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## Undoing Colorblind Ecologies: Redlining and Just Green Enough in the Urban Forest of Boston's Franklin Park

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UNDOING COLORBLIND ECOLOGIES:  
REDLINING AND JUST GREEN ENOUGH IN THE URBAN FOREST OF  
BOSTON'S FRANKLIN PARK

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THESIS

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A thesis submitted in partial fulfillment of the  
requirements for the degree of Master of Arts in the  
College of Arts and Sciences  
at the University of Kentucky

By

Chelsea M. Parise

Lexington, Kentucky

Director: Dr. Patricia Ehrkamp, Professor of Geography

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2022

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## ABSTRACT

### UNDOING COLORBLIND ECOLOGIES: REDLINING AND JUST GREEN ENOUGH IN THE URBAN FOREST OF BOSTON'S FRANKLIN PARK

Urban political ecology research increasingly engages multi-disciplinary methodologies to clarify the role that the botanic plays in creating, maintaining, or subverting ecological geographies of power. Fredrick Law Olmsted intended the forest within Franklin Park to heal the physical degeneration and social disunity he believed resulted from urban living conditions but instead the forest within Franklin Park has grown in contexts of increasingly complex environmental and racial difference. I examine how the urban forest in Boston's Franklin Park has ecologically manifested racialized power relations through distinct periods of elite nature-making and segregated grassroots stewardship. I utilized archival research, forest surveys, and semi-structured interviews to trace the influence of race on forest socio-successional processes and its implication for future forests. I found that periods of racialized land management have formed ecological signatures in the forest strata and shifted forest succession, leaving the forest vulnerable to being inscribed into the processes of green gentrification through forest revitalization. Furthermore, these forest processes create a unique and place-based socio-ecology that reflects the racial tensions in Boston since Franklin Park's establishment. This research complicates the alleged political neutrality of historical and ecological forest restoration. Utilizing a "just green enough" approach, I caution against urban greening initiatives for climate resilience remaking place-based natures and discuss the ways spontaneous vegetation can become collaborators in ecologies of resistance.

KEYWORDS: Public Parks, Urban Forests, Race, Segregation, Gentrification, Climate Change

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Chelsea M. Parise

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04/28/2022

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Date

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## DEDICATION

To our collective connected futures.

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## CHAPTER 1. INTRODUCTION

The contemporary movement for civil rights and racial justice is confronting the myth of public space as equally accessible and impartial. The prevalence of monuments and statues of individuals with racist legacies in public parks and commons has been identified as evidence of the cumulative and persistent impacts of an unequal system of urban public space formation (Schein, 2009). Statues, memorials, buildings, and roads have been renamed, removed, and redesigned as conscious acts of social protest within the built environment (Alderman, 2008; Sheehan and Speights-Binet, 2019; Thompson, 2022). While statues, literally history pressed into stone or cast into bronze, provide visible static evidence of enduring white supremacy, dynamic ecological heritages produced by the same processes of inequity are more difficult to recognize or remediate (Anguelovski et al., 2021). Unlike statues, ecologies undergo a material successional process of change paired with the human systems, and the nature that has been produced by redlining, white flight, and neglect is framed by hierarchies that parallel those of racial difference. Through their appearance, size, or species, individual plants and even an entire forest are living and changing marks of inequity. These invisible, unseen, or overlooked ecological impacts can make forests vulnerable to becoming vectors of future inequity, which has been exemplified in the last few decades as green gentrification perpetuates displacement of urban communities of color (Checker, 2011; Curran and Hamilton, 2012; Dooling, 2009; Gould and Lewis, 2012; Kocisky, 2021; Pearsall and Eller, 2020). There are calls to increase the vegetation in cities to reduce the impact of climate change, but this new urban greening threatens to recreate patterns of environmental inequity, especially under rigid imaginings of desirable urban nature that reflect particular compositions and forms of

vegetation as a capital asset (Bryson, 2013; Checker, 2011; Gould and Lewis, 2012; Harper, 2020; Loughran, 2022; Rigolon and Németh, 2020; Riley et al, 2018).

Now is a timely moment to consider how race and nature intersect within urban parks, as urban public parks are experiencing increased attention and appreciation during the intersecting crises of the Covid-19 pandemic, Black Lives Matter protests, and climate change. Due to their self-sustaining vegetative nature, public parks are often overlooked and underfunded landscapes, but the present moment of health, social, and environmental disruption illustrates that urban public parks and their ecologies are indispensable and dynamic geographies of respite, resilience, and resistance. These interconnecting issues have exposed the inequitable distribution and environmental condition of green space in urban centers, but more research is needed to clarify how park inequity is created within green landscapes through their ecology (Heynen et al., 2006; Hoover and Lim, 2021).

Ecologists frequently assess urban forest condition and recommend management directions utilizing a narrow disciplinary perspective that considers plant survival and growth as purely biological processes under generalized pressures of urban disturbance conditions (Piana et al., 2021b; Prach and Walker, 2011; Zipperer, 2008). However, shifts in localized governance structures, economic conditions, racial conflict, and attitudes towards nature heavily influence management strategies and biological outcomes. In a reflection of this, social science research with a political ecology focus has confronted the role of power within ecological processes, with calls to integrate research more deeply from relevant ecological fields such as botany and forestry (Zimmerer, 1994; Walker, 2005; Pickett and Grove, 2020). These progressive nature-culture ecologies create new avenues for engaging with management practices that disrupt ecologies of power and

integrate multi-species environmental and social justice (Bryson, 2013; Cooke et al., 2020).

This thesis analyzes the intersections of race and ecology by looking at forested areas in Franklin Park in Boston, Massachusetts. Frederick Law Olmsted designed the Park as an ideal nature for white communities in the late 1800s. However, due to the influence of redlining and white flight beginning in the 1950s, Franklin Park is now surrounded by, and primarily used by, communities of color. As white users fled the surrounding neighborhoods, the City of Boston largely abandoned the Park and the management of its forest. In response, a grassroots coalition from Boston's Black community began to manage the landscape. Periods of vegetative alteration by both Olmsted and the Coalition has resulted in changes to the successional processes of the forest, including increased presence of invasive species and the alteration of the dominant tree species composition and structure. As the areas around Franklin Park have begun to gentrify, the City of Boston is poised to make a \$28 million investment in the Park. At this pivotal moment, I analyze the recent history and ecology of Franklin Park to contextualize the potential futures of the forested areas, its relationship with Black history, and its potential to achieve a new form of just green enough environmental justice.

## **Research Questions**

My research questions approach the forests of Franklin Park from two diametric temporal scales, the first looking back in time to frame the ecology as a product of social circumstances of difference and the second considering the present forest condition to understand how future ecological changes may perpetuate or circumvent social circumstances of difference. Specifically, as to the past, I inquired how the incorporation

of race into the historical governance, planning, and implementation of forest management practices has shaped forest succession. To assess the historical and sociological processes that have shaped Franklin Park's contemporary ecology, I utilized historical archives to piece together the social underpinnings of an ecological management strategy in the years following the City of Boston's abandonment of the Park. This archival work included analysis of steering or management documents from both governmental and grassroots actors related to Franklin Park's forest. I conducted this discourse analysis with attention to the historical processes within which these management decisions were made, such as events of social unrest or changing municipal budgets.

My research into the future positions the forest produced by inequity into multiple scenarios for racial and environmental justice. For Franklin Park, where greenspace already exists and is accessible by communities of color, investigating the directionalities of ecological change as a form of justice can reveal how power is recreated in the mediated construction of forests. My research into the future asks how the present-day forest structure and composition shape discourses over park revitalization and greening in the context of equity. It also asks whether contemporary forest conditions leave adjacent communities vulnerable to displacement by green gentrification. To understand the potential for this scenario, this second question required comparing the forests in the Park today with those described in archival documents and those affiliated with the revitalization plans. As I show, the potential for green amenity and racial equity for the historically segregated abutting neighborhoods of Roxbury, Dorchester, and Mattapan is reflected in the compositional and structural signals within the forest itself. To establish ties among forest state, archival documents, and management practices, I conducted

conventional forest sampling techniques in Franklin Park to characterize how the unfolding plans to revitalize the forest may play out.

### **Theoretical Contribution**

Multidisciplinary methodologies are required to comprehend the interwoven matrix of human and nonhuman ecosystems (Bryson, 2013; Cooke et al., 2020; Heynen, 2006). The paradigm of “ecology for the city” embraces the place-based complexities that form urban ecosystems and encourages a more philosophical stewardship that incorporates equity alongside ecology (Pickett et al., 2016). Within this larger body of urban ecology literature, my thesis responds to calls in several strands of geography to engage in research that considers the intertwining aspects of history, race, and greening in creating, maintaining, and subverting ecological geographies of power (Heynen, 2016; Hoover and Lim, 2021; Pickett and Grove, 2020). In particular, my thesis adds more site-specific ecological detail to the concept of “just green enough” (Wolch et al., 2014; Curran and Hamilton, 2018; Rigolon and Németh, 2020). “Just green enough” challenges the inevitability of green gentrification, redirecting environmental remediation efforts to serve the community without attracting outside capital (Curran and Hamilton, 2018). While neighborhoods are often dichotomized as to whether they are gentrifying or in decline as a function of the politics of urban greening, I put more attention on the details of how these and other pathways or scenarios emerge and present themselves (Delmelle, 2017; Landis, 2016). By contributing to a more processual understanding of the historical role of race and racial tensions in altering the successional trajectory of the Franklin Park forest, I illuminate how the socially-produced characteristics of this forest play a role in mediating green gentrification.

By considering the active relationship between the flora and social power production, I also contribute to ideas from more-than-human geographies (Cooke et al., 2020; Ernwein, 2020; Head and Atchison, 2009; Kocisky, 2021; Phillips and Atchison, 2020). As plants are both active and reactive agents alongside human interventions, plant and human futures are bound and co-formed together (Des Roches, et al., 2020; Gabrys, 2012; Head, 2017; Ogden et al., 2018). In urban greening efforts, plants are transcribed into the role of “lively commodities” and engaged within landscapes based on the socio-political will of the dominant society (Hubbard and Brooks, 2021). Vegetative life is planted, removed, modified, or allowed to naturalize based on the uneven conditions of power to manipulate the landscape. Many academic works on critical greening invoke generic concepts of “green,” reducing the process to a featureless dimension of color and disguising the specific influence of plants in nature-making within cities (Patrick, 2014). This not only reduces the unique social influence of particular plants but also erases the agency of each plant to respond to and resist their own manipulation. Plants, down to species with their unique life history traits, as well as individual trees, are “nonhuman laborers” working to create landscapes alongside, independently of, and in opposition to human intentions for the landscape (Ernwein, 2020). Although ecological processes can be directed and interrupted by socio-political processes, they can never fully be controlled by anthropogenic forces.

Furthermore, this thesis makes contributions toward creating a template for a more habitable ecological city that works in cooperation with nature, heals the climate, and dismantles environmental injustice (Blaikie, 2010; Chaudhury and Colla, 2020; Heynen, 2003). It does this through a reframing of the plants that recognizes them as a cooperative



and co-conspiratorial force with non-human agency, one that has the potential to disrupt as well as entrench existing power regimes. Abandoned vegetated places advertise themselves as potential sites for remediation, reworking, and gentrification (Loughran, 2017). Environmental racial equity and justice efforts are beginning to recognize the essential role of floristic management in shaping ecologies of power (Baldock et al., 2019; Birge-Liberman, 2010; Hope et al., 2003; Patrick, 2014; Watkins and Gerrish, 2018). Ecologies of power and the intentional or inadvertent alteration of urban vegetation can intersect and produce a range of green futures, some that may re-entrench existing segregation of people or perpetuate gentrification (Gould and Lewis, 2012; Kohn, 2013; Riley et al., 2018; Robbins, 2007). As forests become both increasingly scarce due to urbanization, yet also valuable under the threats of climate change, governance must seek ways to steer toward restorative future ecologies through the concept of just green enough. Rather than conclude with a singular utopian vision, I focus on the potential scenarios for these urban green futures that emerge out of historical legacies of racial struggles and urban forest succession.

Lastly, this thesis contributes to the ongoing public discussions over how the revitalization of the Franklin Park forest should proceed. Resurrecting the forest, now dominated by invasive plants, defined by the inevitable loss of large canopy overstory trees, and echoing with the voices of historical and contemporary racial protests, asks a far more challenging question than the ones coming out of municipal organizations in Boston: how can the future forest, in its composition and appearance, honor its legacy of resistance through Civil Rights and Black Lives Matter movements and ascend to new levels of racial and multi-species equity? This is particularly pertinent under the conditions that the forest

is both the landmarked product of a historically significant architect and on the cusp of irreversible vegetation change.

## CHAPTER 2. HISTORY OF FRANKLIN PARK

Due to the temporally cumulative processes of both ecologies and social relations, it is necessary to understand the historical roots of Franklin Park's landscape. A focus on Franklin Park's human history alone, as a production of Frederick Law Olmsted, is insufficient. An ecological history is also needed to contextualize the management approaches that have shaped forest composition over time. Similarly, a brief history of Boston is required to illustrate the formation of racial tensions, as well as their manifestation in the Park. Both the historic cultural and ecological construction of the Park and its role in the Civil Rights Movement are crucial for understanding the tensions that exist today. This history of cultural, racial, and ecological legacies helps convey how each of them are represented in the potential futures for Franklin Park and how inattention to the past may lead to green gentrification. While this cumulative history of Franklin Park may seem protracted, it encompasses the perspective of oak trees within the forest which have, in a single lifetime, seen these histories unfold.

### **F. L. Olmsted and Boston's Emerald Necklace**

Commissioned in 1875, the Emerald Necklace is a 1,100-acre urban park system that spans seven miles and consists of six linked public parks designed by landscape architect F. L. Olmsted and three pre-existing historical greenspaces of the Boston Common, the Public Garden, and Commonwealth Avenue Mall. The system spans the intertwined urban municipalities of both Boston and Brookline. The six parks vary between their multiple design intentions, such as the Arnold Arboretum, which is managed by Harvard University as a scientific botanic collection, and the Muddy River, which was designed to mitigate flooding and public health concerns. The Emerald Necklace is one of only four urban park systems designed by Olmsted and the last one that he produced completely from beginning to end.

Olmsted drafted the design for Franklin Park nearly thirty years after the overwhelming success of Central Park. Olmsted applied ideas about the interactions between space, people, and nature honed over decades of composing parks, cemeteries,

state grounds, and neighborhoods. By far the largest park of the Emerald Necklace, Franklin Park is 485-acres and intended to be the “country park” and anchor of the park system. Franklin Park borders the five neighborhoods of Roxbury, Dorchester, Mattapan, Roslindale, and Jamaica Plain (Figure 2.1). The Park was completed in 1896, only a year after Olmsted’s retirement, becoming his last signature park, alongside Central and Prospect Parks in New York (Newton, 1979). Olmsted was intimately involved in the construction, overseeing all aspects of design implementation (Dale et al., 1984). His son John Charles Olmsted called Franklin Park “the best piece of work done” by his father “as an illustration of park designing” (Newton, 1979, p. 8).



**Figure 2.1: Franklin Park, in Boston, Massachusetts**

The Park contains the largest contiguous forest cover in Boston. As a result of redlining, the neighborhoods of Roxbury, Dorchester, and Mattapan are majority low-income Black and Brown and are at risk of future displacement due to the influence of green gentrification.

Prior to the arrival of European colonists in 1630, the future Franklin Park was an oak- and pine-dominated forest growing on rocky land with thin soils (Boston Dept. of Parks, 1886; Foster, 1998; McDonald et al., 2006). The site’s proximity to the bay, freshwater streams, and forest made it very likely that the Massachusetts Tribe utilized this landscape for hunting and foraging (Cogbill et al., 2002). In 1632, the colonized area was renamed Roxbury, after the local rock conglomerate, and grew as an independent rural

satellite town on the southern edge of Boston. In the footprint of what is now Franklin Park, Roxbury's uneven and rocky soils made farming difficult, but land was cleared of forest and tilled in the most amenable areas, and small farms formed in the landscape. The least accessible rocky uplands were spared from severe forest clearcutting and original forested patches persisted with only occasionally timber harvesting.

While initially political distinct, Roxbury evolved in relation to Boston, as the two districts were closely physically, socially, and economically bound. Warner (1978) identifies Roxbury as the first "streetcar suburb" due to its use of some of the earliest forms of mass transit infrastructure in the country, a connection that reflects how the boundaries between Roxbury and Boston were becoming increasingly less distinct. By the mid-1800s, the city of Boston was growing exponentially, becoming more crowded as it urbanized. Waves of new immigration in 1847, largely due to the Irish Potato Famine, hastened the need for Boston's expansion. Boston annexed five suburban towns at its edges in rapid succession, including Roxbury in 1868, increasing its geographical footprint by 441% but its population by only 116% (Hardy, 1980).

The annexation of semi-rural Roxbury into the rapid urbanizing Boston created territory for new approaches to urban planning, including the concept of public greenspaces. At the time, Boston's public greenspaces consisted of only the Boston Common, Public Garden, and the Forest Hill and Mt. Auburn Cemeteries, a total green footprint of just 1.7% of Boston's urban landscape. However, the success of the new parks movement in large cities like New York, Hartford, and Montreal, led by Fredrick Law Olmsted, was well-known, and Olmsted presented his park philosophy to the academic Boston Brahman in a 1870 lecture titled "Public Parks and the Enlargement of Towns" (Olmsted, 2020). Olmsted argued that "a park exercises a very different and much greater influence upon the progress of a city in its general structure than any other ordinary public work" (Eisenman, 2013, p. 296). Olmsted's lecture was convincing, and within the decade, the City of Boston founded a Parks Commission, passed the 1875 Parks Act to acquire property, identified funding in a maturing endowment left by Benjamin Franklin, and commissioned Olmsted to draft the parkway plan that would become the Emerald Necklace.

A decade after its annexation, Roxbury was scouted by Olmsted as future site for inclusion in the Emerald Necklace. In 1876, the site of what would become Franklin Park was known as West Roxbury Park. It contained a handful of small private farms and scattered woodlands whose paths the adjacent landowners permitted the public to access and enjoy. The pre-existing wooded forest, its rural agricultural idyll, and the availability of nature recreation aligned very closely with Olmsted's philosophy, and he uncharacteristically insisted on this property's inclusion as "a singularly complete and perfect example of scenery which is perhaps the most soothing in its influence on mankind of any presented by nature. A man weary of town conditions might travel hundreds of miles through the country without finding one more so" (Zaitzevsky, 1982, p. 66). The City of Boston purchased the land and inscribed it into the Emerald Necklace project in 1881.

In 1884, Olmsted designed Franklin Park as a "country park" distinct from other parks in the Emerald Necklace. His nature-based social philosophy required the presence of large tracts of dense urban forest as argued in his steering document *Notes on the Plan of Franklin Park and Other Matters* (Boston Dept. of Parks, 1886). Olmsted's theory of public park design was diametrically opposed to the style of formal gardening popular at the time. He rejected engaging in the highly visible deployment of a "civilized force over nature" approach to gardening, which he argued was used to signal and perpetuate elitism through nature (Boston Dept. of Parks, 1886, p. 44). Olmsted advocated for this Roxbury Park location in large part because its regenerated second-growth woodland was perceived as an authentic and archetypal New England forest given the "natural materials of the locality... as trees and plants are of a natural character naturally disposed" (Boston Dept. of Parks, 1886., p. 44).

While Olmsted completely manufactured forests in previous designs like Central Park, by this time he displayed a clear preference for the production of forests by natural forces over the time scale of decades, if not centuries, with strategic interventions and ongoing management to ensure the intended influence of his design philosophy. Olmsted now preferred to rely on the natural processes of woodland growth and succession to keep park maintenance costs low. However, he did not believe that a forest could serve its social purpose without interventions. Forest management was essential, with necessary

interjections of planting and thinning to shape the forest, but also to clear the underbrush and prevent the concealment of criminal activity. Crucial to the role of nature in his designs was the time necessary for a forest to mature. Mature forests with established trees were considered more important, as the “value of a rural park grows with its age ... [and] as a rule, the older the wood ... the better it serves its purpose” (Boston Dept. of Parks, 1886, p. 96). Olmsted intended his designs to grow and mature with trees saying, “[A]fter the design for a park has been fully digested, a long series of years must elapse before the ends of the design will begin to be fully realized” (Eisenman, 2013, p. 295). In the final pages of *Notes on the Plan of Franklin Park and Other Matters* is his reminder that his designs are “forever dependent on the condition of its trees” (Boston Dept. of Parks, 1886, p. 99).

