mahican. They were part of a confederacy engaged in a common fight. These Algonquin survivors became Schaghticokes in an event called the Witengemot treaty, signed in 1676 at the Knickerbocker Mansion, upstate, in Schaghticoke, New York. In negotiations with New York Governor Edmund Andros, before the founding of the United States, the Schaghticoke secured their right to live on traditional Mahican territories between the Muhheakunnuk and the Housatonic rivers. Cornwall falls within the traditional territories of the Mahicans, who, through this process, became identified as Schaghticokes. The migration of refugees from King Philips war to the Housatonic and upper Muhheakunnuk is sometimes referred to as the "Hungry March." This was a seventeenth century, northern, trail of tears that I was certainly never taught about in earnest, during my childhood in New York and Connecticut.

Within ten years of the Witengemot treaty, the Schaghticoke were dispossessed from the present-day town of Schaghticoke, New York, near Albany. Across the late 1600s and early 1700s, Schaghticoke culture adapted and evolved in response to rapid political developments. Schaghticokes attempted to hold space within their homelands, across present-day Maine, Vermont, Massachusetts, New Hampshire, and southern New England. As settlement expanded, indigenous sovereignty was steadily eroded. Some Schaghticokes joined neighboring nations to the north and west, but those that remained in the region eventually condensed their communities along the Housatonic river. Many of these villages were previously established Mahican settlements, which absorbed their more distant kin as refugees. The largest village sites in the immediate vicinity of Cornwall and Northwest Connecticut include; Shekomeko, in present day Pine Plains, New York; Schaghticoke, in present-day Kent, Connecticut; Wnahkutook, in Stockbridge, Massachusetts; Weaquadinach, in present day Sharon, Connecticut; and Weatogue, in present day Salisbury. In the mid-seventeenth century, members of the Stockbridge group of Mahicans and Schaghticokes were forced to remove to Pennsylvania, and one hundred years later, again, to Wisconsin, where the Mohican Nation Stockbridge–Munsee Band reservation exists today.

The 400-acre Schaghticoke reservation is located near Bulls bridge, in present day Kent, Connecticut, just along the border of New York State. Despite the establishment of the Schaghticoke reservation by the colony of Connecticut in 1736, well before the advent of the United States, US federal recognition of the tribe was not granted until 2004, for one year, and then rescinded.[87] The historian Lucianne Levin, points out that "only two [of five Connecticut tribes] are eligible to receive federal grants for health care programs for their members, higher education for their children, or housing for their elders, because those grants require federal recognition. These are the reasons tribes want federal recognition, not casinos."[88] The state of Connecticut has a long track record of racist hostility directed towards the Schaghticoke. It is not even within the scope of this essay for me to thoroughly discuss the very important fact that no treaty was ever made with indigenous nations in this vicinity. The historical records do make it pretty clear, however, that the majority of Northwest Connecticut is unceded territory.

[85] Robert Hawk Storm Birch, Schaghticoke First Nations Sachem, in conversation with the author, August 2019.
[86] Lavin, *Connecticut's Indigenous People's,* 336; "Historical records show that after the Pequot and King Philips War, Indian men, women, and children were sold into slavery. Pequots and others thought to be sympathetic to them and to King Philip and the Wampanoag tribe were shipped off to the Caribbean to spend the rest of their lives toiling in sugarcane fields." See also: Wendy Warren, "Visible Slaves," *New England Bound: Slavery and Colonization in Early America*." (New York: Liveright Publishing, 2016), 117-152.
[87] The Schaghticoke Tribal Nation's website describes this process as such; "Although STN was granted federal recognition in 2004, it was unjustly reversed on Columbus Day in 2005 due to heavy political influence by Connecticut politicians and backing by wealthy land owners. It is STN's mission to have their recognition restored." http://schaghticoke.com/. Accessed February 2020.
[88] Lavin, *Connecticut's Indigenous People's,* 355.