Olmsted’s preference for a pre-existing forest and emphasis on natural scenery in his park designs was intentionally deployed as an antidote to what he believed to be the physically and socially degrading influences of urbanism. Olmsted warned of the consequences that an urban environment of “artificial things” begets on its citizenry, producing steady declines “first on [an urban dweller’s] mental and nervous system, and ultimately on his entire constitutional organization” (Boston Dept. of Parks, 1886, p. 42). Unremedied, urbanity fated citizens to lives of “disease and misery and of vice and crime,” and produced a survivalism that decayed social bonds into “particularly hard sort of selfishness” (Nicholson, 2004; Olmsted, 2020, p. 366; Taylor, 1999). However, the insidious influence of urban life could be counteracted and cured through influence of natural scenery. Olmsted repeatedly emphasized the influence of trees, particularly aggregated trees into woodland, as the most influential nature in his designs, saying “the wood, ... will be the most important element of [Franklin Park’s] scenery” (Boston Dept. of Parks, 1886, p. 50). Olmsted argued that visiting these woods enveloped visitors in nature within a “depth of wood ... to completely shut out the city from our landscapes” (Olmsted, 2020). Franklin Park’s forests were designed to be the anti-city, eliminating the need for “excessive nervous tension, over-anxiety, hasteful disposition, impatience, [and] irritability” that originated from the unique urban phenomena of close proximity and extreme inequities (Boston Dept. of Parks, 1886, p. 45). Olmsted argued that the influence of nature in parks was subtle, unconscious at times, but effective, pointing to the “few that seemed a little dazed, as if they did not quite understand it, and were, perhaps, a little

ashamed of ... the prevailing expression of good nature and light heartedness” (Olmsted, 2020).

Influenced by utilitarianism, transcendentalism, and the abolitionist movement, Olmsted could be considered a progressive reformer who intended the benefits of his parks to be public, inclusive, and accessible for all (Nicholson, 2004; Taylor, 1999). His magnanimous vision for park design was inspired by his travels to Europe. Following a visit to the United Kingdom’s Birkenhead Park in 1850, he wrote: “all this magnificent pleasure ground is entirely; unreservedly and forever the people’s own. The poorest British peasant is as free to enjoy it in all its parts as the British Queen” (Eisenman, 2013, p. 289). For Olmsted, the equally experienced influence of nature had a socially unifying and democratizing effect, producing interactions that were “not at all intellectual, competitive with none, disposing to jealousy and spiritual or intellectual pride towards none, each individual adding by his mere presence to the pleasure of all others, helping to the greater happiness of each...” (Olmsted, 2020). Olmsted pointed to what he saw as successes in Central and Prospect Parks where “a body of Christians coming together, and with an evident glee in the prospect of coming together, all classes largely represented ... poor, rich, young, old, Jew and Gentile ... tears of gratitude in the eyes of poor women, as they watch their children thus enjoying themselves” (Olmsted, 2020, p. 368). However, this position is complicated by the elitism inherent within his social uplift approach, his muted position on racial inclusion within parks, and his active displacement of a free Black community during the demolition of Seneca Village to create Central Park.

To read Olmsted’s philosophy for Franklin Park is to imagine it as a utopian space of refresh, recharge, and reconciliation where one can “escape the conditions requiring vigilance, wariness, and activity towards other men” (Olmsted, 2020). While Olmsted emphasized that the benefits of nature are equally distributed, going so far as to argue for affordable transportation to reduce the limitations of travel, Olmsted’s position on the perception of the benefits was distinctly classist. Despite oppositional writings about slavery in *The Cotton Kingdom* (1861) and financial backing of an abolitionist paper, *The Nation*, Olmsted was conspicuously quiet on race in his park theory. Race only played a significant role in his firm’s park design after his death, when the firm designed a



segregated park for Black residents as part of the Louisville, Kentucky Olmsted Park System in 1922 (Free, 2009; Olmsted, 1861).

Completed in 1896, the construction of Franklin Park took 15 years, and Olmsted's vision for Franklin Park as one of passive recreation in an uninterrupted nature-scape lasted only a year before the design of the Park began to be radically altered to attract visitors and increase revenue. Despite Olmsted's vision, a cross country running track, sports fields, public zoo, rose garden, 18-hole golf course, and restaurant were all built in Franklin Park within decades of its completion. These recreational amenities were installed under pressure by upper middle class and elite members of Boston society who lobbied the government to alter the public space to their preferences using unfounded insistence on waning park attendance as evidence of the need for changes (Von Hoffman, 1988).

By the 1920s, the area around Franklin Park was rapidly urbanizing, and a road running through the middle of the Park was opened to multi-use city traffic and eventually widened, facilitating the use of cars within the Park at the expense of pedestrians, cyclists, and equestrians. Several more major land reuse projects encroached the Park's original footprint, including the 10,000 seat White Stadium sports arena in 1945 and Lemuel Shattuck Hospital in 1954. In many ways these additions fractured Olmsted's intended user patterns and sharply redirected the focus away from the forest as a significant landscape feature of the Park.

Olmsted intended for Franklin Park to be a unifying green center of an otherwise disordered city. But instead of becoming a solution, the Park became deeply entangled and emblematic of the ongoing racial tensions within Boston beginning in the 1940s. The area surrounding the Park rapidly urbanized and industrialized, with the Roxbury and Dorchester neighborhoods largely composed of Irish Catholic and Jewish working class immigrants in the earliest decades of the Park. Previously unpolitical, in the 1940s and '50s tension between youth groups in the Park became apparent, with evidence of territories enforced largely by antisemitic violence (*The Boston Globe*, 1951; Norwood, 2003).

During the Great Migration, new Black arrivals seeking equitable social and financial opportunities found primarily low-paying industrial or service work near the

expanding railroads in Boston's South and West Ends (Brennan, 2017). The South End became the most diverse neighborhood in Boston as Southern Black arrivals joined established German, Irish, Jewish, Syrian, Lebanese, Greek, and Armenian residents in the neighborhood (Boston Landmark Report, 1983). With subsequent waves of migration and international arrivals from Jamaica, Barbados, Puerto Rico, Dominican Republic, Cape Verde, and Haiti, the South End became Boston's center of Black life and art in the early 20<sup>th</sup> century. Boston's Black population rapidly increased from 2,000 to 30,000 between 1890 and 1950 (Brennan, 2017; MacLaury et al. 2018). Black communities began to expand past, and were actively pushed out of, the traditional boundaries of the South End into adjacent Roxbury. In the 1950 census, Roxbury was less than 1% Black, but by 1970, the neighborhood was over 90% Black.

As Roxbury rapidly became a Black community in the 1960s and '70s, Franklin Park's amenities became available to the Black community in a new way, and the Park was embraced as a site for respite, recreation, and resistance. As the Black usership increased, nearby white residents gradually neglected the Park in favor of nearby Arnold Arboretum or Jamaica Pond Park, both of the Emerald Necklace. This social segregation was facilitated by the spatial separation resulting from the construction of the Casey Overpass in 1955, which severed pedestrian movement between Franklin Park and other parks in the Necklace, functionally turning Franklin Park into a green island. The segregation of park spaces was compounded by ongoing redlining and blockbusting in the neighborhoods around Franklin Park. The legacy of racial covenants and unequal lending practices under the Federal Housing Administration program were evidenced by the Home Owners Loan Corporation designation of the neighborhoods surrounding Franklin Park to be either "hazardous" or "declining" (Nelson et al., 2016). Local legislation, such as the Boston Banks Urban Renewal Group program perpetuated blockbusting in the name of preventing housing discrimination and segregation (Finfer, *The Boston Globe*, 2019). Even though discrimination practices were illegal, a Boston Federal Reserve Bank study found that 56% of housing applications still evidenced racial bias in 1989 (Bradbury et al., 1989). The neighborhoods of Roxbury, Dorchester, and Mattapan surrounding Franklin Park became distinctly underserved and dilapidated as a result of housing discrimination and

segregation, with notably rundown homes and littered abandoned lots disproportionately prevalent in these disadvantaged neighborhoods (Medoff and Sklar, 1994).

Waves of urban unrest swept the nation in the late 1960s, with New York's Harlem Riots in 1964, Los Angeles's Watts Riots in 1965, and similar uprisings in Philadelphia, Chicago, Cleveland, Detroit, and Atlanta. Due to a relatively small percentage of Black residents and an enduring public belief in Boston as a racially progressive city, Boston expected for this national movement for civil rights to pass without experiencing the same instances of public outrage. However, on June 2, 1967, a group of fifty Black women organized as the Mothers for Adequate Welfare and occupied the Grove Hall Welfare Office in Roxbury to protest severely reduced social services without explanation or appeal, locking themselves inside the building with several social workers. The Black community gathered in solidarity, both within and outside the Welfare Office, reaching numbers well over 700 (*The Boston Globe*, 1967). In response to the growing crowd, Boston Police deployed every officer in the City's force to Franklin Park, with nearly 1,700 officers utilizing the Park's White Stadium as a military-style staging and detainment center (*The Boston Globe*, 1967; Johnson, *The Boston Globe*, 2017). Protestors clashed with police officers in ten blocks adjacent to Franklin Park for over three days in what would become known as the Roxbury Riots, or alternatively, the Blue Hill Riots. Thirty people were arrested, thirty people were injured, and over 200 live rounds were fired by police officers (*The Boston Globe*, 1967). While this event is historically referred to as either the Roxbury Riots or Blue Hill Riots, in this thesis it will be called the Roxbury Rebellion in recognition of conscious language used by activists like Grace Lee Boggs who reject the demonizing of the riot language in favor of that which recognizes a "rebellion is righteous, because it's the protest of a people against injustice" (Campbell et al., 2020; McFadden, *New York Times*, 2015).

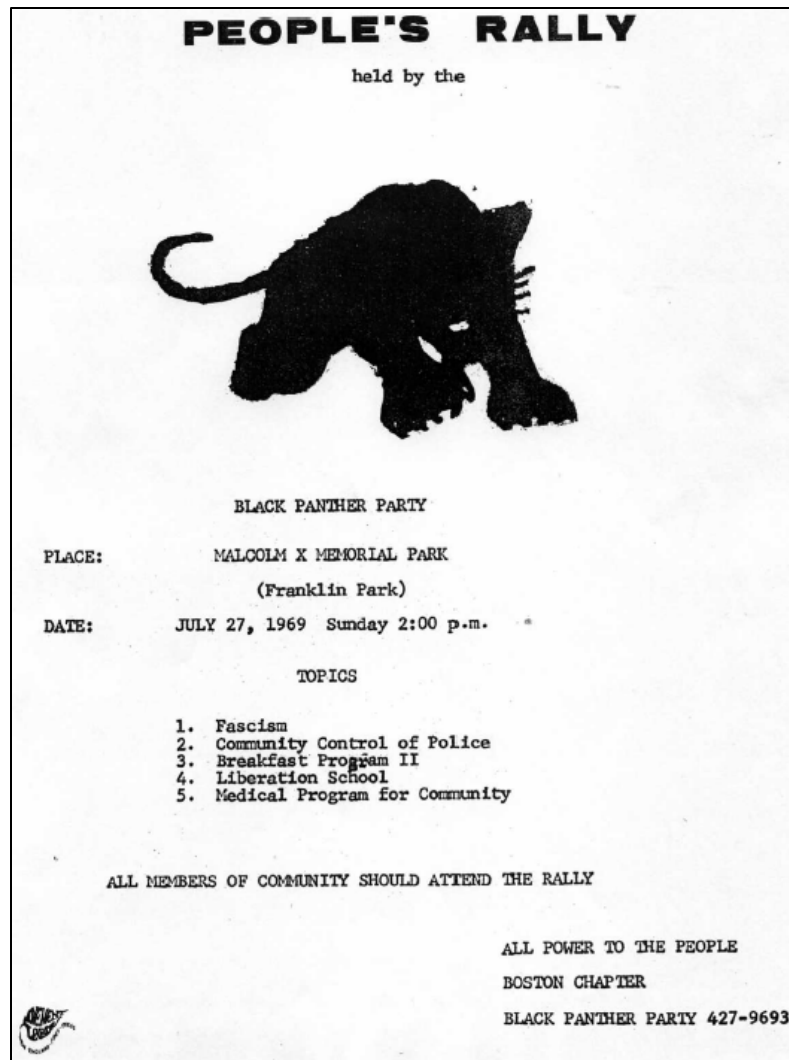
The slow abandonment of the neighborhoods and Franklin Park by whites in the early 1960s as the Black population of Franklin Park increased, sped up dramatically after the Roxbury Rebellions of 1967. Immediately after the Roxbury Rebellion, civil rights protest began to routinely gather in Franklin Park and regular protests by the Black community would continue there for decades. Within weeks of the Roxbury Rebellion,

Stokely Carmichael, the prominent civil rights activist and Black Panther Party leader, spoke at a rally in Franklin Park, reflecting on issues of justice, police brutality, community control, and land rights (Birge-Liberman, 2014). In April 1968, a gathering of the Black United Front drew 5,000 attendees to White Stadium to mourn the murder of Martin Luther King, Jr. and to present demands for Black civil rights to the community in anticipation for delivering them to Mayor Kevin White (Sikowitz, 2021). In September 1968, Black students staged the first of several school walkouts and rallies in Franklin Park to demand “lower food prices, formation of an Afro-American society, more Black teachers, counselors, cooks, and a Black student curriculum” (Figure 2.2; *The Boston Globe*, 1970, p. 10). Louise Day Hicks, a vocal segregationist, member of the Board of Boston Public Schools, and future U.S. House Representative spied on the rally from the bushes and fled when discovered. Hicks would later block a significant amount of funding for Franklin Park (Tierney, 1987). In July 1969, over 300 Black Panther Party members gathered in Franklin Park to address police brutality, listen to political speeches, and demand the renaming of Franklin Park as Malcom X Memorial Park (Figure 2.3; MacLaury et al., 2018).



**Figure 2.2: Black Protest in Franklin Park**

Franklin Park was the terminus of this organized Black student walkout, where protestors listened to speeches demanding Black faculty and curriculum in their schools (left). This protest was semi-secretly observed by Louise Day Hicks, an avid segregationist, who at the time was on the Board of Public Schools but would later be elected a Boston City Councilor and cast a deciding vote blocking municipal funding for Franklin Park (right) (Brearley Collection, Boston Public Library, 1968).



**Figure 2.3: Black Panther Rally in Franklin Park**

Due to its proximity to Black communities, Franklin Park was a convenient, familiar, and safer site to host Civil Rights protests, which often numbered in the hundreds to thousands of participants. This Black Panther rally drew over 300 people and unofficially renamed Franklin Park to Malcom X Memorial Park (Black Panther Party, 1969).

### **Abandonment of Franklin Park**

Retaliation by the City of Boston for the Roxbury Rebellion and continued protests within Franklin Park was immediate and had very visible impacts on the landscape. By 1969, the City of Boston began to use the Park as a dumping ground, with municipal trucks unloading large amounts of garbage debris and setting it aflame, a thinly veiled punishment tactic which was repeated within the Roxbury neighborhood itself (Botwright, *The Boston Globe*, 1969; Medoff and Sklar, 1994). Additionally, an already financially stressed Boston

Parks and Recreation Department began cutting the number of municipal employees within Franklin Park, which were reduced from fifty a decade prior, to three, and eventually eliminated altogether. Boston's first African American City Councilor, Thomas I. Atkins, said in a 1969 interview, "I am criticizing a Parks Department that can only manage to find three men to maintain 490 acres of choice city real estate but can spare 20 men to work on Boston Common and the Public Garden, which cover an area less than a tenth the size of Franklin Park" (Botwright, *The Boston Globe*, 1969, p. 2). The next month Franklin Park was allocated none of the \$1.4 million federal funds dedicated to improving Boston's Parks, with over 60% going to only three sites in a decision that the chairman of the Urban Renewal Committee called "a little disproportionate" (Jordan, *The Boston Globe*, 1969, p. 2). In 1971, the Boston Parks and Recreation Department spent only 0.83% of its \$6 million park-care budget on Franklin Park and in 1974, Louise Day Hicks, then a City Counselor, blocked \$900,000 in funding allocated for Franklin Park, expressing skepticism about "whether the money would benefit all of the people of our city.... *Our people* can't even go into it" (Heath, 1990, p. 93; Lewis, *The Boston Globe*. 1971). Any police presence within the Park disappeared, with reports of multiple calls for police intervention by Park users or neighbors going unanswered, as officers were told to stay out of the Park under an imposed "hands off policy" (Bolden, *The Boston Globe*, 1971; Jones, *The Boston Globe*, 1971, p.1). Concurrently, narratives of Franklin Park as a landscape of crime and danger began to appear in the media, with titles like "Franklin Park: oasis for non-violent crime?" (Jones, *The Boston Globe*, 1971).

The Black community was not deterred by the racially motivated disinvestment within Franklin Park and continued to organize within the Park to celebrate community and maintain the landscape in some of the earliest forms of grassroots park-care activism. Elma Lewis, a Roxbury community activist and founder of the Elma Lewis School of the Fine Arts located across the street from Franklin Park, began the Playhouse in the Park series in 1966, a free and public concert series that featured local Black youth performers alongside major artists, like Duke Ellington, drawing thousands of people to Franklin Park (McClure, 2012). Lewis also organized the first community cleanup of Franklin Park in 1969, drawing nearly 200 people from the Black community, saying, "[T]his is our park and we want to keep it clean" (Jordan, *The Boston Globe*, 1969, p.39; McClure, 2012).

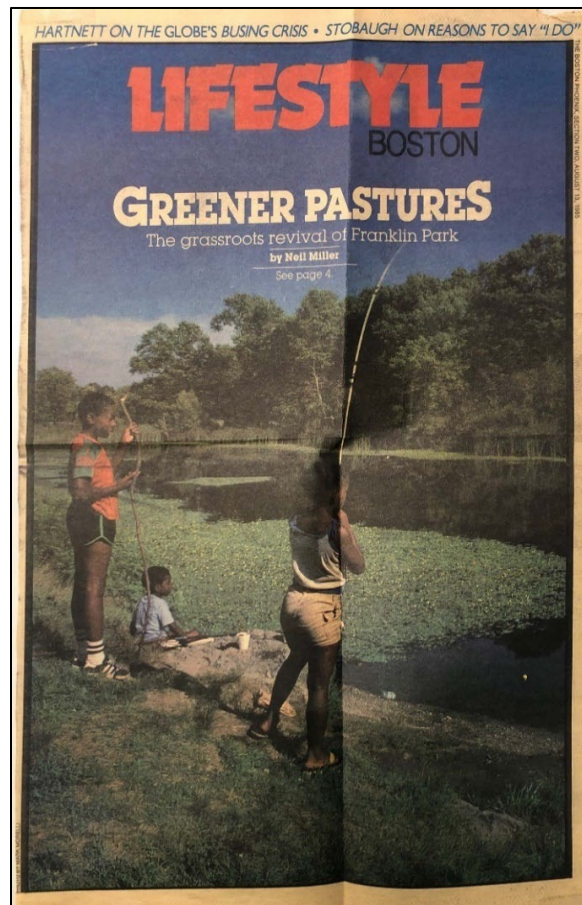
Lewis poured over \$60,000 of her own funds into taking care of Franklin Park, threatened to sue Louise Day Hicks for her role in blocking Franklin Park funds, and began a media campaign to shame the City's inequitable parks budget. In 1978, she took her fight for Franklin Park to the United States Senate Committee on Banking, Housing, and Urban Affairs but had little success in securing national, state, or city funds for the care of Franklin Park (McClure, 2012).

Elma Lewis's advocacy and organizing for Franklin Park evolved into the Franklin Park Coalition (FPC), an all-volunteer organization that expanded its original public arts and events mission to include ecological stewardship, maintenance, and advocacy for the Park. Still active today, the Franklin Park Coalition's community-implemented park stewardship is some of the earliest in the country, nearly a decade before the Central Park Conservancy was founded. In a *Boston Globe* interview, Lewis noted the intertwining cultural and environmental conditions of Franklin Park and the Franklin Park Coalition, saying, "[W]e policed, cleaned, and mowed crabgrass in the park to preserve our existence in the area" (Lewis, *The Boston Globe*, 1971, p. B-7). In an internal document titled "Notes on the Three Most Important Issues Facing the Black Community from the Perspective of the Franklin Park Coalition," the organization summarized the racial discrimination as the core of Franklin Park's neglect:

"The Black community is considered an anomaly by the White political power structure... No other single factors has impeded the work of Franklin Park's revitalization than that...[our] approach has been to thrust the onus of racial fears and racist attitudes onto White residents, by challenging them to confront the real reason why they do not go into Franklin Park" (Heath, 1983a).

The Franklin Park Coalition and the Black community's identification with the Park has persisted through a half century of maintenance austerity, taking pride in the Park and valuing the landscape even in its most neglected condition (Figure 2.4). Resources were especially scarce and the landscape conditions particularly dire in Franklin Park after Proposition 2½ altered the tax code in 1980, cutting the Department of Parks and Recreation funding by 60%. Despite the circumstances, Franklin Park continued to be a center of Black park culture in Boston, hosting many community events alongside Playhouse in the Park, including the Puerto Rican and Dominican Festival beginning in

1967, the Caribbean Festival since 1973, Juneteenth since 1996, and the Boston Arts and Music Soul Festival since 2018. The local Black community unsuccessfully petitioned for Franklin Park to be the site of Nelson Mandela’s 1990 visit to Boston (Thomas, *The Boston Globe*, 1990). Other large community events in Franklin Park were hosted by Franklin Park Coalition, including the Kite and Bike Festival since 1969, and the Turkey Trot 5K in 2013.



**Figure 2.4: Media Coverage of Franklin Park Coalition’s Stewardship**

Marking the centennial anniversary of Franklin Park’s founding, this profile on the Franklin Park Coalition in *The Boston Phoenix* focused on the community’s role in rehabilitating the Park, making explicit the racial tensions at the root of the landscape’s abandonment and the persistent struggle against the Park’s unsafe reputation (Miller, 1985)

In a striking reflection of 1967, half a century after the Roxbury Rebellion and consequential disinvestment, Franklin Park is once again the site of Black protest and economic transformation. Following similar demonstrations in urban areas across the country, on June 2, 2020, a Black Lives Matter (BLM) action drew thousands to “die-in” on Blue Hill Avenue and rally in Franklin Park to protest police violence and systemic



racism (Annear, 2020). Unlike the 1960s, when the Roxbury Rebellion protests were followed by disinvestment, these protests will be followed by the largest injection of municipal funds to Franklin Park since its founding. In 2019, the City of Boston announced the Franklin Park Action Plan, a dedication of \$28 million to restore Park infrastructure, with \$23 million slotted for immediate revitalization projects and \$5 million for a permanent maintenance endowment (Boston Department of Parks and Recreation, 2019). Extensive renovations to public parks are extremely rare, and this amount of funding is guaranteed to significantly impact the landscape.

Boston has a complex and paradoxical relationship with race, one that holds in tension the City's reputation as one of the country's most progressive urban centers and as one of the most overtly racist (Miletsky, 2017). Before the Civil War, Boston was a center of abolitionist organizing, and Massachusetts was the first state to abolish slavery. However, after the Civil War, Boston did not provide an egalitarian welcome to the waves of newly emancipated Black citizenry. In the late 19<sup>th</sup> century, William Wells Brown, an escaped slave and abolitionist, said, "The term Cradle of Liberty, as applied to Boston, was a mockery... If ever was the cradle of liberty, the child has been rocked to death." (MacLaury et al., 2018, p. 89). The Federal Housing Authority practice of redlining in the 1930s, the urban renewal demolition of the South and West End in the 1950s, and Boston Banks Urban Renewal's subsequent blockbusting in the 1960s created the concentrated map of the Black population in Boston that has largely remained unchanged. Today 66% of Black Bostonians live in Roxbury, Dorchester, and Mattapan (Social Explorer, 2020). Although formed largely through coercive policies, these neighborhoods have embraced their identity as the site of Black resistance in Boston since the 1960s. Today, Boston is 25% Black, rated the 15<sup>th</sup> most segregated city in the U.S. and the third most gentrified, resulting in an 7% loss of the Black population over past two decades, putting these neighborhood communities directly at risk of another wave of fracture, displacement, and disamenity (Elton, *The Boston Globe*, 2020; Irons and Fatima, *The Boston Globe*, 2021). A 2015 Federal Reserve study found that white households in the city have an average net worth of \$247,500, compared to \$8 for U.S.-born Black Bostonians (Munoz et al., 2015). A local public radio poll reported that "8 in 10" Bostonians find racism to be a significant

problem, and in 2021, Mayor Marty Walsh declared “racism in Boston a public health crisis” (Ríos, *WBUR*, 2021; Walters, *NPR*, 2020).

The plans for the revitalization for Franklin Park ensure significant and landscape changes, and while investment in the Park is overdue, if applied without careful consideration, it may engage the Park as an asset of green gentrification. This is especially worrying due to dearth of public greenspace in Boston. Roxbury has 3.7 acres of green space per thousand residents, half of the City’s average at 7.6 per thousand (Boston Department of Parks and Recreation, 2015). Compounding this are the reverberations of the Roxbury Rebellions and the Black Lives Matter Movement which defy the “park’s image as natural, sanctifying, wholesome, and [w]hite, counterposing it against a city construed as artificial, profane, insalubrious, and colored” (Byrne and Wolch, 2009, p. 747). In recognition of BLM protests, environmental equity is explicitly included in the language of the Franklin Park Action Plan but recognition of the pressures of green gentrification are notably absent.

The ecological, social, and racial histories of Boston converge within Franklin Park. Understanding how Franklin Park was fluidly reconstructed between the Olmsted and more contemporary periods requires having a critical and comprehensive understanding of these processes both within and outside of the Park. As part of the scaffolding of this thesis, the history clarifies and situates the racialized aspects of stewardship, forest management practices, and ecological conditions which overlap to shape the forests of Franklin Park.

### CHAPTER 3. CONCEPTUAL FRAMEWORK

Any examination of urban public parks should begin with a framing of their nature as racialized economic agents of the city. Harvey (1989) illustrates that nothing in and of the city, including public parks, is removed from the influence of the economic infrastructure of cities. The urban landscape is the physical product of human values manifested through the built environment and made possible by the movement of capital. Under capitalism, hierarchies of value can be assessed by their uneven distribution across the urban landscape and are a result of the mobile nature of capital as it seeks opportunities for accumulation in one location predicated on disinvestment in another. Mobile capital is often the result of racially exploited labor and resources extracted from these relationships, whose investment produces uneven landscapes of value experienced unequally by race and class, reflecting the nature of capital as racial in the built environment (Robinson, 1983).

Capital accumulation drives society to interact with nature in ways that fundamentally reshape nature to mirror capitalism's value, producing what Smith (1984) calls "second nature." In a continuous cycle, racial capital draws from sites of disinvestment, accumulates until it reaches a surplus, and then seeks to find new investments of capital in a "see-saw" effect across the landscape that creates both social and biophysical inequalities in urban areas as evidence of capitalism's value (Harvey, 1989; Smith, 1984). Racial capitalism produces uneven environmental conditions which manifests as environmental racism. Environmental racism encompasses the uneven environmental distribution and conditions of public parks, with unevenness in the landscape both produced by and serving to create a value differential that allows racial capital to continue to accumulate unevenly.

Within this framework, the establishment of large urban parks at the turn of the 19th century, like Central Park in New York and Washington Park in Chicago, can be contextualized as the creation of new natures to facilitate the shift of wealth away from unpleasant environmental sites of capital extraction, namely urban industrial areas dependent on racialized labor (Checker, 2011; Loughran, 2017). As capital flowed into expanding cities to create public parks, it kept white urban residents in manicured nature

while segregating Black urban citizens to the polluted edges from which white wealth gained its primitive accumulation at their expense (Miller, 2020; Pulido, 2017). Racial capital is foundational to the history of public parks, as they were financed as engineered natures alongside white land ownership using capital accrued from the degradation of Black people and ecosystems elsewhere. Urban public parks were founded on a principle of social uplift, strongly tied to their ecological and aesthetic value, a theory that relied on white wealth to achieve a construction of a particular form of “second nature.” However, this form of produced nature was available only to white people of a certain class, as parks were either not built in neighborhoods of color or were segregated through social exclusion and violence (Loughran 2017, Smith, 1984). Public parks, constructed as bucolic natures, stood in stark contrast to communities of color that, without the wealth and income needed to relocate, were segregated to industrial areas with degraded environments in a cycle that even today perpetuates the distribution of “environmental hazards socio-economically downward, and environmental amenities socio-economically upward” (Gould and Lewis, 2012).

Racial capital cannot accumulate directly within parks as they fall outside of private property ownership, but public parks strengthen racial capital by bolstering adjacent housing values. The locations of parks, as an uneven environmental amenity, increases the value of white housing through racialized environmental difference. Discriminatory housing policy, including racially exclusive lending and covenant systems reduce the ability of people of color to accrue wealth through homeownership while perpetuating the unequal access to park space (Gould and Lewis, 2012). Furthermore, these housing policies silo communities of color in locations devoid of greenspace and near polluted natures, further depressing their property values (Bryson, 2013). Public parks reinforce racial and economic differences in cities as “[Black neighborhoods] were reproduced as ghettoized and underdeveloped, while [white neighborhoods] contained plentifully newly created parks” (Loughran, 2017).

Greenspace in the urban environment is often unequally distributed according to racial and socio-economic geographies (Heynen et al., 2006; Boone et al., 2009; Nesbit et al., 2019; Watkins and Gerrish, 2018). People of color traditionally lack access to greenspaces,

including public parks (Heynen, 2006). Attempts to increase park equity have relied on the construction of smaller parks which perpetuate inequity by both green acreage and quality (Boone, et al., 2007; Cranz, 1982; Rigolon, 2016). When greenspace difference is further interrogated vegetation type disparities appear, with significant difference in access to woody ecosystems and forests (Nyele and Kroll, 2020; Nesbit et al., 2019). As urban greenspaces provide mental and physical benefits, this inequity has health consequences for systemically disadvantaged communities. This has become particularly apparent since the beginning of the Covid-19 pandemic. Spotswood et al. (2021) found evidence that people of color's lack of access to the public parks during the pandemic has led to higher rates of Covid-19 infections.

However, attempts to equalize access, quality, and type of greenspace across the city may further embed inequality even as it seeks to resolve it because environmental change and greening projects manifest as complex, relational, and biased in a capitalist system (Heynen et al., 2006; Kay and Kenny-Lazar, 2017; Lang and Rothenberg, 2017; Loughran, 2020). Urban greening projects are enacted for an innumerable list of ends, including improving urban climate resilience, increasing mental and physical benefits, providing educational or experiential exposure to nature, and remedying historical environmental injustice (Anguelovski et al. 2020; McPhearson, 2013; Oke et al., 1989; Taylor et al., 1998; Ulrich, 1984). In the recent past, a greening project, regardless of location, site history, or audience was considered “win-win-win” with nature’s passive neutrality enacting an unbiased green trickle-down effect that benefitted all and harmed none (Anguelovski et al. 2021; Goodling et al., 2015, p. 505). However, these greening projects can lead to displacement of communities of color through the process of green gentrification, which makes the area around the greening project more valuable and increasingly unaffordable for the original communities, resulting in their displacement to other less green geographies in the city (Dooling, 2009; Rigolon and Németh, 2018). These racialized ecologies illustrate greening’s “paradox of sustainability,” with attempts to remedy greenspace inequities actually perpetuating greenspace inequities, solidifying instead of dissolving the relationship between race and nature in the city (Checker 2011, Heynen 2006; Rigolon and Németh, 2018). Curran and Hamilton (2012) have theorized a framework of “just green enough” for greening projects, which challenges the inevitability

of green gentrification and seeks to produce a level of greenness that can provide the amenities of environmental restoration without creating the conditions that lead to displacement. This framework consciously recognizes the classed and racial injustices that produced the disamenity and engages in remediation efforts that cater to current residents in mixed-use ways that do not code the landscape to attract new capital.

While this research draws from political ecology, it also relates to approaches in cultural landscape geography that identify invisible ideologies made material in the landscape to secure power through social reproduction and by reinforcing racial otherness (Mitchell, 2017; Schein, 2006). The power structures that dictate the cultural production and consumption of landscape are frequently interrogated by examining the contested aesthetics of how a landscape “should be” (Cosgrove, 1998; Johnson, 2006). This research is an intersection of geographic disciplines, a “cultural ecology” that questions forest restoration as an act of preservation of the Olmsted legacy through its historic woodland (Berg, 1992; Cronon, 1996; Melnick, 2000; Zimmerer, 2007).

Race and environment are interlinked and inseparable (Pulido, 2000). Nature is formed under social circumstances of racial exclusion and violence, including those that link white supremacy and urban natures (Heynen, 2016; Moore et al., 2003). Many scholars assume an approach to natures as apolitical or race-neutral, but Farmer (2019) points to this as evidence in which “one of the innumerable minor privileges of American whiteness is the freedom to appreciate trees as just trees: anodyne features, ahistorical objects” (p. 815). Both individual trees and aggregate woodlands are fraught with meaning due to Black-specific histories and experiences with nature. Finney (2014) articulates the woods as a place of respite and spiritual connectedness, but also a “harbinger of death” after a history of lynching in the United States “succeed in limiting the environmental imagination of Black people whose legitimate fear of the woods served as a painful and very specific reminder of the many places a black person should not go” (p. 60). Alternatively, “white wilderness” allows for those of privilege to advocate for an imagined “pristine wilderness” as an ideology that erases the human elements of race, gender, and class (DeLuca and Demo, 2001).

Even when people of color have access to urban nature, the organic landscape becomes racialized in similar ways to the built inorganic urban landscape. Vegetation composition and structure can reflect how race and ecology have been co-inscribed to create a racialized distribution of amenities (Hoover and Lin, 2020; Schell et al., 2020). Even strikingly similar ecologies can be interpreted racially, as is the case with the perception of spontaneous flora which is experienced as an indicator of reduced neighborhood safety in one context or romanticized and rebuilt to produce elite florals of “imbricated spaces” in another (Loughran, 2017, p. 1948; Nassauer and Raskin, 2014). Greening becomes racialized as users tailor nature to their own preferences, which in turn determines who belongs and who does not (Byrne and Wolch, 2009; Head et al., 2014; Robbins, 2007). Wealthier, whiter neighborhoods have access to less polluted nature, more trees, and greater species diversity, creating a “luxury effect” (Hope et al., 2003) in the landscape, an “ecology-of-prestige” (Schell et al., 2020, p. 4; Troy et al., 2007). In contrast, poor, Black, and Brown neighborhoods are impacted by a physical legacy of racist policies such as redlining, environmental pollution, and lack of intentional public greenspaces that produce “ecologies of segregation” (Grove et al., 2018; Heynen, 2006). The ecology itself is altered by the racialization process, with socio-political processes like redlining having a “bottom-up” legacy of degraded biodiversity which impacts entire ecosystems in particular neighborhoods, perpetuating social impacts of environmental difference within the biological domain (Schell et al., 2020). Shackleton and Gwelda (2021) conclude that the influence of both colonialism and apartheid in South Africa has influenced greenspace distribution and urban tree species composition as a lasting ecological effect of systemically enforced racial domination.

In summary, the traditional literature on these perspectives of economics, race, and greening tend to dichotomize processes of neighborhood change as either “ascent” or “decline” and urban ecologies as either “healthy” or “unhealthy,” though the reality is that these processes are much more nuanced and uniquely place based (Landis, 2016; Delmelle, 2017). Vegetation change, as mediated through plant growth forms and reproductive strategies, is shaped by the incremental, processual human geographies of urban greening. Interventions in the management of an urban forest occur over time, with even their absence relating to racial contexts of the cities and neighborhoods in which they take place.

Greening, and whether it is too much and leads to green gentrification or not enough and reinscribes segregation and environmental inequities, is in the details of forest management. I am situating the concept of just green enough in the context of Franklin Park, which requires both methods that are historical and those that are oriented toward the future.



## CHAPTER 4. METHODS

### Archives

#### **How does the incorporation of race into the historical governance, planning, and implementation of forest management practices shape forest succession?**

After the Roxbury Rebellions of 1967, management of Franklin Park by the City of Boston Parks and Recreation Department abruptly ended and was almost immediately replaced by the neighborhood-based volunteer group, the Franklin Park Coalition. To establish the forestry practices and conditions leading up to and during this organization's affiliation with the Park, I visited four archives in Boston to review documents for insights into the silvicultural impact of discourses around race within both the Park and the greater Boston area. Specifically, I sought information about the state of the forest when the Franklin Park Coalition assumed informal responsibility for it and about the way in which race shaped the forest management practices organized by the Franklin Park Coalition.

The Roxbury Community College Archive in Boston holds the materials of the Franklin Park Coalition in a special collection. The collection spans the period from 1960s to the 1990s and consists of materials mainly associated with Richard Heath, the Director of the Franklin Park Coalition from 1975 until 1982. The material includes advocacy letters to the Boston City Council and Parks Department, fundraising requests to local businesses and grant applications, meeting notes and agendas, financial statements, published bulletins, reprints of historical documents, media clippings, planning documents, and maps. I also accessed the Northeastern Archives in Boston, which contain the Elma Lewis School of Fine Arts special collection. This collection includes Franklin Park Coalition documents largely from the 1980s and 1990s, including a 1998 vegetation survey of Franklin Park. Lastly, I accessed materials from the City of Boston Archives and Digital Commonwealth, a public non-profit archive. These archives included Franklin Park planning documents, Landmark Commission Reports, and adjacent neighborhood district profiles.

I also examined two other resources for examples of how race and management practices intersected to shape the present-day forest. In 1984, the Franklin Park Coalition

enlisted the assistance of Harvard University Graduate School of Design students to assess and recommend approaches for the Park's forests. I accessed this document through the Arnold Arboretum Horticulture Library and Archives. In 1998, the Emerald Necklace Conservancy (ENC), as a registered nonprofit, assumed comprehensive non-governmental co-stewardship of the Olmsted park system. Although no formal archive exists, I was able to procure the major steering documents since the organization's founding, produced in 2001 and 2015, through the digitized material provided through the public non-profit Internet Archive. I also issued requests and received documents from employees of the ENC.

Read sequentially, these historical and contemporary documents contain evidence of forest management activities, as well as forest composition and condition after government abandonment of Franklin Park following the Roxbury Rebellions in 1967. I used these materials to characterize the impact of racial tensions on management approaches coinciding with conditions of funding scarcity and informal organization. They facilitated reconstruction of how race continued to impact the prioritization of different aspects of forest care during a period of minimum municipal involvement and increased community control under the Franklin Park Coalition. More importantly, the discourses over what constituted a desired greening, and the forest management actions to implement it, under the Franklin Park Coalition can be compared to those emerging out of the current calls for revitalization by the Emerald Necklace Conservatory.

I additionally conducted two semi-structured interviews with current organizers or employees of the Franklin Park Coalition and Emerald Necklace Conservancy to assess their perspectives on the intersection of race and forest management within Franklin Park in light of the Black Lives Matter protests and the Franklin Park Action Plan announcement. I contacted both interview subjects through their organization's websites. All interviews were conducted via Zoom.

Archive visits and interviews were conducted between June and September 2021. Analysis of these archival materials in conjunction with interviews allowed me to reconstruct the racialized component of preferential forms and types of greening beginning

in a period characterized by overt racism and municipal neglect to one animated by discourses over the good of greening as a climate change strategy and the equity aspirations of the Black Lives Movement. As I later discuss, these discourses may steer the park toward green gentrification or toward a more negotiated and nuanced revitalization, a just green enough that prioritizes the park's importance to a struggle for space and equity in a still-segregated Boston.

### **Forest Characterization**

**How does the present-day forest structure and composition shape discourses over park revitalization and greening in the context of equity?**

**Can contemporary forest condition leave adjacent communities vulnerable to green gentrification?**

While my first research question addresses past management approaches for the Franklin Park forest as a reflection of its segregated past and growing calls for its revitalization, my second research question focuses on the material outcomes of that management. It quantifies contemporary forest composition, structure, and condition in order to illuminate more of the strategies, successes, and consequences of the initiatives of the Franklin Park Coalition. This quantification of forest state also provides a foil to the ways in which the forest is qualitatively and quantitatively described in the revitalization plans.

Forest conditions have both biological and social interpretations, and perceptions of these conditions can catalyze or accelerate gentrification (Ali et al., 2020). For example, people may feel safer in a forest with distinct stands of trees and open ground, while a thick overgrown understory may be perceived as untended, neglected, and perhaps dangerous (Payne et al., 2002; Rahm et al., 2021; Talal et al., 2020). Forest management that prioritizes particular tree species and aesthetics may shape a forest into an urban green amenity, but one that can also catalyze gentrification and the potential for environmental inequity. Taking into account the type of tree species present in Franklin Park's forest, as well as their size or dominance and frequency of occurrence, provides insights into how

forest conditions may intersect with social perceptions to influence management strategies and the greening outcomes that result.

I conducted a detailed forest survey in June 2021. I divided the Franklin Park forest into seven zones, each consisting of an intact forest patch bounded by roads and paths. These zones encompassed the most significant contiguous forests in Olmsted's design, the Wilderness, the Steading, and the Long Crouch Woods, which comprise approximately 120 acres out of 204 total (Binggeli and Urquhart, 2007). I excluded small, fragmented forest patches, scenic overlooks, and areas with prominent non-natural infrastructure. I systematically sampled circular quadrats with a radius of 5.64 meters along a transect running through the midsection of each zone, with an exception for the largest zone which I sampled using two transects to compensate for its larger area. I geocoded transect and quadrat positions and photographed forest conditions using the Gaia GPS smartphone application. I systematically positioned quadrats approximately every fifteen meters along each transect, yielding a total of 112 quadrat samples. Within each quadrat, I measured diameter at breast height (DBH) for all trees with a height greater than 50 cm and a DBH greater than 1 cm. I included both standing dead trees and fallen woody debris in the inventory, as tree loss is an important metric of past and present forest dynamics. I measured a total number of 1630 trees in the forest survey. I identified the majority of trees to the species level, while those species susceptible to hybridization and difficult to delineate were grouped at the genus level.

For each tree species or genus, I converted DBH values to basal area in order to calculate relative percent dominance. Tree counts provided a measure of relative percent frequency. When averaged, relative percent dominance and relative percent frequency, produce a commonly employed ecological metric called importance. Importance values reflect both the size or dominance of the tree and how often it is encountered.