It is a duplicitous phenomenon through which settler historians of Connecticut have perpetuated the myth that Northwest Connecticut was uninhabited prior to settlement. John De Forest, a nineteeth century historian, was particularly prolific in propagating indigenous erasure across generations of settler consciousness. Writing for the Connecticut Historical Society in 1851 says "North west of the Paugussetts, within the limits of Newtown, Southbury, Woodbury and some other townships, resided a clan known as the Potatucks. Their insignificance is sufficiently proved by the almost total silence of authors concerning them, and by their noiseless disappearance. With slight exception, the whole country now known as Litchfield County, together with the northern part of Fairfield and western part of Hartford counties, presented an uninhabited wilderness."[89] De Forest's comments are particularly strange given the fact 400 pages later, he dedicates roughly 50 pages of his book to historical accounts of the Native settlements within Kent, Salisbury and Sharon—which comprise a large portion of Litchfield county. He says; "some, if not many, Indian deeds are now lying in oblivion, or have been totally lost, for want of being recorded. The proportion of Connecticut which can prove to have been sold by the Indians to the whites is much less extensive than that which unquestionably was thus sold."[90] De Forest presents an insidious and typical settler logic; ignorant blind faith in the justness of settler colonial law. Of the town of Kent, where the Schaghticoke reservation lies, De Forest says "The township of Kent was sold to the original settlers by the colony; and no records or papers remain to show whether the land was usurped from the Indians, or was obtained from them by purchase. Reservations, however, were made to them: one on the west bank of the Housatonic River' and one, of two thousand acres, in the mountains: and, since there were reservations, we may conclude that there must have been, in the first place, sales. One of the only two land transactions, between the natives and the colony, to be found in the Kent records, is a deed dated December 19th, 1746."[91] This date is six years after the town was settled. He continues: "After the Connecticut people commenced their settlements in Kent, the Indians took up their residence chiefly on the west bank of the Housatonic. The settlers gradually encroached on them, by purchase and perhaps otherwise, until, about the year 1752, the Indians found themselves deprived of nearly all their lands on the plain." (This land on the plains was the primarily agricultural land of the Schaghticoke and was taken by Kent School, which refuses to acknowledge this history.)

I will share one last compelling account from De Forest's narratives of contradiction; he recounts that Natives in Sharon communicated that "they had never intended to sell their land, they said, but were deceived into it…as the prospect of obtaining their rights seemed to become more and more hopeless, they continued to move away from Sharon. In the fall of 1754, one of the tribe, named Timotheus, made his appearance, and began to hang around the settlement. He often came into the farmers' houses, and expressed his indignation that the land which the committee laid out to the Indians had never been put in their possession. As he sat, one day, in the kitchen of Jonathan Pettis, he talked about the wrongs of his people until he became excited and very angry. "I vow it is my land," he exclaimed, "and you know it. I swear it is my land, and I will have it.""[92] The land was never returned, Timotheus was forced to migrate, and accept a financial settlement.

Not only has the size of the reservation itself been consistently eroded over centuries, but the state has also actively worked to hinder tribal members from living on and accessing the reservation. In the 1953, the Connecticut Welfare Department tried to pass Senate Bill 502, "An Act Concerning Indians," which "if passed and signed into law, would disperse communally-owned lands reserved long ago for native peoples; some would be sold at public auction while others would be incorporated into state parks."[93] Schaghticoke resistance to this bill was successful, and the reservation remained intact, but "reservation houses were allowed to deteriorate. Many lacked running water and electricity. When a tribal member died or left the reservation the house was pulled down [by the state]. Tribal members seeking to return were told there was no housing. Reservation visitors had to be authorized by the overseer and had to be off the premises by nightfall. Any meetings or festivities had to be approved by the overseer. No economic endeavors could be

89 J.W. Deforest. *History of the Indians of Connecticut from the Earliest Known Period to 1850.* (Hartford: Connecticut Historical Society, 1851), 51.
90 De forest, *History of the Indians of Connecticut,* 391-392.
91 Ibid, 413.
92 Ibid, 403.
93 Lavin, *Connecticut's Indigenous Peoples,* 353.

undertaken except farming, which could not be profitable given the marginal nature of reservations lands."[94] It's not hard to understand, how, under these conditions, generations of Schaghticoke migrated off the reservation into surrounding communities— to find work that would support their families, and to live with dignity that was so actively inhibited. The state of Connecticut used its power to made reservation life essentially untenable for the Schaghticoke.