I constructed a histogram to summarize the size frequency distributions of the tree species having high importance values. In conjunction with the life history strategies of these trees (i.e., relative differences in growth rates, tolerance of shade, and reproductive strategies), histograms provide general insights not only about past forest conditions, but

also about the potential changes in the near future. This data facilitated assessment of descriptions of the forest from the period of management by the Franklin Park Coalition as evidence of the potential effectiveness of their management practices. I also compared this data to prior forest surveys by those at the Harvard Graduate School of Design (Dale et al., 1984), Boston Department of Parks and Recreation (1990), University of Massachusetts (Kelty, 1998), and the Emerald Necklace Conservancy (2015).

### **Positionality**

This research intersects with my own positionality in multiple overlapping ways, both professionally and personally. I write as a social science researcher integrating human geography with my background in biology and public park horticulture within Olmsted designed public parks, in both Boston and New York. It is through my multidisciplinary career that I have become aware of gaps in relative ecological restoration and political ecology literatures. It is through the positionality of my experience that I confront these gaps, bringing both an intimate field awareness of ecological patterns and professional practices to an examination of place and power central to critical geographical research. I also write from personal experience in this geography as a resident of Boston and user of Franklin Park for nearly a decade. I was partially made aware of the unique racialized circumstances of Franklin Park due to the almost complete ignorance of its existence among my white friends, even as they made great efforts to frequent other greenspaces in the Emerald Necklace. Now that increased attention for Franklin Park is actively being solicited by the City of Boston, I utilize my training, local experience, and white privilege to pursue research that seeks to reduce the harm of this attention as a precursor for green gentrification. I invoke an explicitly anti-racist lens in this geographic research in the belief that new radical ecologies and relationship solidarities can be formed within and through Franklin Park.

## CHAPTER 5. RESULTS AND DISCUSSION – FOREST ARCHIVES

### 1967-1985 Archival Documents

In the wake of the 1968 Roxbury Rebellion and the effective abandonment of the Park by the City of Boston, the Franklin Park Coalition (FPC) became the primary managers—“the only group that cares enough to get what Franklin Park needs”—of the forested areas of Franklin Park (Heath, letter, 1982). It quickly became apparent that a citizen volunteer effort to provide end-to-end care of the 485-acre park according to Olmsted’s aesthetic was prohibitively expensive. Primary financial support for the Franklin Park Coalition came from coalition-produced publications, solicited donations from local businesses, and membership dues of \$7.50 (Franklin Park Coalition, Annual Meeting, 1980). This marked the beginning an 18-year process of amateur forest management in a slash-clearing style dictated by the constraints of financial austerity and perceptions of racial and floristic co-criminality. As the Coalition struggled to manage the forest acreage to traditional standards, the vegetation became increasingly dense in the understory and was perceived as both visually dilapidated and physically enabling of criminal activity:

“Olmsted created the romantic Wilderness which is now overgrown and unrecognizable... In many cases, the relationship between security and landscape planting is close. For many years extensive undergrowth has choked park walks and roadsides, creating walls of vegetation... properly managed and maintained woodlands can provide adequate visibility to foster feelings of security... new plantings... will contribute to a more favorable attitude towards the park” (Dale et al., 1984, p. 4, 29).

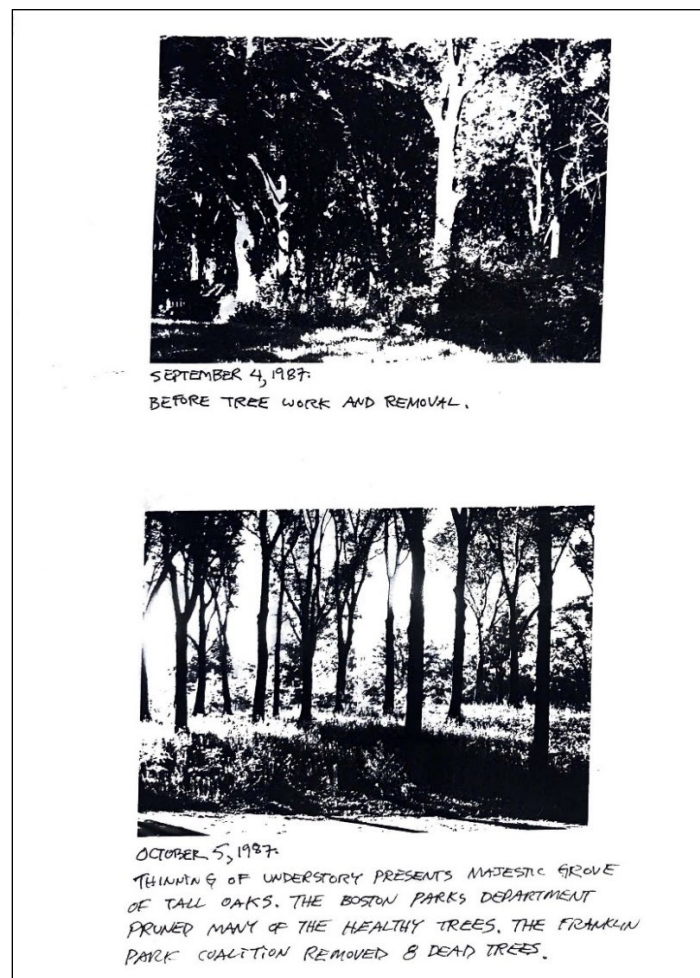
Despite its own absence from Park maintenance for a decade and the Coalition’s active leadership within the Park on behalf of the Park’s user community, the City of Boston intentionally excluded the Franklin Park Coalition from its 1977 drafting processes of the Franklin Park 1980 Master Plan, also called the Revised General Plan or the Weinmayr Plan after the leading architect. Coalition meeting notes for May 2, 1979 noted that Cynthia Zaitzevsky, Olmsted landscape historian and consultant for the City of Boston, was “warned not to inform the Coalition about the study” by Boston’s urban planners (Franklin Park Coalition, Board Meeting, 1979). Undeterred, the Franklin Park Coalition inserted itself into the municipal planning process and revised the priorities of the new plan

based on community input, of which protection of the forest was among the highest. The Franklin Park Coalition director, Richard Heath, wrote of this period, “[The Parks Department] did not fully understand why Franklin Park had declined and why Franklin Park looked the way it did, and was used (or not used). The Coalition explained the social and political dynamics of the Park and its communities, and made major changes to the Plan’s recommendations” (Franklin Park Coalition, 1986, p. 2). Prior to the Coalition’s involvement, the municipal 1980 Master Plan prioritized increasing park attendance, but the Coalition insisted “people already use the park; heavily. What the Master Plan should’ve addressed was the problems affecting the condition of the parkland... soil erosion and poor soil conditions, tree care and replanting” (Franklin Park Coalition, Board Meeting, 1979).

The Coalition asked the City to fund landscape improvements in the Wilderness section of Franklin Park, advocating for a granite wall to be constructed around the forested area to prevent unwanted motor vehicle intrusion and damage. This project, completed in 1981, began a period where forest management was a top priority for Franklin Park Coalition to improve perceptions of public safety and facilitate the restoration of Franklin Park. This period set the tone for sporadic, intermittent funding for the Park by the City of Boston with the Coalition advocating for consistent and equal funding compared to that of other Emerald Necklace parks, of which forest maintenance was a significant expense and major capital demand.

Acting on a sense of defensive urgency that predated similar protection of other parks in the Emerald Necklace by almost a decade, the Franklin Park Coalition secured Boston Landmark status for Franklin Park in 1980. While Franklin Park’s landmark status barred the unapproved planting of new or healthy trees within the Park, the removal of dead wood and diseased trees remained unrestricted. These practices neatly paralleled the Franklin Park Coalition’s priority and independent capacity for forest care, which centered around the removal of dense underbrush, fallen limbs, and dead trees. Citing the historical legitimacy of these forest interventions, the Franklin Park Coalition stated that “the pruning and clearings do so much to restore the park to the condition intended by its designer, landscape architect Fredrick Law Olmsted” (Franklin Park Coalition, 1986). Figure 5.1

shows an example of an undesirable overgrown forest and the dense vegetation and dead wood clearing around the trunks of a “majestic grove of tall oaks” (Franklin Park Coalition, 1987). Despite professional and financial limitations, the Franklin Park Coalition indicated that “mowing, general clearing and tree removal and pruning... [is] the largest accomplishment of the Coalition in Franklin Park. Whole sections have been opened up after many years of being completely overgrown and ugly” (Franklin Park Coalition, 1986, p. 4).



**Figure 5.1: Slash and Clear Forest Management by Franklin Park Coalition**

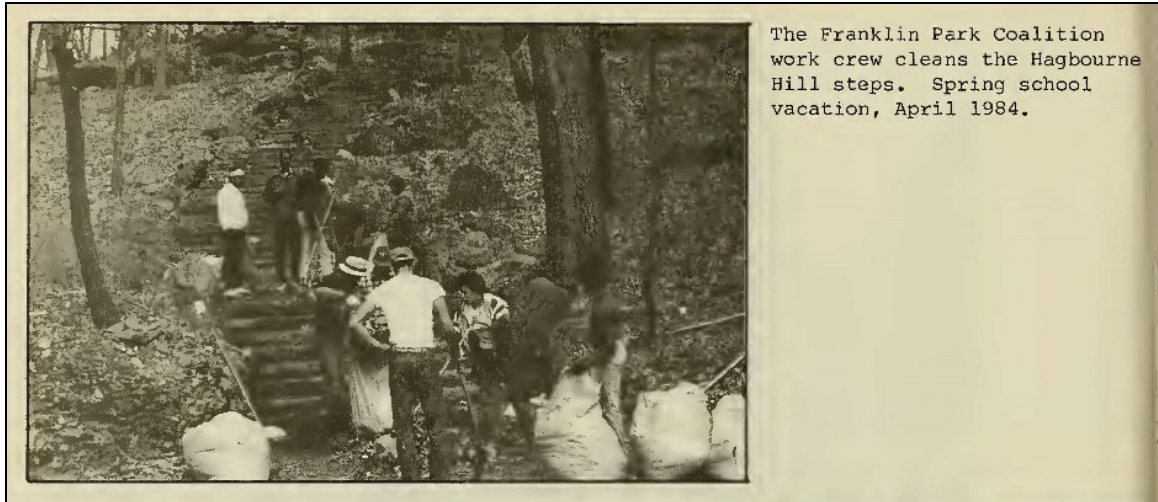
The Franklin Park Coalition maximized the impact of their limited resources to engage in largely indiscriminate slash-clearing of the plants at the base of established trees. This practice was an attempt to both recreate the Olmsted ideal of a visually open and neat forest and combat the stereotype of Franklin Park’s forest as an overgrown respite for criminal dealings (Franklin Park Coalition, 1987, p. 2).

Unsuccessful in fundraising the substantial finances required to enact large-scale maintenance of Franklin Park, the Coalition attempted to mitigate the municipal financial bottleneck to the Park by focusing more on reducing racist stereotypes of criminality and



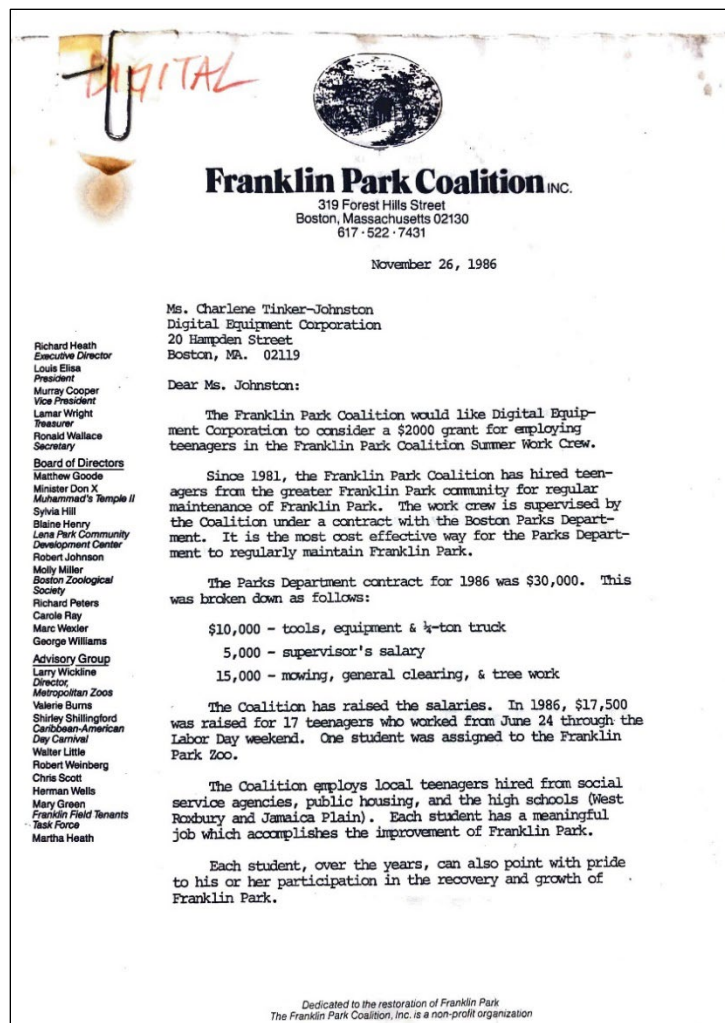
social decline affiliated with the Park. Mimicking Olmstedian practices of forest management, FPC attempted to create clear sightlines and reduce the abandoned appearance produced by spontaneous vegetation in order to utilize the forest to signal the Park's legitimacy as a historical landscape worthy of investment. However, due to the grassroots nature of the Franklin Park Coalition, the forestry work was again amateur and piecemeal. The non-professional nature of the forest management, based in community labor, is intentionally self-advertised in media coverage of the Franklin Park centennial. In an interview, Heath said, "I have no past experience in horticulture. We are residents and park users who looked at Franklin Park and knew that it needed to be improved" (Elliott, Bay State Banner, 1985). Even in quite detailed meeting notes and letters, any recognition, preference, removal, and preservation of particular tree species is almost completely absent. When a tree species is on occasion mentioned, it is only in reference to the near total clearing around charismatic tree species, such as flowering dogwood, unlike Olmsted's original highly preferential specimen-centric forest management (Heath, letter, 1986). Forest management at this time could be referred to as beautification, as evidenced in the 1985 Centennial Report, which says that the Coalition worked "from one end to the other, picnic litter was removed, overgrowth, secondary growth, and weeds were cut down, leaves raked from steps, drives, walks and terraces and the banks of the pond were cleared of overgrowth" (Franklin Park Coalition, Centennial Report, 1985).

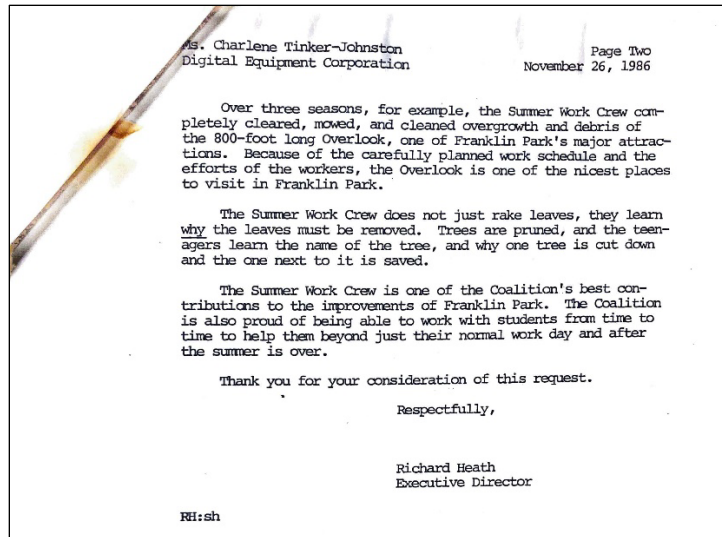
Financial limitations for the Coalition made concentrated, patchy maintenance projects the only realizable strategy. Franklin Park Coalition maximized limited private fundraising to fund "work crews made up of [Black] students from the Franklin Park communities" who are documented working for at least 25 hours a week during the summer months for at least a decade beginning in 1981 and continuing intermittently until 2014 (Figure 5.2; anonymous interview; Heath, letter, 1986). Students were taught to identify plants, but it is highly probable that the process of underbrush clearing, weeding, and tree removal was only coarsely attentive to species identities. The work was sustained for decades through the employment of local Black youth who were engaged "since 1981 on a regular, systemic program of maintenance.... [on] areas of underuse due to overgrowth, weeds, secondary growth, and shabby trees." (Figure 5.3; Franklin Park Coalition, 1986, p. 4).



**Figure 5.2: Franklin Park Coalition Youth Crew**

For decades Franklin Park Coalition managed the forest of Franklin Park by employing local Black youth in summer work crews that focused on tidying forest edges along walking trails, removing vegetation, dead wood, and leaves, as seen here on the Hagbourne Hill steps in the Wilderness (Heath, 1985a, p.17).





**Figure 5.3: Franklin Park Coalition Donation Solicitation Letter**

Archival materials, like this letter, exemplify the recognizable themes of financial scarcity, park restoration, and community-based forest management practices working within Franklin Park and highlight how the youth engagement in clearing overgrowth and removing trees was crucial to the Coalition's agenda for improving perceptions of the landscape (Heath, letter, 1986).

Reliance on a small crew of youth to maintain 120-acres of forested park land, in addition to other Park needs, had limitations. The Coalition engaged in an austerity forest maintenance approach, with sporadic vegetative clearing completed over many seasons with “a half-acre here or a ledge there [to] give the appearance of treating the whole Wilderness” (Heath, letter, 1983b, p. 2). The Coalition's crews primarily targeted woodland entrances and forest trail boarders for forest clearing to maximize the visual impact of limited labor capabilities, while the core forest interior was much less frequently cleared. Evidence of patchwork maintenance projects and preference for edge forest tending are demonstrated by the Coalition's reported major landscape improvements of 1985, listed as “Wilderness walks and a portion of the bridle path cleared and cleaned... dead trees removed, weeds cut down” and future improvement goals for the subsequent 1986 season included “clearing and cleaning of another portion of walkway in the Wilderness, connecting and expanding work done in previous seasons” (Franklin Park Coalition, Centennial Report, 1985).

Black youth and student labor as the main foresters of Franklin Park was intended to be a temporary or supplemental mutual assistance program for improving the landscape, but the City of Boston was never persuaded to fund permanent professional forest crews in

Franklin Park. Therefore, the sustained intervention by local students became the most significant contemporary ecomanagement impact on the succession of Franklin Park forests. In a 1985 letter of praise in a local paper, the *Jamaica Plain Citizen*, publicizing the youth work, Heath wrote, “[T]he work those young men and women accomplish in Franklin Park is unequalled anywhere in Boston. If the Franklin Park looks good, it is because they made it look good” (Heath, letter, 1985b, p. 1).

The Franklin Park Coalition continued to lobby the Boston Parks Department for professional tree work and forest rejuvenation, citing it as a necessity for restoration of the Park. The group requested “a regular work crew made up of contracted professional labor for tree work and lawn mowing and a work crew of labors under Coalition supervision and Parks department contract; seasonal and year-round” (Franklin Park Coalition, Centennial Report, 1985, p.5). The Coalition argued that forest maintenance was essential and that “denying the Parks Department sufficient funds for tree maintenance is like denying the Fire Department money for water hoses” (Heath, letter, 1986, p.1). When pushed, the City cited the scale and existing conditions of the forest as deterrents to installing a permanent forestry workforce. Parks Commissioner Peter Meade argued, “[I]t is difficult with limited forces to make any major impact in areas that have been neglected for so many years” (Meade, letter, 1976).

Repeated appeals on behalf of Franklin Park by the Franklin Park Coalition for fair financial support in relation to the other parks in the Emerald Necklace were largely unsuccessful and the City’s response inconsistent. When the Franklin Park Coalition protested against a decade long history of unequal financial distribution between parks in the Emerald Necklace, the City itself admitted to the imbalance. In a 1981, *Boston Globe* article titled “Franklin Park seeks better image,” Parks Commissioner John Vitagliano stated, “[T]he distribution of park department resources was unequal and Franklin Park suffered because of it” (Blackstone, *The Boston Globe*, 1981, p. 21). Additionally, the racially discriminatory cause of the financial scarcity and its impacts on the landscape was plainly stated in official City documents, like the 1990 Master Plan Draft, which recounts Franklin Park history:

“In the aftermath of racial tensions of the 1960s, many people...shunned Franklin Park. The park landscape reflected the effects of abuse and neglect. The lack of systemic management of the woodlands since 1920 left them diseased and overcrowded, with decline in species diversity and loss of the many shrub and understory plants that gave the park landscape its variety and interest.” (Boston Department of Parks and Recreation, 1988, p. 5).

However, admissions such as these did not spur any significant financial or managerial change in government presence within Franklin Park. Proposition 2½, passed in 1980, further prolonged fiscal austerity. The measure reduced the flow of city property taxes into the Park Department, decreasing the already thin city-wide park budget by over 60% and severely setting back the Coalition’s attempts to solicit financial and managerial equity within the Emerald Necklace. Infrastructural and recreational maintenance needs in sectors of the Park not represented by the Franklin Park Coalition further undermined the budget for restoring forest conditions: “a great error was made by pooring [sic] millions into the Zoo and only pennies into Franklin Park; for now a part overwhelms the whole – a great fear of F. L. Olmsted” (Franklin Park Coalition, 1980, p. 3) The Coalition remained frustrated by financial difficulties in advocating for the forest. “[S]hort of buying Franklin Park,” its meeting notes document, “we have tried all angles to push for better maintenance and faster improvements for the Park” (Franklin Park Coalition, Annual Meeting, 1980, p. 2).

As municipal monetary support for forest management became increasingly implausible, the funding strategy of the Coalition shifted to once more focus on dispelling racially discriminatory perceptions of the Park as a way to increase park usership and entice private revenue streams for sustained park care. A 1981 *Boston Globe* article pointed to this strategy: “Heath conducts the tour each year to reveal the beauty of the park and also to show how much better it could be if the illegal dumping of trash and violent crime, which he believes stem from poor maintenance, can be curbed” (Blackstone, 1981, p. 21). However, many people blamed Franklin Park’s deterioration on the new Black residents that had been moving into the area for several decades. This myth was only reinforced when the Elma Lewis School, a prominent Black Boston institution, spearheaded the drive to improve the Park (Linday, 1980).

Forest health and underbrush density became the focus of mediating the narrative of crime, race, and equity in Franklin Park. In a letter to Parks Commissioner Peter Meade in 1977, FPC discussed this effect as:

“[T]here is also the very real issue of public perception of Franklin Park in the Olmsted Park System. While people jam Jamaica Pond and the [Arnold] Arboretum, they shun the other areas because they perceive them as unsafe... scarred with acres of dead trees, overgrown walkways, eroded hillsides, and a bad reputation” (Heath, letter, 1977, p. 2).

The Coalition even cited Olmsted to legitimize its claim that the forest condition was key to public perception of safety, stating, “[Olmsted] equated breaking tree branches in parks as vandalism on par with breaking windows in a private dwelling” (Linday, 1980, p. 16). It did not help that media coverage during this time period reinforced the view that overgrown vegetation within Franklin Park’s forest was produced by, and was evidence of, dangerous conditions. For example, a 1985 *Boston Herald* story reported that there was a “hidden enclave in Franklin Park, surrounded by brush and off limit to cars so they thought their \$15,000-a-day [heroin dealing] business was safe” (Cullen, *The Boston Herald*, 1985, p. 10) In a defiant letter to *The Boston Globe* following coverage of an assault in Franklin Park, Heath expressed his exasperation at the media’s narrative of the Park as dangerous. His protests highlighted the lack of positive reporting on forest and architectural landscape improvements intended to change this narrative:

“[T]he very location of the gang rape [in Franklin Park] was where \$150,000 had been spent relandscaping – money which the Coalition raised.... Yet this project was totally ignored by the media. When rapes took place in The Arboretum in 1982, the Globe reacted far differently and the residents did too. A sort of protective ring was formed and the cry went out that “The Arboretum is important to us, we won’t permit these things to happen.” No such cry went out for Franklin Park...” (Heath, letter, 1984, p. 1).

Although these contemporary events reinforced the criminal narrative of Franklin Park as dangerous, the sentiment drew significantly from the Roxbury Rebellion, the original racializing moment of the Park, which persisted in the social consciousness of Boston for decades:

“[I]t never ceases to amaze me how many people come to the park [for the first time and cite] war stories 14 years old,” Heath says referring to the Riots on Blue

Hill Avenue and reports of crime in the Park” (Blackstone, *The Boston Globe*, 1982, p.32).

The Coalition counteracted this myth of both Park and Park patrons as criminal by independently tracking police report statistics. A Franklin Park Coalition report showed “less crime in Franklin Park than any other public park in the city,” and alternatively posited, it “is not crime, but fear of crime and resulting lack of interest both by citizens and city officials” (*Sanctuary*, 1981). Boston’s first Black Park Commissioner, Robert McCoy, echoed this sentiment in a 1985 *Boston Phoenix* article: “[T]he image of the park as crime infested is far from accurate. [Franklin Park] is not any more dangerous than any other park in the city” (Miller, *The Boston Phoenix*, 1985, p. 11). The Coalition pointed to the narrative of crime in Franklin Park as key to reinforcing segregation of the Emerald Necklace:

“The reason why Franklin Park finds itself constantly on the defensive is not just because it has a bad reputation for crime but because its image of being ‘black turf’... it surprises me to see a white person in this park... for the majority of Jamaica Plain residents Franklin Park does not exist... People in Jamaica Plain feel ownership of the [Jamaica] Pond and the [Arnold] Arboretum but they don’t feel ownership of the [Franklin] Park” (Miller, *The Boston Phoenix*, 1985, p. 11).

In 1984, due to the lack of consistent professional guidance, physical intervention, or financial support from the Parks Department, the Franklin Park Coalition sought the affordable pre-professional assistance of Harvard Graduate School of Design (GSD) students. As part of Harvard’s Community Assistance Program, the Franklin Park Coalition worked with three graduate students and their advisor to assess the ecological history and contemporary condition of the forest, as well as outline future directions for management. Throughout this collaboration, the Franklin Park Coalition stressed that the GSD students understand and accommodate their suggestions for forest restoration given the pressures of community management under a small budget, an amateur workforce, and the racialized reputation of Franklin Park:

“The highest need is maintenance techniques that could be done by the summer work crew or a light contractor with \$2 or \$3 thousand to spend. ... [The Harvard students] felt that the slash-clearing style which the Coalition has been doing may be harmful. We need to know why and you need to understand that this clearing makes a dramatic impact on park perception by neighbors and park users. How can the two balance off?” (Heath, letter, 1983b, p.1)

The students assessed and recommended forest practice guidelines for Franklin Park in a thesis titled “The Wilderness: Franklin Park Wilderness Study” (Dale et al., 1984). They noted that the forest suffered from “abuse,” “relaxed attention,” “non-maintenance”, and “a paucity of enforcement officers,” all of which produced “extensive understory growth... invasive species... [and] neglect.” (Dale et al., 1984, p. 69). The Harvard study described the forest as “over aged and unstable” with “too few and too widely spaced trees, and the canopies of individual trees are much larger than would be found in a normal healthy forest... when one of these larger trees goes, the forest is incapable of adequate rejuvenation” (Dale et al., 1984, p. 33).

The study identified Olmsted’s forest design as requiring an unsustainable level of maintenance. The report described the forest deterioration as a symptom common to “many Olmsted parks and parks in the English landscape tradition” (Dale et al., 1984, p.33). This tradition’s management practices required “the clearance of smaller trees and removal of underbrush to create an open or grassy understory” but in doing so, it suppressed natural patterns of succession (Dale et al., 1984, p. 33). Olmsted’s desire for a wilderness that highlighted large specimen trees achieved this effect by largely clearing competing adjacent tree seedlings and saplings, allowing a targeted specimen tree to achieve canopy maturity but eliminating several generations of future canopy trees in the immediate vicinity. This approach left a successional gap in the forest midstory, a component of the forest that could only be re-created through artificial plantings. Despite these detractions, the document states that any suggested strategies for forest restoration would have, as their source, the Olmsted design.

Even in recognizing the degradation of the forest due to the structural deficiencies of the original Olmstedian approach, the Harvard study painted the contemporary forest condition in language that reinforced the Park as racialized and dangerous.

“In many cases the relationship between security and landscape planting is close. For many years extensive undergrowth has choked park walks and roadsides, creating walls of vegetation. This report responds to the issues of security through the premise that properly managed and maintained woodlands can provide adequate visibility to foster feelings of security” (Dale et al., 1984, pg. 4).



Despite the specific needs of the Coalition, the recommendations from students of this elite institution, one that trains future influential landscape architects and city planners, suggested a management approach to forest care outside of the financial possibilities of the community organizing efforts. The Harvard students argued for a traditional forestry “system of continuous, low-level management. It is not a one-shot, more intensive approach that produces temporary gains.” (Dale et al., 1984, p.33). This advice was capital intensive and not financially viable for Franklin Park Coalition, which had never been able to hire a professional staff to consistently maintain the forest for a healthier and more visually appealing ends. Without an alternative, Franklin Park Coalition could only double down on its “slash-clearing” forest management to solicit legitimacy and improve park perceptions. However, there is a documented instance of altered forestry practices by the Coalition after the corrective suggestions of the Harvard students, specifically to retain selective naturally occurring saplings to promote forest renewal:

“The understory has been thinned to allow views and use of the Park in areas which had been impassable thicket... young trees in the understory have been carefully saved so that the next generation of large shade trees for the area is underway” (Franklin Park Coalition, 1987, p. 1).

### **1985-2000 Archival Documents**

The Olmsted Historic Landscape Preservation Program was established in 1984 by the Massachusetts Department of Conservation and Recreation to fund restoration work across the Emerald Necklace and to commission a new master plan for Franklin Park. This Master Plan was finalized in 1990, a process in which the Franklin Park Coalition was once again heavily involved. The Plan included an extensive forest survey completed by The Halverson Company, which cites the “most critical factor affecting the health and dynamics of the Park's vegetation was the overmature population of upper story trees.” (Boston Department of Parks and Recreation and The Halvorson Company, 1990). It also stated the Coalition’s priorities as: “[FPC] focuses its work on clearing overgrown areas and opening up views to increase use and safety (particularly along pathways) as well as general pruning, weeding and trash removal.” (Boston Department of Parks and Recreation and The Halvorson Company, 1990). The 1990 Master Plan largely confirms the consistency

of the Franklin Park forest conditions, the maintenance practices deployed by the Franklin Park Coalition, and the social motivations at the core of FPC's ecological stewardship.

Proceeding the professional forestry assessment by The Halverson Company in the 1990 Master Plan are suggested restoration considerations by Christopher Leahy of the Massachusetts Audubon Society which differ significantly from the 1980 Master Plan and 1984 Harvard study in key ways. This portion of the 1990 Master Plan argues for prioritizing ecological processes over Olmsted's aesthetic and separates its condition from the identity of its Black user community:

“Natural communities are ever changing, and this fact is not compatible with a landscape architect's desire to create a constant aesthetic structure, even when, as with Olmsted, the structure was meant to look natural. Some of what has changed in Franklin Park in the last fifty years is simply the result of succession. This is particularly evident in the senescence of much of the oaks in areas such as Long Crouch Woods. One approach to this problem would be...simply allow this to develop naturally... The advantage of this approach would be the creation of a naturally diverse, self-sustaining community that would require little maintenance. The disadvantage is that the "landscape" would probably fall short of Olmsted's vision while the system matured naturally and might never achieve the ideal structure in some areas. The other approach is to try to rejuvenate the woodlands by plantings, duplicating, at least superficially, the desired structure. This will be much more labor intensive, will probably require continual "adjustment", may never attain true stability, and will likely be less diverse than a "natural" woodland” (Leahy, 1989, p.3).

Another professional forest survey of Franklin Park was completed in 1998 by professors of the Department of Forestry and Wildlife Management at the University of Massachusetts using traditional silvicultural practices (Kelty, 1998). This survey also directly challenges the Olmsted approach, questioning the “compatibility” of “relying on Olmsted's original design concept for the Park” (p.17). The prognosis of this 1998 forest survey differed from the 1984 Harvard GSD survey, reporting that the forest was healthy and within the “understory reinitiation age” of normal forest succession (Kelty, 1998). The report also took a different approach to the condition of the forest and praised the “irregular appearance” with “medium-sized trees, scattered old trees, and standing dead and fallen trees” (Kelty, 1998, p.15). Due to what they perceived as a well-developed understory, the

Kelty study posited that “no treatment of understory vegetation appear[ed to be] needed” with the exception of homogenous stands of non-native plant species (Kelty, 1998, p.16).

## **2000-2015 Archival Documents**

In the early 2000s, Franklin Park Coalition once again renewed its effort to rejuvenate the woodlands. A 2003 *Boston Globe* article reported that the Coalition planted 100 understory plants in the Franklin Park (Hall, 2003). In 2006, the Franklin Park Coalition hired forest consultants to assess and recommend strategies for forest maintenance within Franklin Park. The document, “A Management Plan for the Franklin Park Woodlands: Forest Inventory and Shade Tree Assessment,” is the most complete and contemporary survey of the forest up to this date (Binggeli and Urquhart, 2007). The Coalition strategically called for the professional characterization of the forest once again to “secure funding for woodlands management and monitoring” because “serious consideration of greenspace restoration and maintenance [would] not be considered without a management plan” (Binggeli and Urquhart, 2007, p.15). For the first time, this document framed forest maintenance as a way to preserve the landscape as an asset: “it is important to note that many municipalities are beginning to view urban forests as ‘green infrastructure’ in an attempt to recognize the value of trees as capital assets, which must be maintained through investment” (Binggeli and Urquhart, 2007, p.20).

The 2007 report described a non-rejuvenating forest with a homogenous canopy that lacked tree species diversity within a landscape dominated by invasive species. The report concluded, “at this point, a no management approach is not an option... if we don’t act now, this exquisite forest, 200 acres of trees in the heart of the city, will be lost” (Binggeli and Urquhart, 2007, p.10, 14). Once again social context played a large role in framing the forest and producing recommended management strategies:

“For the last forty years Franklin Park has suffered from a reputation dating back to the urban unrest of the 1960s and related racism. A widespread misconception about park safety exists outside immediate park neighborhoods. While police statistics and the personal experiences of hundreds of everyday park users tell a different story (one of a safe public park!), safety concerns and perceptions must be considered in each step of woodlands restoration. Well-tended paths, woodland directional signs, and the creation of sightlines through the woods will be

considered... A fine balance will be needed to ensure that dense planting does not detract from park visitors' perception of safety in the park. Greenery that limits sightlines can make people feel less secure. (Binggeli and Urquhart, 2007, p. 14, 19).

The recommendation for a forest management strategy to promote safety was softened but not entirely eliminated. Instead, dense non-native species were increasingly framed as threatening to the forest ecosystem and the public's perceptions of safety. The report echoed earlier recommendations about clearing sightlines but this forest plan directed those suggestions to non-native species: "dense thickets of invasive species should also be cleared to create sightlines through wooded areas to give users a better sense of safety" (p.24). Reflecting the Coalition's consistently meager finances, the focus continued to be on path edges more than the entire forest. Path edges remain a focal point for management spending because they are the "face" of the forest that the visitors interact with most often, a representation of the forest as a whole.

In 2015, the Emerald Necklace Conservancy created the first forest management plan that considered the complete Emerald Necklace park system, as past management documents had excluded Franklin Park. The report, entitled "Emerald Necklace: Tree Inventory, Conditions Assessment, and Management Plan" reflects a major shift in stewardship of the Franklin Park forest from the Franklin Coalition to the Emerald Necklace Conservancy. This forest management plan focuses entirely on the ecology, with no mention of collaboration with the Franklin Park Coalition. Decades of segregation, criminal perception, and immediate community stewardship are tempered or erased in the description of Franklin Park as "well loved by many, but also a complete mystery to others. The rugged topography, remote access, and large areas make maintenance difficult, so some areas appear tired and forgotten" (Emerald Necklace Conservancy et al., 2015, p.166). The Emerald Necklace Management Plan was split into three areas of interest: a tree conditions assessment, a general woodland survey, and a Heritage Tree Program. The trees surveyed for the conditions assessment portion were primarily path edge trees and the project was capped at a total of 7,000 individual trees for the entire Necklace (Figure 5.4). This portion produced raw data metrics as a "big picture overview of the conditions across the Emerald necklace..., along with more detailed insight in the conditions of each park"

(Emerald Necklace et al., 2015, p. 57). While the plan aimed for “geographic equality by park area,” among all the parks in the Emerald Necklace, Franklin Park represented only 932 trees, or 13% of the cumulative trees surveyed (Emerald Necklace Conservancy et al., 2015, p.72).



**Figure 5.4: Emerald Necklace Franklin Park Tree Condition Assessment**

The Emerald Necklace Conservancy’s 2015 tree conditions assessment surveyed selective path edges to identify tree species, size, and conditions in each park of the Necklace, notably not including the interior forest paths or young trees of Franklin Park. This data also identified heritage trees and summarized the “ecological benefit value” of trees in terms of monetized environmental services (Emerald Necklace Conservancy et al., 2015, p. 73).

The general woodland survey characterized tree species assemblages and canopy structure, recommending prescriptions for future forest care. The woodland survey also noted the impact of historic slash-clearing, but without any social contexts, and recommended current management “stop[ping] practices of cutting understory and regenerating vegetation, specifically in Franklin Park” (Emerald Necklace Conservancy et al., 2015, p.86, 185). However, the report notes that in the largest core section of forest, “new tree generations [had] developed—naturally, without planting—leading to a more structurally complex, resilient forest. Exotic invasives, however, threaten this favorable progression, by limiting the forest’s ability to self-plant” (Emerald Necklace Conservancy et al., 2015, p.335).

The Heritage Tree Program prioritized maintenance for trees of 48-inch DBH or greater that would be “present or planted during the construction of the Emerald Necklace” (Emerald Necklace Conservancy et al., 2015, p.76). Donors may fund a portion of this program by sponsoring heritage trees through philanthropic contributions beginning at \$15,000 for a tree starting at 15 inches in diameter and increasing to the “Legacy Tree Care and Succession Plan” of \$25,000 for a tree of 32 inches or greater in diameter that includes the “planting of a placement tree to ensure the continuity of the tree canopy” (Emerald Necklace Conservancy, n.d.). Donations for the Heritage Tree Program include recognition via a “commemorative plaque” naming the donor being embedded in the sponsored tree within the Emerald Necklace Parks.

### **Discussion: Forest Archives**

Analysis of the Franklin Park Coalition documents, the Franklin Park Master Plans (1980, 1990), and forestry management documents (1984, 1998, 2007, 2015) provided insights into the social and ecological processes that have shaped the current structure and composition of Franklin Park today. The management strategies of the FPC to alter the forest were not impartial environmental practices but instead were motivated by social tensions that shaped the forest in response to racialized circumstances. Their ad hoc forest management practices likely impacted the successional trajectory of the forest. The forest present today was shaped by inconsistent and amateur labor that reflected systemic disparities in flows of racial capital strongly associated with property ownership.

Both the Olmsted and Franklin Park Coalition eras of management exemplified distinct periods of racialized social, financial, and political difference that significantly disturbed the ecology and altered patterns of forest succession in ways evident today. The initial intensive ecological restructuring during the Olmsted period established the present-day forest canopy of Franklin Park. The Olmstedian period was followed by a second ecological restructuring as financially limited communities engaged in a frugal management strategy of slash-clearing, which removed a cohort of successional regeneration from the forest. In this way, the Franklin Park Coalition’s Black community-based grassroots management efforts influenced the structure, composition, and

successional trajectories of the forest in its attempts to combat the perceptions of both forest and their community as neglected and dangerous.

The condition of Franklin Park's forests today exemplifies the process of ecological inheritance, with both cumulative and discrete periods of management and influence serving to conscript the vegetation and its ecologies in and out of literal forms of power. Heynen (2003) argues that ecologies within urban areas are not neutral and the "reasons trees grow are both natural and social" (p. 982). Consequently, the political, social, and economic abilities of the management entity become essential to consider when approaching an urban ecology. Furthermore, due to the extended lifespan of trees conscripted into these ecosocial processes of urban forest management is not isolated to a specific time and must be viewed cumulatively. The present-day vegetation can reflect social characteristics of the past because vegetation has the ability to outlive the regimes that designed, planted, and pruned them into particular forms (Boone et al., 2010, p. 254). Grove et al. (2018) recognized this pattern in the long term social-ecological research site in Baltimore, where "past practices of de jure and de facto segregation created social and environmental legacies that persist on the landscape" and were crucial to understanding environmental justice as a legacy process (p. 524). Parks in this sense are inherited; they are produced by a "cumulation of policies and practices that entangle urban parks with racialized histories" (Brown and Shcheglovitova, 2020, p. 2). The constructed ecologies of urban nature embed power within the vegetation, which changes during periods of urban social conflict along racial lines and cultural decisions over its use and control (Swyngedouw and Heynen, 2003).

A process of racial dispossession led to the abandonment of Franklin Park's once elite forest landscape and resulted in community control by organizations that could not maintain the ecology in its Olmsted-designed form. This historic ecology represented a "luxury effect" legacy, with plant species and location largely dictated by Olmsted, who exercised singular forms of economic and political power during the creation of Franklin Park (Hope et al., 2003). It was only through the paired processes of segregation and white flight that Franklin Park, as a green amenity, became available to Black communities of Roxbury (Boone, 2009; Gove et al., 2018). However, the Franklin Park Coalition could not

maintain the Olmsted forest because of its economic constraints. This is a direct result of the City of Boston's financial negligence, which created large park care budget disparities between Franklin Park and the rest of the Emerald Necklace as retribution after the Roxbury Rebellion.