These actions caused unimaginable trauma to Schaghticoke people for centuries, and to their land. They also encouraged pristine myths in the region; countless regional histories that I consulted for this research stated—clearly without due diligence— that much of Northwest Connecticut was not inhabited by Native people before settlement. "Local historians in the nineteenth and early twentieth centuries misrepresented or ignored the Indian communities around them, instead persuading the public that their Indian neighbors were extinct… to support their false assumptions, these writers used the then popular notion of "racial purity" to brand their contemporary indigenous counterparts of mixed blood as no longer Indian." [95] Even those historians who did acknowledge the obvious and historically well-documented native presence in the region, nonetheless, utilized racial purity narratives to propagate ideas of the "vanishing Indian," which wrongfully suggest that native people are no longer present, legitimate, or relevant. The Schaghticoke, like countless contemporary American communities, are highly multi-racial. Native communities, within Connecticut, in some cases became havens for people of color in general; "Many Indigenous communities continued to exist throughout the nineteenth century— some through the present— on-reservation and off reservation. Often these were refuges for people of color in general— including families from different tribes as well as free black families— who banded together to survive a racist, class-conscious world that treated them all like foreigners and second-class citizens."[96] In 1924, in present-day Barkhamstead, Connecticut, a mixed-raced community of black and Schaghticoke families known as the Lighthouse community was evicted in order to establish "People's State Park."[97] Gilio-Whitaker articulates the impacts of "vanishing Indian" discourse as such; "the persistence of the vanishing Indian narrative in American society represents a collective inability to perceive Native people as survivors— as people with viable, living cultures that although altered and adapted to modern circumstances are nonetheless authentic and vibrant. The narrative has spun off into dozens of stereotypes and misconceptions that dehumanize them and keep them frozen in racist legal and policy frameworks that continue to deny them full access to their own lands and control over their own lives and resources."[98]

Despite the fact that the vast majority of the Schaghticoke are not able to live on their reservation, tribal engagement with efforts to revitalize Schaghticoke land and culture are nonetheless, vibrant. "We don't need recognition. We know exactly who we are," Hawk Storm told me, regarding the thirty-year lawsuit through which the Schaghticoke were denied federal recognition. Hawk Storm no longer believes federal recognition is a process that can lead to empowerment for the Schaghticoke. Instead, he has been working to build a non-profit organization, the Schaghticoke First Nations, founded in 2015 to advance Schaghticoke culture, politics, and environmental justice organizing.

It is a critical aspect of my inquiry at the Cathedral Pines to suggest the viability of multi-racial, cross-class, and indigenous-led approaches to ecological restoration in the broader region, and to suggest that moves to combat racial and environmental injustice must be understood as fundamentally interconnected. This is a matter of intention, political analysis, and relationship building. It won't happen overnight, but what I am trying to highlight is that concepts of what is involved in restoration, conservation, and environmental (in)justice must expand if they are to effectively address the layered social dimensions of the current socio-ecological crisis. We must all bring courage and a willingness to transform to our work of tending and caring for the ecological and social landscapes we live within. After all; the Cathedral Pines grew from a clearcut. As Kimmer put it; "the land holds…memory and the possibility of regeneration."

[94] Lavin, *Connecticut's Indigenous Peoples,* 351.
[95] Ibid, 346.
[96] Ibid, 348.
[97] Ibid, 348.
[98] Gilio-Whitaker, *Green Grass,* 59.

During my visit with Hawk Storm in late August, he took me to the site of a former Native settlement that he regards as a major sacred site. In my experiences supporting indigenous activism, I have generally only visited sacred sites during high-stakes moments of protective action. In any other case, I do not see it as my place or role to visit Native sacred places. I asked Hawk Storm why he was showing me the site and he responded that "it is important that people know that these sites are here. Our people have been so thoroughly erased. If we can get these sites recognized, it could be very helpful for us all." This was clearly a massive former settlement spread across a large area now retaken by forest. Stone walls built in a distinctly different style than the settler-built stone walls that cover the region wound a path through the forest that ends in what Hawk Storm believes is a large colonial grave site. We watched as other hikers passed over these graves, entirely unaware. Hawk Storm stopped, observing them, as the hikers walked through this sacred place they did not know they were within. "It's amazing how people walk through the woods looking at their feet— no idea where they are or what they are seeing." He continued, telling me how much he enjoys teaching people to identify markers of Native culture on the landscape. He then pulled out his phone, showing me pictures a new friend had sent that day, of stone wigwam platforms in the woods of New Hampshire. He had, just a few days before, taught an avid hiker how to identify common features of native stone walls. "I love helping people wake up," he said. I was truly touched over the weekend I spent with him, by the open-hearted embrace he extended not just to me, but towards the capacity of natives and non-natives alike, to change, learn, and make different decisions than those we have inherited. [99]