The forest under the stewardship of the Franklin Park Coalition became increasingly spontaneous, with periodic clearing undertaken as much to maintain the Olmsted forests as to reframe its racialized perception as a dangerous and criminalized space. Solecki and Welch (1995) demonstrate how greenspaces can function as segregation enforcement landscapes, becoming "boundary parks." These boundary parks are produced by a combination of racial stigmatization of adjacent neighborhoods alongside "weeds and plant overgrowth and trees in poor condition," which mark the landscape as both undesirable and unsafe (Loughran, 2017; Solecki and Welch, 1995, p. 95). This kind of ecological shaping to signal social belonging has been well documented in more obviously tended habitats such as the suburban lawn (Head et al., 2014; Robbins, 2007). Advocacy by the Franklin Park Coalition to remove downed trees and to reduce spontaneous vegetation in the understory can be seen as a strategy to escape its social designation as a boundary park. Ironically, it was the aging forest planted by Olmsted, and the successional processes it set in motion, that have produced the woody debris that was perceived as a symptom of community failure rather than as a natural outcome of forest succession.

The disinvestment from the City of Boston reinforced unstructured nature as a marker of non-white economic scarcity. The Franklin Park Coalition internalized this, reflecting Olmsted's view that broken branches and dying trees on the forest floor are recognized as "vandalism on par with breaking windows in a private dwelling" (Linday, 1980, p. 16). This is the ecological version of the racist and disproven "broken windows" theory that visual signs of deterioration in infrastructure perpetuate more of the same, prompting a spiral of social decay (Kelling and Wilson, *The Atlantic*, 1982). Forest conditions were not attributed to Olmstedian succession, as they should have been, but to the inability of the Black user community to hide this organic process it did not set in motion (Ansfield, 2020). Although removal of trees and woody debris was practiced during the Franklin Park Coalition's oversight to manage the park's perception, the benefits of



leaving decayed material are now widely accepted (Gillis, 1990). Removal of dead wood may be desirable aesthetically, but at the same time, without accompanying management, its removal may lower soil nutrients and create conditions that may also influence successional trajectories.

Franklin Park was deprived of municipal funds a decade before austerity approaches in urban governance across the United States shifted urban public greenspace care to private nonprofit entities. While private conservancies in parks surrounded by more affluent communities have had success, Franklin Park never had the organizational structure or access to private capital that was key to the increasingly prevalent private-public park governance model. The Franklin Park Coalition employed a maintenance regimen that relied on the amateur and sporadic labor of neighborhood schools, summer youth work crews, and small volunteer gatherings to preserve the landscape. “Capital only values parts of the natural world which requires human labor to produce it” and parks produce value in public park nature using racially differentiated work regimes that reflect racial capitalism in abutting property values (Castree, 2003; Huber, 2017, p. 41; Loughran, 2017; Speer and Goldfischer, 2020).

The shifts in maintenance regimes in Franklin Park, from Olmsted through the FPC, exemplify how the forest acted as a mediated and contested form of nature dependent on racialized ecologies, which are themselves formed and defined by a cumulative and inherited spectrum of highly managed or more spontaneous natures. While both regimes were unified in the desire to make the woods to appear organic and independent of human tending, large amounts of labor capital were required to form and continually guide woodlands that are open and native, according to Olmsted’s design for woodland as socially restorative ecology. More spontaneously, authentically unmediated wild woodland began to form in Franklin Parks as the community and citizen leadership was unable to provide the needed capital due to racialized disinvestment, thereby grafting its racialized ecology on the Black community. The original and unsustainable modifications and management of the forest set in motion by Olmsted are disguised within the elite nature-making process, with the delayed consequences of these actions incorrectly perceived as the failure of local communities under racialized conditions.

The management choices made under racialized regimes in Franklin Park had the intent to alter the forest, shaping its structure, composition, and its perception into good/safe and bad/unsafe natures. However, in its attempt to maximize its limited community resources through slash-clearing and wood removal, the Franklin Park Coalition may have exacerbated natural processes that shifted the ecology ever further from its original elite form. Forest clearing undertaken sporadically and intensively may have been different than what was done in the Olmsted era. Moreover, the clearing that took place a century ago was in a landscape relatively absent many of the invasive plant species present today, although some plant species of contemporary concern were introduced into the Emerald Necklace by Olmsted during the nature making process (Boston Department of Parks and Recreation, 2001). Ultimately, the practices of the Franklin Park Coalition may have counterproductively steered the forest toward the material and ideological conditions that canalized its perception as a park in decline and in need of revitalization.

Although the Emerald Necklace was designed as a unified park system, the racial tensions in Boston separated Franklin Park from the rest of the Necklace. The forest legacies of Olmsted, as they aged and overwhelmed the capacity of the Franklin Park Coalition to maintain their aesthetics, facilitated this separation. An effective forest restoration will require financially endowed organizations like the Emerald Necklace Conservancy to scale up the work. The Emerald Necklace Conservancy's integration of Franklin Park forest into its 2015 Tree Survey and Management Plan brings the Park back into the Emerald Necklace system for the first time in decades. However, this begins the introduction of "politically neutral" ecology by those who do not frame park care in terms of reciprocal adjacent community benefit but focus on the forest as an insular ecosystem. Notably, the Emerald Necklace Conservancy has begun to prioritize heritage trees over others within its forest maintenance plan, the oldest trees in Franklin Park and those mostly likely to have been planted by Olmsted. This preference may disenfranchise the long history of the forest as a site of Black struggle and contestation present within the emerging understory, and further lock in the prioritization of a forest as a historically elite landscape instead of a more novel ecosystem evolving in the context of social, as well as climatic change.

## CHAPTER 6. RESULTS AND DISCUSSION – FOREST COMPOSITION AND CHARACTERIZATION

Franklin Park forests are compositionally disorganized. The original analysis for the forest characterization intended to apply quantitative techniques from community ecology (ordination and clustering) to aid in the interpretation of the compositional variability within the forest. However, these methods indicated that there was little structure to the co-occurrence of species. This is not uncommon for data collected from highly disturbed environments with an history of human impacts. In a forest with less human modification, plant species will tend to co-occur and exhibit trends in composition that reflect underlying environmental gradients and regularly occurring disturbances. Tree species in the present-day Franklin Forest exhibit little of this systematic variation in species composition.

The intact overstory, largely pre-existing or planted by Olmsted, is primarily red oak (*Quercus rubra*), white oak (*Quercus alba*), and black oak (*Quercus velutina*). These oaks are the largest and oldest trees in the forest, with broad canopies that shade a significantly younger forest (Figure 6.1). These canopy oaks are dispersed in their distribution across the forest with only the edges of their canopies interlinking. The midstory is comprised of woody shrubs and small trees such as white ash (*Fraxinus americana*), black cherry (*Prunus serotina*), and crabapple (*Malus* spp.). The midstory is dense, with many of the trees having long, thin trunks as a consequence of competing for light in the understory (Figure 6.2). There is little age variation in the midstory, with trunks of comparable diameter growing in close proximity to one another (Figure 6.3). The understory is largely dominated by glossy buckthorn (*Frangula alnus*), an invasive shrubby multi-stemmed tree that forms dense thickets (Figure 6.4). The herbaceous ground cover was dominated by the invasive plant Japanese knotweed (*Reynoutria japonica*). This species can become dominant in disturbed areas.



**Figure 6.1: Oak Canopy**

A typical large old canopy oak tree surrounded by a crowded emerging midstory of black cherry (*Prunus serotina*), crabapple (*Malus* spp.), and glossy buckthorn (*Frangula alnus*). This oak was likely present or planted by Olmsted during the forest construction of Franklin Park, while the others are spontaneous recruits.



**Figure 6.2: Black Cherry Midstory**

Black cherry (*Prunus serotina*) is a fast-growing shade-tolerant native pioneer species. Slender trees form much of the understory in the forests of Franklin Park.





**Figure 6.3: High Plant Density in Forest**

Franklin Park's forested understory is dense and difficult to see or walk through.



**Figure 6.4: Glossy Buckthorn Understory**

Invasive, monodominant glossy buckthorn (*Frangula alnus*) dominates a significant portion of the Franklin Park forested understory. Buckthorn thrives in disturbed areas and is difficult to eradicate once established and can inhibit the growth of other plant species. A dense stand that is living (left) and a stand that is recovering after fire (right).

Overall, approximately 50 tree species were identified in the study comprising a total of 1630 stems. The forest oaks (*Quercus* spp., 46.3%), black cherry (*Prunus serotina*, 8.8%), and glossy buckthorn (*Frangula alnus*, 7.4%) had the highest importance metrics (Table 6.1). Oaks are slow-growing long-lived species, and those present in Franklin Park today likely thrived and grew quickly under attentive management during the Olmsted era, allowing them to dominate the forest overstory. Black cherry (*Prunus* spp., 8.8%) is a pioneer species that grow quickly in disturbed urban forest environments. The trees are shade tolerant and grow tall and slender in shaded competitive conditions. Black cherry produces many seeds that readily germinate upon dispersal. Their unassisted success in disturbed environments often categorizes them as a semi-undesirable native species that is aggressive or weedy. Glossy buckthorn (*Frangula alnus*, 7.4%) was introduced to the United States as a horticultural plant to form hedges, as evidenced by its tendency to establish quickly and form dense thickets in disturbed urban forests. It is shade tolerant and spreads easily through bird dispersal of its seeds. Even when damaged or cut, glossy buckthorn quickly regenerates. With removal of above ground stems, the new shoots that form have the potential to leaf out and produce fruit in the same season (Cunard and Lee, 2009).

Although not identified to species, dead standing trees (15.5%) and downed woody debris (13.1%) also had large importance values, higher than many of the living species in the forest (Table 6.1; Figure 6.5). Standing dead trees, or snags, are important ecologically because they provide additional animal habitat, slowly hold and release moisture, and provide soil nutrients as they decompose.



**Figure 6.5: Accumulation of Dead Wood in the Forest**

Dead wood, in this case coarse woody debris is abundant in Franklin Park due to the senescing oak canopy and increased competition for light.

Many of the tree species with high importance values, included standing trees and woody debris on the ground had high frequencies (Table 6.2). However, one genera of trees, crabapples (*Malus* spp.), ranked much higher for its frequency. Because of its small stem size, it was overall less important, but this woody shrub to small tree was very common from quadrat to quadrat. Crabapple are multi-stemmed small trees that can thrive in disturbed areas. Although they are shade tolerant, they prefer to grow in full sun and become abundant along forest edges and beneath overstory openings.

Tree species with the highest relative percent dominance, a function of diameter of the trunk rather than frequency of occurrence, were clearly oaks (*Quercus* spp.) (Table 6.3). These slow growing shade-tolerant species are among the largest trees in the forest and comprise the few remaining historic landmark trees in the forest. The largest tree sampled is estimated to be approximately 150 years old based on standard silvicultural growth factors. White pine (*Pinus strobus*) also ranks high as a dominant canopy tree. It was a forest dominant in the pre-Olmsted ecosystem. Pines can grow on the thin, poor

acidic soils like those in the Park. For the oaks and white pine, their dominance in the forest is mostly a factor of historical plantings and legacies of the original forest.

**Table 6.1: Relative Percent Importance (>2%) of Tree Species in Franklin Park**

<i>Common Name</i>	<i>Scientific Name</i>	<i>Relative Importance</i>
Black and red oak	<i>Quercus rubra</i> L. and <i>Q. velutina</i> Lam.	30.9
Dead wood (standing)	Snag	15.5
Dead wood (ground)	Coarse woody debris	13.1
White oak	<i>Quercus alba</i> L.	11.0
Black cherry	<i>Prunus serotina</i> Ehrh.	8.8
Glossy buckthorn	<i>Frangula alnus</i> Mill.	7.4
White pine	<i>Pinus strobus</i> L.	5.7
Sweet birch	<i>Betula lenta</i> L.	4.5
Pin oak	<i>Quercus ellipsoidalis</i> E.J.Hill	4.4
Crabapple	<i>Malus</i> spp.	4.2
American beech	<i>Fagus grandifolia</i> Ehrh.	3.9
Shagbark hickory	<i>Carya ovata</i> (Mill.) K.Koch	2.2
Red chokeberry	<i>Aronia arbutifolia</i> (L.) Pers.	2.2
American elm	<i>Ulmus americana</i> L.	2.1

**Table 6.2: Relative Percent Frequency (>2%) of Tree Species in Franklin Park**

<i>Common Name</i>	<i>Scientific Name</i>	<i>Relative Frequency</i>
Dead wood (standing)	Snag	25.1
Black and red oak	<i>Quercus rubra</i> L. and <i>Q. velutina</i> Lam.	24.4
Dead wood (ground)	Coarse woody debris	16.5
Black cherry	<i>Prunus serotina</i> Ehrh.	15.0
Glossy buckthorn	<i>Frangula alnus</i> Mill.	14.7
Crabapple	<i>Malus</i> spp.	8.1
White oak	<i>Quercus alba</i> L.	7.7
Sweet birch	<i>Betula lenta</i> L.	7.1
American beech	<i>Fagus grandifolia</i> Ehrh.	5.2
White pine	<i>Pinus strobus</i> L.	4.8
Red chokeberry	<i>Aronia arbutifolia</i> (L.) Pers.	4.3
Choke cherry	<i>Prunus virginiana</i> L.	3.3
Shagbark hickory	<i>Carya ovata</i> (Mill.) K.Koch	2.9
White ash	<i>Fraxinus americana</i> L.	2.5
Freeman maple	<i>Acer freemanii</i> A.E.Murray, Kalmia	2.4
Sugar maple	<i>Acer saccharum</i> Marshall	2.4
Pin oak	<i>Quercus ellipsoidalis</i> E.J.Hill	2.3
American elm	<i>Ulmus americana</i> L.	2.2
Norway maple	<i>Acer platanoides</i> L.	2.0

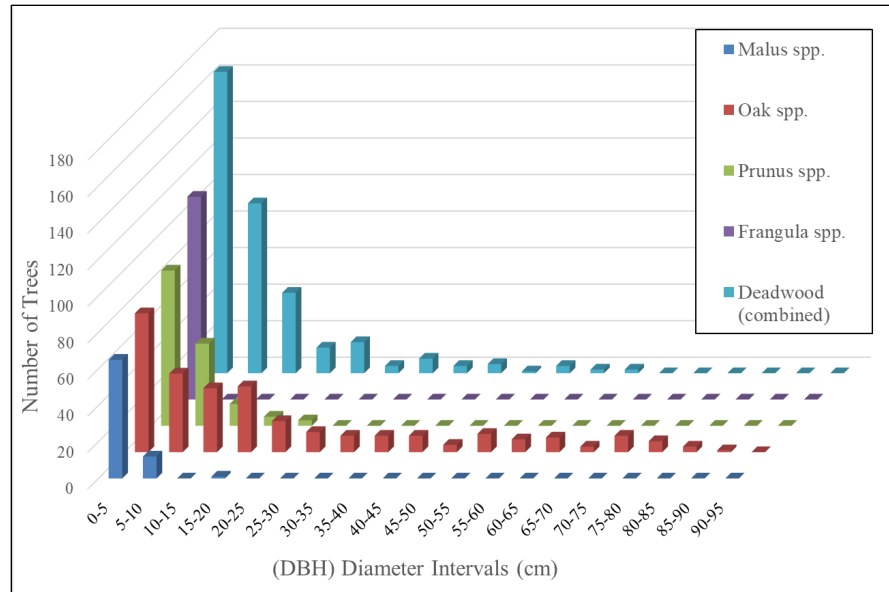


**Table 6.3: Relative Percent Dominance (>2%) of Tree Species in Franklin Park**

<i>Common name</i>	<i>Scientific Name</i>	<i>Relative Dominance</i>
Black and red oak	<i>Quercus rubra</i> L. and <i>Q. velutina</i> Lam.	37.4
White oak	<i>Quercus alba</i> L.	14.3
Dead wood (ground)	Coarse Woody Debris	9.8
White pine	<i>Pinus strobus</i> L.	6.7
Pin oak	<i>Quercus ellipsoidalis</i> E.J.Hill	6.4
Dead wood (standing)	Snag	5.9
American beech	<i>Fagus grandifolia</i> Ehrh.	2.7
Black cherry	<i>Prunus serotina</i> Ehrh.	2.5
American elm	<i>Ulmus americana</i> L.	2.0

Some of the tree species appear to be less adapted to disturbed environments, or were not nurtured after the Olmsted period. For example, it is not surprising that American elms are present, as they were once most widely distributed trees in North America. However, their current presence in the forest is now limited to sprouts from the stumps of old trees felled by Dutch elm disease. Additionally, hickory trees (*Carya* spp.) commonly co-occur with oaks, and while they are consistently present in Franklin Park, they have an overall low importance due to their slow growth and small size. Some species are notably absent in the forest. Although listed in the historical record as planted by Olmsted, some native trees like red cedar (*Juniperus virginiana*), flowering dogwoods (*Cornus florida*), and redbud (*Cercis canadensis*) are largely or entirely absent likely due to their short-lived nature and inability to independently compete and regenerate in the post-Olmsted period forest (Boston Department of Parks and Recreation, 2001; Dale et al., 1984).

A histogram of the frequency of tree species by DBH size classes and life history strategies confirms a woodland dominated by immature trees, midstory invasives, and a senescing Olmsted canopy (Figure 6.6). Dead trees, either on the ground as woody debris or standing snags, outnumber all other species. Dead standing trees suggests that new trees may have established, but many have not survived the stem exclusion stage as a consequence of competition for sunlight. Downed woody debris indicates that larger established trees may be senescing and dropping limbs. Stems of invasive glossy buckthorn fill the mid-canopy along with black cherry, and crabapple. Individual oak trees can be found across the range of size classes. This suggests that conditions for oak to be recruited into the overstory have continued to exist, although few have attained a large size.



**Figure 6.6: Histogram of Tree Diameters by Species in Franklin Park**

This data indicates that spontaneous plant species, like black cherry (*Prunus serotina*), crabapple (*Malus* spp.), and buckthorn (*Frangula alnus*), are increasingly common in the forest, while historically intentional species, like oaks (*Quercus* spp.), are less so.

## Discussion: Forest Characterization

The forest characterization undertaken in this thesis confirmed aspects of the four earlier forest surveys. In agreement with all surveys (1984, 1998, 2007, 2015), widely spaced old oaks still comprise the remaining canopy. The forest also continues to exhibit little recruitment of a new generation of oaks. However, Kelty’s (1998) forest survey, one based more on silvicultural characteristics, noted that the forest had an understory that was regenerating, as observed in this research, in the abundance of the midstory native tree black cherry (*Prunus serotina*) in the present-day forest. The 1998 survey also recorded that the condition of the understory did not warrant clearing, except for the locations where non-native plants species were established. Yet today’s forest has extensive cover of non-native plants in the understory, including the invasive glossy buckthorn and Japanese knotweed. The 2015 characterization of the Franklin Park forest by the ENC was in agreement with the forest composition and the mixed canopy structure evident today. The ENC forest survey observed that “canopy gaps are more prevalent in the Franklin Park woodlands than expected in comparable natural forests ... [which] provides more opportunity for invasive species to become established” (Emerald Necklace Conservancy

et al., p. 86). Based on the forest surveys conducted over this interval of nearly forty years (1984-2021), the forest appears to have increased in vegetation density in the understory and midstory, with a greater cover of invasive species, and a continued decline in the oak canopy.

The 2015 Emerald Necklace Conservancy survey prioritized aspects of the forest related to how it might be used by visitors as they traverse trail paths. This survey focused on identifying the presence of large trees of 30 inches or greater, called “heritage trees,” along the main paths through the forest. According to their survey, forty-seven percent of these heritage trees were in good condition (Emerald Necklace Conservancy et al., 2015, p. 72). However, this focus on the old and larger trees stopped short of documenting dead trees. Although standing dead trees and woody debris were found to be a large component of the forest in this thesis, approximately 28%, standing dead trees and woody debris were not a prominent component of the forest in the ENC survey (Table 6.1; Emerald Necklace Conservancy et al., 2015).

From the archival records, the Franklin Park Coalition historically prioritized dead trees and downed wood for removal with the intention of reducing the neglected appearance of the Park. This management approach is consistent with research that has found that visitors to forested ecosystems dislike the presence of woody debris (Arnberger et al., 2018). Additionally, dead standing trees pose hazards to park users and are a liability for the city. Woody debris on the ground is difficult and laborious to remove. Remediation of both types, for the safety of visitors or to improve the appearance of the landscape, require significant capital. Research has shown that higher residential housing values are correlated with decreased presence of woody debris ostensibly due to larger landscape maintenance budgets (Frohlich and Ciach, 2020; Thorn et al., 2020). The Emerald Necklace Conservancy forest survey recorded the dead material, but it is presented in a relational level of none, low, moderate, and high accumulation, which disguises the prevalence of this significant component of the forest (Figure 6.7). Although there are ecologically sound reasons for leaving woody debris in the forest, as its decomposition augments soil organic matter, the practice of removing woody debris likely slowed after the most intense tenure period of the Franklin Park Coalition. While dead wood has

historically been perceived as evidence of neglect, changing ecological approaches may prompt parallel social changes that view woody debris as an “imbricated space” in which natural decay is a desirable natural or “authentic” form of nature, a shift analogous to the reframing of dead wood as “nurse logs” (Loughran, 2017).



**Figure 6.7: Perceptions of Dead Wood in Franklin Park**

The presence of dead wood is not only statistically significant but also visually impactful. Shifting sentiments around dead wood from a sign of neglect to a more positive reception as an organic form of nature that belongs exemplify how race and forest succession interrelate in Franklin Park.

Due to their significant diameter, the aging oak trees that remain in the canopy are likely from Olmsted’s plantings. The effect of Olmsted’s intensive planting in a short time span and subsequent increased caretaking of trees once planted produced an unnatural amount of tree viability to form this even-aged oak canopy. Soil amendments and plantings by Olmsted may have also helped convert the pre-existing pattern of forest succession in Franklin Park into one lacking a cohort of younger oaks in the understory. This care and cultivation of oaks in their early years may have been necessary because Franklin Park’s sandy rocky forest site is not ideal for oaks. Although oaks can thrive in a wide variety of conditions, such soils may limit oak recruitment in favor of white pines and species better adapted to drier and lower nutrient sites. The dense multi-layered canopy of crabapple (*Malus* spp.), black cherry (*Prunus serotina*), and glossy buckthorn (*Frangula alnus*) may

now further limit recruitment of oaks into the overstory, although oaks can be fairly tolerant of shade. In this way, Olmsted's design of the forest set the stage for the declining forest conditions today.

While oaks may live well over a century, their planting on an unsuitable site by Olmsted a century ago, compounded with the stressors of an urban environment, suggests that natural recovery of oaks in Franklin Park is unlikely. Despite the oaks' status as a native and ecologically valuable tree, the presence of the oak canopy in Franklin Park is manufactured, out of sync with natural processes, and ultimately unsustainable. Without intervention, the oak forest is unlikely to persist without expensive interventions and new plantings, a recommendation that has been made for decades among the various groups affiliated with Franklin Park (Binggeli and Urquhart 2007; Boston Department of Parks and Recreation and The Halvorson Company, 1990; Dale et al., 1984).

It is well established that non-native plants can alter forest successional patterns in urban woodlands (Piana et al., 2021a). Invasive plants may have increased when Franklin Park Coalition's slash clearing created the kind of disturbances that allow species like glossy buckthorn (*Frangula alnus*) to invade and increase in abundance. Furthermore, by reworking path edges to efficiently increase perceptions of Olmsted tidiness and safety, the Coalition's interventions may have further aided the establishment of glossy buckthorn, Japanese knotweed, and other invasive species. Clearing often results in the formation of edge habitat in forested ecosystems, which are considered hyperdynamic (Laurance, 2002). Edges experience greater levels of human and natural disturbance and more compositional turnover compared to the interior of patches, creating opportunities for invasive species establishment. Buckthorn was not raised as a concern in the 1984, 1998, or 1990 forest documents, appearing for the first time in substantial levels in the 2007 document. This indicates a likely origin of the species establishment during the Coalition management practices with a delay in the time needed for this species to establish at the density it is today.

The Franklin Park Coalition's management practices, operating under the constraints imposed by the cumulative and ongoing effects of racism, may have augmented

the cover of glossy buckthorn, which in turn altered the successional trajectory of Franklin Park's forest. When abundant, glossy buckthorn (*Frangula alnus*) deters the establishment and success of other plant species (Cunard and Lee, 2009; Frappier et al., 2003; Hamelin et al., 2016; Lanzer et al., 2017). Some invasive species, like buckthorn, may be more tolerant and therefore successful under the pressures of climate change than native species (Dukes et al., 2009). In addition to preventing the recruitment and reestablishment of oaks in the canopy, the visual aspects of this invasive plant also produce a forest that signals distress and disinvestment. The Emerald Necklace Conservancy forest survey in 2015 reported that buckthorn was only 1% of the forest composition, a much smaller percentage than what my research indicates, which may, in turn, underestimate the labor and capital needed to remove it (Emerald Necklace Conservancy et al., 2015, p. 95). However, a third management period in Franklin Park is beginning. Forest care is scaling up to the private nonprofit governance of the Emerald Necklace Conservancy, an organization not geographically based in the community surrounding Franklin Park, but one that possesses the capital needed to remove the buckthorn.

The 2015 ENC forest survey mentioned several other weedy species of concern, including the non-native corktree (*Phellodendron amurense*), tree of heaven (*Ailanthus altissima*), and Norway maple (*Acer platanoides*), as well as the regionally native black locust (*Robinia pseudoacacia*). These species were all encountered in my forest survey, but none were of high importance. Furthermore, of these, several species were actively planted by Olmsted in the Emerald Necklace system (Boston Department of Parks and Recreation, 2001). The ENC's endorsement of their removal exhibits a willingness to deviate from Olmsted's design when considering future avenues for forest restoration.

At present, the only tree species that seems capable of replacing the declining oaks within the canopy is black cherry (*Prunus serotina*). The significance of black cherry in Franklin Park's urban forests is consistent with findings that this early successional tree also dominates urban forests in New York and Philadelphia (Johnson and Handel, 2016; Liptzin and Ashton, 1999; Nowak et al., 2007). The Emerald Necklace survey (2015) states that they prefer to "encourage natural regeneration with minimal intervention," which, if followed, would likely lead to black cherry's dominance in the future canopy. However,

by restricting sampling to path edges in the ENC forest survey, only 3% of the Franklin Park trees were identified as black cherry, indicating a misrepresentation of future of forest change in their report (Emerald Necklace Conservancy et al., 2015, p. 72). The Emerald Necklace survey indicates no preference for species composition in the forest outside of a desired level of species diversity and it is unclear how black cherry forest would be perceived by urban public visitors (Gerstenberg and Hofmann, 2018). While Iverson et al. (2008) shows black cherry forests diminishing under climate change conditions, Averill et al. (2018) illustrates that the same conditions spur growth rates within this species. Royo et al. (2021) indicates that the long-term success of black cherry as a species rest more on anthropogenic changes, like policy, than the unique forests conditions in which they reside.

In summary, the past legacies of environmental management have likely steered the forest toward the current conditions and abundance of dead wood, oak, buckthorn, and black cherry. The declining oak and increasing dead wood represent an Olmsted forest that is waning, but whose presence is prioritized by the Emerald Necklace Conservancy through the heritage tree program. The buckthorn and black cherry establishing under the Coalition's stewardship, are little recognized by the ENC, but these species are the ones that represent the Park's struggle for racial and environmental justice.

## CHAPTER 7. FRANKLIN PARK FOREST FUTURES

Dooling (2009) defines “ecological gentrification,” or alternatively “green gentrification,” as the urban planning process, shaped by social and environmental power agendas, which results in the uneven distribution of and access to public greenspaces in favor of the economically affluent. The uneven distribution in both quantity and quality of public parks in the urban landscape make them particularly strong influences on green gentrification patterns in the city (Anguelovski, 2016; Gould and Lewis, 2012; Loughran, 2016; Miller, 2020). Birge-Lieberman (2010) argues that Olmsted’s parks are at the intersection of reestablishing social power through park restoration, with ecological remediation acting as a spatial fix for urban capital to perpetuate uneven amenity in green infrastructure. A park relies on its physical characteristics, including the flora, to provide aesthetic and ecosystem services that indirectly increase the value of adjacent real estate (Crompton, 2005). As a manufactured urban ecosystem, the extent a park is maintained is frequently a reflection of its ability to generate adjacent capital from the surrounding communities, with the wealth in these communities funding private sector park maintenance which stabilizes the link between park and real estate investment (Krinsky and Simonet, 2017). This maintenance includes forest construction, through tree planting and care, so that “trees as nature are used in and for the reproduction of a privileged subject in the context of neoliberal capitalist urbanism” and therefore, are integral to consider when countering green gentrification (Parish, 2019).

The Franklin Park forest is a productive setting to investigate green gentrification because the ecosystem designed by Olmsted is coming to the end of its “design life” and will be lost without investment (Birge-Lieberman, 2010). The oak (*Quercus* spp.) canopy is the most significant remaining ecological imprint of Olmsted’s on the landscape, while other planted species, like redbud (*Cercis canadensis*) and dogwoods (*Cornus florida*), or disease prone species, like hemlock (*Tsuga canadensis*), are no longer abundant (Boston Department of Parks and Recreation, 2001). As ineffective maintenance strategies and plant succession shifted the forest further from Olmsted’s design, spontaneous species like black cherry (*Prunus serotina*), crabapple (*Malus* spp.), and glossy buckthorn (*Frangula alnus*) have established independently without direct human intention and are becoming



increasingly dominant in the forest. These species do not cohere with Olmsted's design and do not embody capital investment, meaning that they are functionally not actively perpetuating the environment as a "capitalized nature" (Kay and Kenney-Lazar, 2017). This is supported by their own independent establishment and growth under conditions of austerity produced by the financial abandonment of Franklin Park after the Roxbury Rebellion.

Altering the forest, either to plant or remove certain species, would require significant capital investment, and may reinscribe the Franklin Park forests as a perpetuator of green gentrification (Bryson, 2013). Many studies of green gentrification have highlighted the intentionality of green projects, the most well-known example being the green gentrification of the High Line in New York City. There, the park played a key role in ushering in an acute period of rezoning, development, and displacement (Lang and Rothenberg, 2017). The creation of new public parks from remediation of toxic brown fields has also been linked to gentrification, as seen in the Gowanus Canal Sponge Park in Brooklyn, New York (Miller, 2020). Furthermore, green gentrification has also occurred through the historical preservation and environmental remediation of existing parks, including Olmsted's parks. Nowak and Roynsedal (2021) argue that capital was intentionally deployed to change the flora of Olmsted's Back Bay Fens Park in Boston in order to "domesticate" what had been a queer cruising space, remaking the ecology for cultural and environmental consumption of the park by an elite class. Gould and Lewis (2012) focused on the impacts of a surge of restoration investment into the once neglected Prospect Park in Brooklyn, New York, where a "meticulous reconstruction of Olmsted and Vaux's original design specifications" took place. These investments led to an increase in the value of adjacent housing and the area around Prospect Park became whiter and wealthier, a hallmark of gentrification. This process likely drew from historically accurate environmental restoration projects in Central Park, where private capital fundraising and ongoing neoliberal environmental management approach have become the model for urban parks across the country (Cramer, 1993; Krinsky and Simonet, 2017). The history of Prospect Park is very similar to Franklin Park and can be taken as an example of what could happen in Franklin Park and the surrounding neighborhoods of Roxbury, Dorchester, and Mattapan.

Gentrification is often coarsely dichotomized in the literature as either “ascent” or “decline,” though the reality is that these processes are much more nuanced and varied (Delmelle, 2017; Landis, 2016). The same applies with green gentrification, which can be categorized or dichotomized at the expense of the ecological details that facilitate or resist it. Many different historical and spatial processes are embedded in this dichotomization, and consideration of them highlights the restorative spectrums possible within the overlap between investment and greening. The analyses undertaken in this thesis illuminated some of these processual details. For Franklin Park, I highlighted how unintentional, and even well-intentioned processes may contribute to green gentrification (Quastel, 2009). The Franklin Park Coalition’s efforts to advocate for the community and the forest inadvertently led to significantly expanded invasive species. Their amateur forestry may have steered plant succession toward a forest with a dense midstory with vigorous growth of spontaneous species like buckthorn and black cherry. Soil improvements produced by standing dead trees and downed wood may have aided their establishment. However, these changes to the forest may have reduced the presence of oak species, a departure from Olmsted’s ideal. Redirecting the forest away from its current successional trajectory may require significant outlays of capital, with this remediation enhancing the positioning of the forest as a site of accumulation that may lead to more rapid gentrification. In sum, the actions of the Franklin Park Coalition may have enhanced a lock-in of decline in the Olmstedian forest that now serves to strengthen calls for its restoration and the potential for green gentrification. Nonetheless, there are viable socio-ecological futures that hinge upon approaching the forest as it currently is.

Three scenarios for Franklin Park may emerge out of the racialized forest management documented in my archival work and forest characterizations: too green, not enough green, and just green enough. Their intent, collectively, is to show that while green gentrification may be difficult to avoid completely, it may be possible to slow or minimize the process until multiple intertwining social justice safety nets in housing, employment, education can be established (Derickson et al., 2021). Moore et. al. (2003) says that “there are few forms of nature that do not bear the traces of racial exclusion,” but perhaps it is in recognizing their historical legacies that new forms of liberatory nature can be fostered. Such natures may “challenge the intertwined crises of ecosystem decline, nonhuman

species exploitation and extinction, and human oppression” (Pellow, 2014). They attempt to close some of the gap between the academic and the actual, a criticism often levied at political ecology (Blaikie, 2011).

## **Too Green**

The scenario of “too green” represents a future with concentrated and capital-intensive forest remaking that prioritizes a return to an Olmstedian landscape, reestablishing the elite nature of the forest and leading to increased Black displacement in the neighborhood surrounding the Park. A too green future would entail an almost total remake of the contemporary forest to reflect Olmsted’s specification, a “forest flipping” that would require a dramatic alteration of the flora within the landscape to recreate what Gobster (2007) calls a “museumification of nature.” This level of forest ecosystem remaking would reflect not only Olmsted’s flora, but also his mechanical nature-making process. Desirable tree species would have to be planted. Significant areas of invasive species would need to be removed. This non-spontaneous vegetation would require additional investment and care to maintain.

While difficult and expensive at the scale of the entirety of Franklin Park, small scale examples of too green have already occurred within the Emerald Necklace park system. The Muddy River Restoration Project dramatically restored a portion of Olmsted’s riparian landscape in Boston (Bennett, 2018). These kinds of too green interventions may also be rationalized by the threat of climate change, as trees and forest become defined by their roles as carbon sinks and any monetary value attributed to their ecosystem services (Brown et al., 2015; Loughran, 2020). Both the Emerald Necklace Conservancy and the Franklin Park Action Plan speak broadly to the role of the forest in addressing climate change. However, the emerging science on forests as carbon sinks indicates that mature forests, with bigger and older trees, may not sequester carbon from the atmosphere as efficiently as younger forests (Jiang et al., 2020). Relationships between forest recovery, tree plantings, and carbon capture are far less straightforward than previously assumed (Demuzere et al., 2014; Kabisch et al., 2016).

Additionally, a dramatic removal and replacement of tree species would effectively erase the environmental legacy of racial disinvestment and redlining of the forest, producing a kind of visual and ecological amnesia through green gentrification. The ecology of Franklin Park, as a consequence of racialized disinvestment, would be made more like the ecologies that exist in other forests within the Emerald Necklace system. Many spontaneous native species like black cherry, would be removed and replaced by artificial plantings. Minimizing the dominance of the spontaneous vegetation lessens the evidence of the Franklin Park Coalition's efforts to care for the forest and the community together. An argument can also be made that the present-day vegetation may be better adapted to the climate and the land-use history of the site (Calfapietra et al., 2014; Millar et al., 2007). A wholesale replacement of the forest would disguise the generation of trees that went missing due to the City of Boston's persistent refusal to fund Franklin Park equitably. This too green scenario not only erases the botanic but, "naturalizes the disappearance of working-class communities" through the process of green gentrification (Curran and Hamilton, 2012).

There are precedents for this erasure of race and history through green gentrification in the name of sustainability and environmental justice (Anguelovski et al., 2021). Parks, which used to fall under the category of "horticultural" or "decorative," are now reframed through the lenses of "urban biodiversity," "green infrastructure," or "nature-based solutions" (Ernwein, 2020; Wilson and Hughes, 2011). In Portland, Oregon, investment in green infrastructure, like parks, was undertaken with an explicit focus on sustainability and equity but led to a further "demarcation of racialized poverty" in the city through uneven project implementation (Goodling et al., 2015). Anguelovski et al. (2021) followed the Street Bridge Project in the Anacostia neighborhood of Washington D.C., where social and environmental justice language was used to disguise traditional routes of gentrification, commodifying the landscape by combining "greenness and diversity together." This identified greenspaces near Black communities as culturally "cool" even as it sought to displace the same communities with new elite investment (Anguelovski et al., 2021; Loughran, 2017). Checker (2011) identifies this as a "paradox of sustainability," where racial capital perverts environmental justice organizing in increasingly nefarious

ways and makes acquiring or improving greenspace inherently risky for communities of color that desire it.

Too green is in the realm of possibility for Franklin Park. The Franklin Park Action Plan has stated its intent to enact “a lot of work in the near-term,” and the Emerald Park Conservancy speculates openly about implementing an Olmsted ecology and a “more formal look” (anonymous interview). A too green future uses the power imaginaries of the Olmsted past to recenter power in the present, while deprioritizing the successional ecologies already in place. Too green seeks selective vegetation as amenity to the exclusion of the people and history of the neighborhoods that have long maintained a relationship with the Park and its ecology (Patrick, 2014). In the worst of outcomes, too green would create a park where segregation is resurgent via a second act of displacement, a Franklin Park for white and wealthy people to the exclusion of people of color.

### **Not Green Enough**

Not green enough approaches the forest with minimal to no capital or mechanical intervention to avoid enrolling the forest into any potential gentrification process. As Olmsted’s oak canopy is lost, this future allows the ecology formed over the last five decades of austerity and community control to mature. Successive generations of vegetation would continue to be spontaneous or incidental and not conscripted into the capitalistic process. Forest management interventions, including those to avoid the risk of loss of particular species, like white ash (*Fraxinus americana*), which are vulnerable to emerald ash borer, would cease. According to the forest characterizations in this thesis, as well as the recommendations of other forest surveys, it is very likely that the final elements of the forest established under Olmsted would perish and the forest would most likely become a mix of woody shrubs and small trees for the next generation of Franklin Park users (Binggeli and Urquhart, 2007; Emerald Necklace Conservancy, 2015). The shrubification of forests is one scenario that is already playing out in forests of the eastern U.S., where “slower growth rate of this regions forest meant that most mechanically disturbed lands transitioned to grassland or shrubland cover during one or more time intervals rather than directly back to forest” (Drummond and Loveland, 2010, p. 292). This

is supported by the increasing importance glossy buckthorn and crabapple in the forest today. These short shrubby trees have increased in importance over the past several decades. Still, succession in this scenario of not green enough would be more unpredictable, particularly with some of the uncertainties surrounding climate change and ongoing shifts in forest pathogens and plant species in responses to changes in temperature and precipitation. However, one could also argue that this scenario, in the long run, could lead to a forest type that may be less maintenance-reliant than an artificially and painstakingly curated forest of the too green scenario.

The not green enough an approach is largely unsatisfactory because it perpetuates environmental inequality and freezes historic segregation by continuing to present the image of Franklin Park as a “boundary park” (Solecki and Welch, 1995). Dense unmanaged vegetation would perpetuate the historical narrative of the landscape as dangerous, preventing new narratives from forming in social consciousness to the detriment of local and non-local park users (Sreetheran and van den Bosch, 2014). It would continue a historical process of greening as disamenity, with forest restoration too expensive and difficult to enact so its care becomes forced “downward” (Gould and Lewis, 2012) to communities with less economic and political power (Checker, 2011; Dooling, 2009, Pearsall, 2010). This future trajectory most directly reduces the risk of capital investment in the forest and gentrification but it does so at the expense of the entire forest itself, risking its loss and perpetuating the unequal distribution of urban greenspace and environmental services.

### **Just Green Enough**

This “just green enough” scenario is one that attempts to balance an equalizing of forest health and environmental services without instigating gentrification pressures through the luxury effect. It exists somewhere in between a historic baseline and a spontaneous flora but remains socially rooted in community history and identity. This is based on Curran and Hamilton’s (2012) approach of “just green enough” in Greenpoint, Brooklyn to “challenge the presumed inevitability of gentrification.” While the term was initially based on environmental remediation of a severely polluted riverfront, this thesis

has applied it to an urban forest with legacies of past and present community activism, volunteer management and labor, and human-modified ecologies (Loughran, 2020; Patrick, 2014; Wolch et al., 2014).

Olmsted resisted the elite messaging of formal gardens but recreated the same process in Franklin Park forests through strict and intense management regimes, an effect which risks being repeated through contemporary revitalization efforts. The improvement of urban nature, especially in historical and landmarked locations, imposes cultural meaning onto vegetation which approves of some species and segregates others (Head and Atchison, 2009; Head et al., 2014; Katz, 1998; Tzaninis et al., 2020). Altering the social and environmental harm inherent within this technique means relinquishing heavy-handed nature shaping and policing. An open-ended forest based in geographically specific identity requires a recognition of “multispecies entanglements” that resists putting pre-determined meanings on plants (Doody et al., 2014; Head, 2017; Houston et al., 2018). It seeks to challenge the hierarchy of nonhuman nature, where some are demonized while others are “cast as vulnerable, in need of rescue, and exuding an innocence and purity found nowhere else” (Pellow, 2014).