Hawk Storm was clearly very knowledgeable about regional forest history and ecology. As we prepared to leave the sacred site, we came across an old field retaken by forest. A large red cedar, maybe 25-30 feet tall, stood dead underneath a near-homogenous maple canopy now reaching high above it. He said to me, "Do you know why this dead tree is here?" I did not. He said, "these dead red cedars—you see them all over in this area. They are here because of the sheep. During the woolen industry, the sheep ate everything. There was no forest where there were sheep. But they did not like red cedar, so that was the only tree that could grow. Now the sheep are gone, and cedar doesn't grow as tall or fast as most of the common species, so you see red cedar, dead-standing, in the forests of this area." We paused in that spot a bit longer, gazing up at the canopy. "Look at this forest," he said. "It is so unhealthy— everything is the same age, and the same species. There is no groundcover, so little biodiversity. It's because we haven't been here to take care of it. You can still see our landscaping, though. I would love to see what is under this soil, but we can't do that because that would disturb the rhizosphere and we can't afford to do that. We need to let it be." [100]

We drove to a nearby community organization that has a young agro-forestry pilot site that I was interested to see. The concept of agroforesty quickly came up in our conversations when I first spoke with Hawk Storm, over zoom, a month or so before we first met in person. Agroforestry is an approach that integrates concepts of ecological and sustainable forestry with food production by fostering edible and biodiverse forest agricultural infrastructure in ways that are highly site-specific and eco-contextual. Agroforestry integrates traditional knowledge and the unique ecological profile of a given place. The aim is to cultivate maximum biodiversity and carbon sequestration to provide sustenance and longevity to both human and non-human life through the practices of reciprocity that encourage clean air, food, plant diversity, and soil health. There are seven layers of forest biodiversity that are commonly discussed as basic ecosystem-infrastructure within agroforestry; the canopy, sub-canopy, shrub, herbaceous, ground-cover or horizontal layer, underground, and vertical or climbing layer. The ubiquitous scruf of many urban, suburban, and even rural ecosystems today is more often than not, lacking quite a few layers. These imbalances ripple through ecological systems, in complex causal relationships, especially as climactic conditions change.

Hawk Storm directed me to the work of a regional agroforestry scholar and practitioner named Connor Steadman,[101] who has been among his consultants for a plan to establish a Schaghticoke community center and agroforesty area on a post-

[99] Robert Hawk Storm Birch, Schaghticoke First Nations Sachem, in conversation with the author, August 2019.

[100] Robert Hawk Storm Birch, Schaghticoke First Nations Sachem, in conversation with the author, August 2019.

[101] Connor's a field ecologist, agroforestry specialist, and educator based in western New England and in the Hudson Valley specifically. He holds an MS in ecological planning from the University of Vermont. He is a lead organizer of the internationally recognized Carbon Farming Course. Connor offers consulting

industrial site along the Hudson River. Connor is a proponent of the potentialities of agroforestry to seriously diminish the impacts of climate change and restore battered ecologies. Many of his ideas offer a surprising and hopeful counter-narrative to the bleak parameters of discourse we are used to within mainstream debates that frame climate change as an issue laymen can't do much about, materially, in their own backyards, today. Steadman doesn't think we should be waiting around for techno-fixes orchestrated from the top down. He says, "a point worth making, [is] that of all the surplus carbon that has been released since the beginning of the Industrial Revolution 300 years ago, the majority of it is still not from fossil fuel burning. The majority of the total accumulated surplus carbon is from land degradation. It's from deforestation; it's from tillage; it's from urbanization…but, land degradation is a reversible process and beyond."[102] Steadman explains that fossil testing and soil samples from certain regions suggest that prior to mass-agriculture and industrialization, the carbon content— or total sequestration capacity held in soil was much higher than what is held in the soil today. "The effects of all of that tillage, all of that fertilizer use, all of that compaction and…loss of soil carbon from farmland in North America is one of the global carbon bombs that has already gone off. Because those bottomlands, those tallgrass prairie landscapes in the Midwest, those rich river valleys in the East, those soils likely, from some research and estimates and fragments that remain in some places, many of those soils had organic matter levels between ten and twenty percent historically." Connor mentions that the average carbon content of soil in developed or "farmed-out" long-term agricultural sites tends to be around one percent today.

He discusses one farm in California, Singing Frogs Ranch, that was able to use agroforestry practices to recultivate its carbon soil content from two to eight percent over a relatively short period of time. "I will say that that type of leap from two percent soil organic matter to eight percent soil organic matter is definitely doable on millions of acres of farmland all around the world… carbon farming can do the magnitude of sequestration that is needed to slow down and reverse climate change……if every farm in the world was doing this, the entire output of carbon dioxide from the beginning of the Industrial Revolution would be sopped up and put in the ground." These are pretty provocative ideas. Connor's logic implies that even if we are able to phase out fossil fuels, the core of our work is in recultivating soil health and biological diversity. This all sounds incredibly exciting, but Connor is not naïve about the political context these arise within. As fossil fuel emissions continue to climb globally despite calls for eventual cessation, sequestration gains cannot be realized. Connor says; "the greater challenge than the technological one is the social and financial and political work to make [carbon farming] happen. That's really where a lot of the obstacle is."

I am excited about the possibilities the land holds at the community center that the Schaghticoke First Nations (SFN) is in the process of building. Schaghticoke organizing is certainly not happening in a vacuum— the SFN has racked up a long list of allied organizations and community partners. If you want to donate to their work, you can do so on their website, http://www.schaghticoke.info,
but your money will not only go to SFN, it will go to a community fund established with their relatives and allied organizations; The United Confederation of Tiano People, the Yawinawa Nation of Brazil, the International Indian Treaty Council, the Wabanaki Confederacy, the Watershed Center, the Tribal Link Foundation, the Omega Center for Sustainable Living, Relational Uprising, Duchess Land Conservancy, the Appalachian Mountain Club— Connecticut Chapter, and the PTM Foundation. To support the SFN is to support a growing network of regional, national, and international collaborations and movements that are intimately connecting decolonial justice to environmental regeneration.

and design for multi-productive forest management at AppleSeed Permaculture, including silvopasture, forest understory crops, productive buffers, and wildlife habitat. He's also one of the smartest people I know. Connor, welcome to the program.

[102] "Connor Steadman: Carbon Farming." Website of the organization Peak Prosperity. Interview by Adam Taggart on October 9, 2017. https://www.peakprosperity.com/connor-stedman-carbon-farming/ Accessed August 2019.

The community center that is envisioned is, at this stage, a project planned being planned with the Scenic Hudson organization,[103] who have acquired a number of former Industrial sites along the Hudson river that they intend to protect from future redevelopment. The SFN's vision for the project is in early stages and is modeled on a document that is called the Yawinawa Life Plan.[104] This document[105] was produced by the Yawinawa people of the Amazon, who Hawk Storm has built deep ties with through his work to support the implementation of the United Nations Rights of Indigenous Peoples, and as a representative within the United Nations Permanent Forum on Indigenous Issues. The Yawinawa have been in the global spotlight in recent conversations on global deforestation; their rainforest territories are situated with areas of the Brazilian Amazon that have been under attack by logging and farming interests emboldened by Brazil's right-wing autocratic president, Jair Bolsonaro— who is an open advocate of indigenous removal from the Amazon. The Yawinawa Life Plan might be seen as a document that provides guidelines for reciprocity, or a system of responsibilities, within Yawinawa territory and culture. It outlines the nitty gritty ecological and social processes through which Yawinawa people tend their landbase to support their nees and the relationships between humans, non-humans, and ecosystems. Hawk Storm is working on a developing a Schaghticoke life plan, tailored to the ecology and history of their territories. He hopes to promote decentralized sustainable food systems that draw on indigenous traditions, foster carbon farming, and cultivate ecosystem biodiversity as core efforts to propel coalitional organizing and strengthen Schaghticoke community, culture, and sovereignty. I see within this work the potential to recalibrate environmental justice organizing and begin to rebuild the systems of responsibility and reciprocity for future generations. The community center is planned as a nexus to foster opportunities for collective knowledge-production that can be disseminated and practiced both within and beyond Schaghticoke territory.

I set out on this journey hoping to find new connections and a path forward towards the type of work I'd like to be part of, in a town I have often felt out of place, in a landscape I am deeply attached to. Meeting Hawk Storm was a huge blessing that has transformed my ideas of what might be possible here. I began this research on instinct; I had the conviction that the process of research would itself might yield the relationships and ideas I want to build towards. A year and a half later, I won't say I'm yet on my trail, but I do now have a rough map to assist me in finding the trailhead. The sea of birch saplings is growing up quickly. It's now a gaggle of gangly teenagers. As climactic conditions change, so does the forest regrowth process. I now understand that the black birch is here to help rebalance a pine dense forest that may never have wanted to be as homogenous as it became. We don't know what the future holds for the Cathedral Pines, but I've made my peace with the black birch, and learned quite a bit—not about, but from— this beloved garden.

[103] Robert Hawk Storm Birch, Schaghticoke First Nations Sachem, in conversation with the author, August 2019.

[104] Ibid, August 2019.

[105] Though the document is not yet fully in public circulation, you can read more about it here: https://www.ecosystemmarketplace.com/articles/message-tashka-yawanawa-importance-indigenous-life-plans/

BIBLIOGRAPHY

Abrams, Marc D. “Eastern White Pine Versatility in the Presettlement Forest.” Bioscience: Vol. 51 No. 11. November 2001.

Birch, Robert Hawk Storm, Schaghticoke First Nations Sachem, in conversation with the author, August 2019.

Blakey, Pat. “Storm Chronicle,” *The Cornwall Chronicle*, Summer 1989. Archives of the Calhoun Family. Accessed October 2018.

Bonaparte, Darren. *Creation and Confederation: The Living History of the Iroquois*. Awkwesasne: The Wampum Chronicles, 2006.

Calhoun Family Archives. Correspondence of Frederic Kellogg and John E. Calhoun, 1882. Accessed October 2018.

Cole, Thomas. *Essay on American Scenery.* American Monthly Magazine, January 1836.

Cornwall, Connecticut Town Land Records. Accessed October 2018.

Cornwall Historical Society Archives, “Maps and Surveys of Pierce Estate,” Box 3, Folder 33, Accessed October 2018.

Cornwall Historical Society Archives. “Charcoal,” photographers and dates unknown. Box 34, Folder 22. Accessed October 2018.

Cromie, George. “A Longer Life for Cathedral Pines,” *Connecticut Woodlands*, Connecticut Forest and Park Association. New Haven, Connecticut, 1945. 11. See Also; Navitsky, Scott. *Pines In A Pasture: The History of the Cathedral Pines, Northwestern Connecticut, and the Blowdown of July 1989.* Academic essay, Harvard University, November 1990.

Cronin, William. *Changes in the Land: Indians, Colonists, and the Ecology of New England.* Hill and Wang, New York, 1983.

Deforest, J.W. *History of the Indians of Connecticut from the Earliest Known Period to 1850.* Hartford: Connecticut Historical Society, 1851.

Del Tredici, Peter. “The Upright White Pine.” Boston: Arnoldia Arboretum, vol. 53, 1993.

Del Tredici, Peter. Botanist, in conversation with the author on July 13, 2019.

Denevan, William. "The Pristine Myth." *Annals of the Association of American Geographers*, Vol. 82, No. 3,Sep., 1992.

Denny, Ellen. Forest Scientist, in conversation with the author on December 18, 2018.

Di Chiro, Giovanna and William Cronon, ed. "Nature as Community: The Convergence of Environmental and Social Justice." *Uncommon Ground.* W.W. Norton and Company, 1996.

Forbes, Jack. "Finding A Good Path, A Path with Heart," *Columbus and Other Cannibals*, New York: Seven Stories Press, 2008.

Foster, David R. *Thoreau's Country: Social Change and Farm Abandonment in New England.* Harvard Press, 1999.

Gilio-Whitaker, Dana. *As Long As the Green Grass Grows: The Indigenous Fight for Environmental Justice, From Colonization to Standing Rock.* Boston: Beacon Press, 2019.

Haraway, Donna. *When Species Meet.* Minneapolis: University of Minnesota Press, 2008.

Haraway, Donna. *Staying with the Trouble: Making Kin in the Chthulucene* Durham: Duke University Press, 2016.

Kelsch, Paul. "Constructions of American Forest. Four Landscapes, Four Readings." *Environmentalism in Landscape Architecture*, Bumbarton Oaks Research Collection. Washington, D.C., 2000.

Kimmerer, Robin Wall. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*. Milkweed Editions, 2013.

Kirby, Ed. "Salisbury Iron Forged Early Industry." Connecticut History.org website; https://connecticuthistory.org/salisbury-iron-forged-early-industry/, Accessed October 2018.

Knott, John R. *Imagining Wild America.* Ann Arbor: University of Michigan Press, 2002.

Nash, Roderick Frazier. *Wilderness and the American Mind.* Fifth Edition. New Haven: Yale University Press, 1967.

Navitsky, Scott. *Pines In A Pasture: The History of the Cathedral Pines, Northwestern Connecticut, and the Blowdown of July 1989.* Academic essay, Harvard University, November 1990.

"National Natural Landmarks: Cathedral Pines," National Park Service website, accessed September 24, 2018, https://www.nps.gov/subjects/nnlandmarks/site.htm?Site=CAPI-CT.

"Wampum: Memorializing the Spoken Word," Onieda Nation website, https://www.oneidaindiannation.com/wampum-memorializing-the-spoken-word/, accessed April 2020.

Paglen, Trevor. "Experimental Geography: From Cultural Production to the Production of Space," in *Experimental Geography*, New York: Independent Curators International, 2008.

George F. Peterken. "Natural Disturbance," *Natural Woodland: Ecology and Conservation in Northern Temperate Regions.* Cambrigdge University Press, 1996.

Pollan, Micheal. "Like A Garden," *Second Nature: A Gardener's Education*. New York: Grove Press, 1991.

Powless, Chief Irving. *Who Are These People Anyways?* Syracuse: Syracuse University Press, 2016.

Shotwell, Alexis. *Against Purity: Living Ethically in Compromised Times*, Minneapolis: University of Minnesota Press, 2016.

Straka, Thomas. "Historic Charcoal Production in the US and Forest Depletion: Development of Production Parameters," *Advances in Historical Studies,* Vol.3 No.2 (2014); DOI:10.4236/ahs.2014.32010. Accessed October 2018.

"Connor Steadman: Carbon Farming." Website of the organization Peak Prosperity. Interview by Adam Taggart on October 9, 2017. https://www.peakprosperity.com/connor-stedman-carbon-farming/ Accessed August 2019.

Thoreau, Henry D. “The Succession of Forest Trees,” 1860. http://monadnock.net/thoreau/trees.html. Accessed October 2018.

“Four Centuries of Change in Northeastern United States Forests.” Thompson JR, Carpenter DN, Cogbill CV, Foster DR. Published 2013 in Pone online journal. Accessed October 2018. http://e72540. https://doi.org/10.1371/journal.pone.0072540.

Vietze, Andrew. *White Pine: American History and the Tree that Made America.* Globe Pequot, 2018.

Vizenor, Gerald. *Manifest Manners: Post-Indian Warriors of Survivance.* Middletown, CT: Wesleyan University Press, 1994.

Williams, Michael. *Deforesting the Earth: From Prehistory to Global Crisis.* Chicago: University of Chicago Press, 2002.

Whyte , Kyle Powys. “Indigenous Experience, Environmental Justice, and Settler Colonialism.” April 25, 2016. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2770058. Accessed December 2019.