This scenario is a form of rewilding, or reconciliation ecology, in that it rejects the Olmsted design for a successional model that admits more contingency and novelty based on the forest’s unique ecosocial history. It invokes historical legacies of racial processes reflected in seedbank and strata, instead of denying them by severely restructuring the forest. It engages forest restoration and management at both the governance and practitioner level, professional or amateur, in a conscious nature-making that considers the social cause and effects of landscape change. Intervention into the forest would be based on the prerogative of community groups like the Franklin Park Coalition, with a redistribution of what is “best” for the forest inclusive of both ecological and social preservation ends.

Professional and academic foresters are recognizing that urban forest systems form under unique socio-ecological processes that are largely shaped by municipal policy makers and private actors and are therefore not approachable using more traditional

methodologies employed in naturalized forest environments (Des Roches, 2021; Johnson et al., 2020; Watkins and Gerrish, 2018). Urban foresters are beginning to consider their ecological practices in terms of equity, which alert forest practitioners to consider their role in remedying, perpetuating or worsening ecologies of power (Nesbit et al. 2019; Sax et al., 2020; Watkins and Gerrish, 2018). A just green enough forest formed by slow management under community stewardship is an achievable option that would produce an ecologically and socially restorative Franklin Park. Furthermore, allowing some spontaneity in a forest will likely make it more resilient as climate change unfolds while also providing environmental services for communities. The just green enough scenario requires an understanding that the management goal is not to recover the former state of the past Olmsted forest but embrace new altered trajectories for forest succession that perpetuate both environmental and social justice.

Just green enough is not a one-sized fits all view of forests dictated by “best practices” in forestry. Instead, it seeks to encourage forest regeneration from existing saplings, relying on species that are already in the natural process of establishment. The management approach of fostering spontaneous flora from the seedling and sapling level allows the system to develop over time as the forest naturally adapts to the resources and conditions in its environment. Using slow methodologies that prioritize spontaneously occurring desirable species or the planting of young saplings could augment species diversity, but it would do so to no immediately dramatic landscape effect. Slow methods create healthier forests and rebuild species diversity even as they are based on site, species, and interactions that were set in motion by land use past (Douda et al., 2017; Johnson and Handel, 2019; Sasaki et al., 2018). It encourages a closure of the ecosystem services inequity set in motion by racist legacies, but slowly and consciously (Nyelele and Kroll, 2020). In avoiding a luxury ecology, the just green enough process deliberately retains some invasive species. It would not prune trees for form or health but allow the forest to take shape through a wild aesthetic which acts as a barrier to those who only find pleasure in particular forms of nature. Based on the composition of the forest today, which is in itself a reflection of past racial histories, this just green enough forest is likely to be dominated initially by black cherry (*Prunus serotina*). This black cherry forest, valuable ecologically but more common and irregular in stature, would accurately represent the

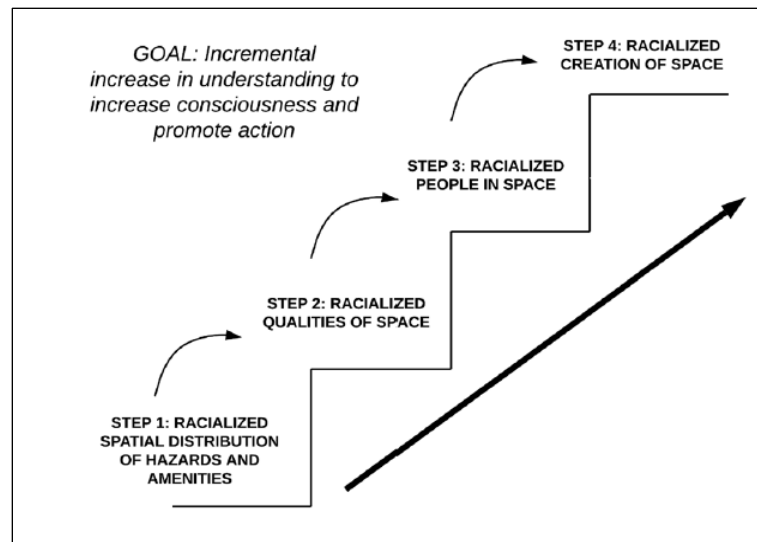


socio-ecological history of the site because it establishes easily in urban areas of high disturbance, such as those produced by the contentious influence of race in the forests of Franklin Park.

As these three scenarios convey, there needs to be an increasing consciousness, both publicly and professionally, of the ways that race and urban forests are interwoven and have become inseparable components of urban ecosystems. Urban political ecologists have clearly established how public parks hold racial capital through colonization, environmental difference, nature shaping, labor regimes, and neoliberal governance (Heynen, 2016). In recognizing how redlining ecologies form, we can trace how vegetation creates a “green image” of nature that is coded and racialized to perpetuate belonging (Head et al., 2014; Hoover and Lim, 2020). Through current conditions of forest inequity and their social origins we might more carefully negotiate a new liberatory abolition ecology that intentionally forms antiracist floras (Heynen, 2018; Hoover and Lim, 2020). It can be argued that the value of these “anthromes” is not defined only by their ecology, but also their embodiment of a struggle for racial, economic, and environmental justice (Ellis and Ramankutty, 2008). Similar approaches have been taken by Patrick (2014), who identified the “queer ecology of place,” in his work centered around the Tree of Heaven (*Ailanthus altissima*), that was erased by a “homonormative ecology” in the process of ecological gentrification via public park infrastructure of the High Line in New York. What is needed now is to understand these processes enough to redirect them to encompass the creation of forests through the lens of race and the vegetation itself. Just green enough can bring something new, even aspirational: a forest that relates more fluidly to the social histories that have surrounded it. There is a need to go beyond the documentation of ecologies of segregation to understand how to create ecologies of desegregation through management sensitive to racial histories and vegetation dynamics that prepare for a future under climate change.

Hoover and Lim (2020) conceptualized this movement toward the intentional creation of racialized park space as affirmative of the past and future (Figure 7.1). This movement has progressed from recognition of the basic differentials of access and availability to green amenities among races and classes (Step 1) to the way in which these

inequities infuse spaces with meaning, like safe or dangerous (Step 2). Building upon this, scholars have recognized how the people in these spaces acquire the properties attributed to their surroundings (Step 3). The last step, and where this thesis situates its findings, is that these processes can also be used for the intentional racialized creation of space to counter inequities and affirm racial struggles (Step 4).



**Figure 7.1: Model for Recognizing Racialized Socio-Ecologies**

A model for recognizing, approaching, and analyzing historically cumulative socio-ecological processes in order to disrupt racist structures of power within humanized environments (Hoover and Lim, 2020).

Olmsted designed Franklin Park forest as a pseudo-rural landscape and could not have anticipated the intense degree of urban social and ecological process, both local and global in scale, that would come to influence the forest. Today, the woodland embodies a unique ecology with radical opportunities for the creation of a more democratic racialized space along the lines of Hoover and Lim (2020). If we are to minimize the role of capital in shaping this version of a racialized ecology, then we need to relinquish the designs that emphasize a return to the Olmsted forest. A future open-ended ecology based on the contemporary conditions is more affordable, sustainable, resilient, and less socially harmful than those that are tightly controlled and artificially produced (Lindenmayer et al., 2017; Steenberg et al., 2016). However, open-endedness can result in a greater abundance of nonnative seedlings, dissimilarity between canopy and seedling layer composition, and shifts in forest community trajectories (Piana et al. 2021a; Piana et al. 2021b; Pregitzer et al. 2019). Nonetheless, Kowarik et al. (2019) argues that allowing an “emerging urban

forest” that is truly wilder produces multiple benefits including increased species richness, of both native and alien plant species, and increased rare species occurrence. Evidence of this exists in Franklin Park, as documented in the pink lady slipper orchid (*Cypripedium acaule*) encountered during field sampling (Figure 7.2). This just green enough ecology breaks away from a single-minded focus on the Olmsted legacy to embrace the history of racial struggle and cherish the forest as a product of historical process, living community identity, and the inherent resilience of Earth to adapt (Loughran, 2020; Ogden, et al., 2019; Tidball et al., 2010).



**Figure 7.2: Just Green Enough Plant Ecologies**

Pink lady slipper orchid (*Cypripedium acaule*) in Franklin Park. This woodland species is not often seen in the urban environment of public parks. It would risk being lost through the disturbance of intensive “too green” forest restoration futures.

## CHAPTER 8. CONCLUSION

This thesis expanded from a documentation of ecologies of segregation to a recognition of the processual complexities of race and vegetation, with the potential for the awareness of these complexities to be creatively engaged to create new forms of urban forests. Forest surveys in 1984, 1998, 2007, and 2015, as well as the forest sampling in this study were used to triangulate among the practices, recommendations, and discourses recorded in the archival documents from a period of largely citizen-based advocacy and management of the forests of Franklin Park. They collectively provided insights into how the forest may have been materially shaped by socially mediated pressures on the Franklin Park Coalition to portray the forest as safe and deserving of its historical importance. The forest metrics of importance, dominance, and frequency also facilitated inference of the likely trajectories of future forest succession, and indirectly, how these trajectories might align with calls for revitalization of the forest, climate change mitigation, and racial equity.

Franklin Park's forest is at an ecological and social crossroads, one that asks us to balance the historic inequities that have formed both ecosystem and human vulnerabilities. However, the current revitalization plans pits one against the other, creating a tension between historical-environmental remediation and racial anti-gentrification justice. While it is easier to argue that nature is not politically neutral, it is much more of a challenge to manage a forest with the understanding that it is. The structure and composition of any "just" forest is as complex as the socio-ecological processes that produced it. The documentation of the interactions and feedbacks among race and forest management in this thesis can hopefully prompt the creation of new ecologies that allow more malleability in the way plants and people co-constitute one another's histories and futures. As Patrick (2014) says, "what would happen if we made more political room for the 'succession' of the [forest] rather than the 'success' of the [gentrifier]" (p. 935).

While this thesis necessitated a degree of simplification of the narrative of the forest and its stewards, it captured the key management interventions and outcomes that have shaped the forest today. It illustrated the way the forest was molded by white elite privilege as well as Black segregation, both of which had material consequences on the trees within

the forest, altering successional trajectories and creating a new urban socio-ecology unique to Franklin Park. While Olmsted intended this nature to be democratizing and restorative, his capacity to incorporate racial equity in the landscape and anticipate Franklin Park's future role as a site of important civil rights protests was limited. Furthermore, Olmsted's nature required constant capital to nurture desirable species and keep the woodlands visually open, a level of investment that existed only outside of the Black community due to systemic disenfranchisement under racial capitalism. This becomes clear after the Roxbury Rebellion and the segregation of Franklin Park within the Emerald Necklace. The forest situated as bucolic and restorative under Olmsted became perceived as overgrown, dangerous, and even criminal under the inability of Franklin Park Coalition to maintain its historical condition. Unable to privately raise funds to employ professional horticulturalists or foresters, Franklin Park Coalition relied on amateur attempts to maintain the forest to its Olmstedian standards, unintentionally altering the successional trajectory of the forest once again. The contemporary result of these two racial management regimes is that the Olmsted forest legacy lives in the oak canopy and dies in the increasing presence of dead wood, while the ecological impacts of segregation grow in the emerging native black cherry trees and the invasive glossy buckthorn understory. Both periods uniquely but connectedly altered the successional development of the forest by suppressing regeneration. Now, as the forest reaches its maturity - if, how, and for whom will the socio-ecology of the forest be remade again?

The contemporary forest and its future may be uncertain, but the socially unconscious management of its structure and composition creates more tangible, recognizable risks for the adjacent Black community through green gentrification. While forest restoration as a green amenity is often unquestioned, we must ask for whom is the forest being remediated. In the rush to enact a more "green urbanism" by creating or stabilizing urban forests, forest management decisions are rarely recognized as creating vulnerabilities in non-white low-income communities (Des Roches, 2021; Johnson et al., 2020; Watkins and Gerrish, 2018). The dominant ideology in place is to consider forests exclusively through the viewpoint of a conservation-based approach without regard for the social conditions that also produced the forest or the complex consequences, both good and bad, that may unfold for the surrounding communities. This oversight, and the assumed

politically neutral and universal good of forest management, may unknowingly perpetuate environmental inequity and green gentrification by favoring the professional production of urban forest ecosystems that create a luxury effect. In a slight to the histories of social struggles, such forest remediation is an ecological rewriting of history, as it reworks ecologies to disguise past harms to Black and Brown communities.

The engagement of professional urban forestry work in a landscape is more likely to occur in communities with political sway to incur the favor of government actors or private capital to support nonprofits in hiring highly educated employees or contract outside vendors (Krinsky and Simonet, 2017; Lawrence et al., 2013; Varuzzo and Harvey, 2017). Forest management actions, at their fundamental level, exist as economic relationships with the ecosystem and can signal investment that can be read as monetary. Even when forest management is civic and volunteer based, it originates from a larger political and social history of those with the time and resources to donate to the alteration of public ecologies (Gabriel et al., 2020; Perkins et al., 2004).

This research asks the governing bodies and practitioners of urban green spaces to consider the positionality of their work, to reframe conservation and greening as a process of both ecological and social protection. Urban socio-ecological interactions are complex and recognizing place-based solutions should be the goal. Reducing advocacy for one-dimensional perspectives on the environment and justice will facilitate recognition of the range of possible scenarios for forest management to pursue and the implications of choosing one over the others. Due to the persistent inequities of urban greenspaces, urban natures need to be cultivated differently in different contexts for different populations to prevent displacement.

This complexity was distilled in this research into scenarios of too green, not green enough, and just green enough. Under a too green scenario the forest is remade according to Olmsted's specifications, a remediation that will mask the injustice of the past and likely signal the return of white wealth that will more quickly gentrify the surrounding neighborhoods. A not green enough scenario avoids the gentrifying influence of remediation through capital investment entirely but risks the loss of many desired qualities

and services of the forest, an unwise approach, both locally and globally, under the threats of climate change. It also runs the risk of leaving the forest in a perceived state of neglect, which may further drive processes of segregation.

Just green enough combines restoration and natural regeneration into a process that recognizes the past environmental injustices and remediates the environment without increasing the likelihood of displacement. This may be accomplished through slow methods that repair the forest in the long term without creating a luxury effect in the short term. It relies on natural regeneration as a collaborator in this process, through seedlings in the soil and the autonomous establishment of saplings (Kühn, 2006). New urban ecology practices are beginning to recognize the value of spontaneous vegetation in providing urban ecosystem services, such as through an approach called “intended wilderness” (Hwang and Yue, 2019; Phillips and Lindquist, 2021; Robinson and Lundholm, 2012).

Perhaps it is in the reframing of the perception of spontaneous vegetation that multi-species justice can occur. The Olmsted era projects an imitation of a spontaneous rural nature that is characterized as bucolic, while the legitimately spontaneous urban vegetation under the Franklin Park Coalition is characterized as neglected and unsightly (Riley et al., 2018). In my framing of just green enough, I suggest that spontaneous vegetation be reframed as protector and collaborator against the environmental injustice of dispossession. This goes beyond just the conscription of spontaneous vegetation for the benefit of the human but requires a recognition of vegetative agency to respond and resist structures of power as “nonhuman actants” (Bryson, 2013). Houston et al. (2018) calls for urban citizens to look “beyond human exceptionalism” and connect with plants as kin in ways that reject human control over the environment in favor of mutually shaping ecologies of liberation.

Certain types of nature, including plants, are noted as belonging or having a “right to remain” while others are displaced in the gentrifying process (Hubbard and Brooks, 2021; Phillips and Atchison, 2020). This identifies how capitalism relies on the oppression of both nature and people of color in different but intersecting ways. In rejecting the hierarchy of nature and human life there may be liberation for both. Cooke et al. (2020) calls this process “more than human commoning,” recognizing the ways that both plant

and human communities resist power in property regimes, including those in public parks experiencing privatization influences under neoliberalism governance structures (Krinsky and Simonet, 2017). Rademacher et al. (2019) argues that by resisting traditional approaches and perceptions of division between the human and ecosystem, we can find avenues and futures for new mutual co-productions of more just socio-ecologies.

I have shown how race and racism played a central role in the successional trajectory of Franklin Park's forest. While the particular trajectories detailed here are unique to Franklin Park, many Olmsted parks face the question of canopy collapse and require remediation to continue as forests. This research should give governing agents and practitioners pause to ask how they can grow a new forest that is less harmful than the old. It also equips communities with the biological and social science justifications for alternative ecological futures that are expansively restorative. In revitalizing Franklin Park there is an option for recognizing the inequities of the past, honoring acts of resistance, and creating new forms of liberatory urban ecosocial futures.



## REFERENCES

- A Future for Franklin Park. (1981, June). *Sanctuary: The Bulletin of the Massachusetts Audubon Society*, 20(9). Roxbury Community College Archive.
- All United States Data. (n.d.). Social Explorer. Retrieved January 24, 2022, from <https://www.socialexplorer.com/a9676d974c/explore>
- Anguelovski, I. (2016). From toxic sites to parks as (green) LULUs? New challenges of inequity, privilege, gentrification, and exclusion for urban environmental justice. *Journal of Planning Literature*, 31(1), 23–36. <https://doi.org/10.1177/0885412215610491>
- Anguelovski, I., Brand, A. L., Connolly, J. J. T., Corbera, E., Kotsila, P., Steil, J., Garcia-Lamarca, M., Triguero-Mas, M., Cole, H., Baró, F., Langemeyer, J., del Pulgar, C. P., Shokry, G., Sekulova, F., & Argüelles Ramos, L. (2020). Expanding the boundaries of justice in urban greening scholarship: Toward an emancipatory, antisubordination, intersectional, and relational approach. *Annals of the American Association of Geographers*, 110(6), 1743–1769. <https://doi.org/10.1080/24694452.2020.1740579>
- Anguelovski, I., Brand, A. L., Ranganathan, M., & Hyra, D. (2022). Decolonizing the green city: From environmental privilege to emancipatory green justice. *Environmental Justice*, 15(1), 1–11. <https://doi.org/10.1089/env.2021.0014>
- Anguelovski, I., Ranganathan, M., & Hyra, D. (2021). The racial inequities of green gentrification in Washington, D.C. In I. Anguelovski & J. J. T. Connolly, *The Green City and Social Injustice* (1st ed., pp. 160–170). Routledge. <https://doi.org/10.4324/9781003183273-16>
- Annear, S., Coleman, V., Greenberg, Z., Arnett, D., Ellement, J. R., & Finucane, M. (2020, June 2). Thousands rally in Franklin Park to protest deaths of Black people at hands of police—*The Boston Globe*. *BostonGlobe.Com*. <https://www.bostonglobe.com/2020/06/02/metro/protest-rally-planned-boston-following-deaths-george-floyd-breonna-taylor-ahmaud-arbery/>
- Ansfield, B. (2020). The broken windows of the Bronx: Putting the theory in its place. *American Quarterly*, 72(1), 103–127. <https://doi.org/10.1353/aq.2020.0005>
- Arnberger, A., Ebenberger, M., Schneider, I. E., Cottrell, S., Schlueter, A. C., von Ruschkowski, E., Venette, R. C., Snyder, S. A., & Gobster, P. H. (2018). Visitor preferences for visual changes in bark beetle-impacted forest recreation settings in the United States and Germany. *Environmental Management*, 61(2), 209–223. <https://doi.org/10.1007/s00267-017-0975-4>
- Baldock, K. C. R., Goddard, M. A., Hicks, D. M., Kunin, W. E., Mitschunas, N., Morse, H., Osgathorpe, L. M., Potts, S. G., Robertson, K. M., Scott, A. V., Staniczenko, P. P. A., Stone, G. N., Vaughan, I. P., & Memmott, J. (2019). A systems approach reveals urban pollinator hotspots and conservation opportunities. *Nature Ecology & Evolution*, 3(3), 363–373. <https://doi.org/10.1038/s41559-018-0769-y>
- Bennett, L. (2018, November 2). *Parks department proposes phase 2 of Muddy River project*. Mission Hill Gazette. <https://missionhillgazette.com/2018/11/02/parks-department-proposes-phase-2-of-muddy-river-project/>
- Binggeli, C., & Urquhart, B. (2007). *A management plan for the Franklin Park woodlands: Forest inventory and shade tree assessment*. Franklin Park Coalition.

- Birge-Liberman, P. (2010). (Re)greening the city: Urban park restoration as a spatial fix. *Geography Compass*, 4(9), 1392–1407. <https://doi.org/10.1111/j.1749-8198.2010.00374.x>
- Birge-Liberman, P. (2014). *The ghost of Olmsted: Nature, history and urban park restoration in Boston's Emerald Necklace*. Syracuse University.
- Blackstone, K. (1981, October 19). Franklin Park seeks better image. *The Boston Globe*.
- Blackstone, K. (1982, April 25). Talk with urban park rangers follows tours of Franklin Park. *The Boston Globe*.
- Blaikie, P. (2012). Should some political ecology be useful? The Inaugural Lecture for the Cultural and Political Ecology Specialty Group, Annual Meeting of the Association of American Geographers, April 2010. *Geoforum*, 43(2), 231–239. <https://doi.org/10.1016/j.geoforum.2011.08.010>
- Bolden, G. (1971, March 31). No police arrived at Franklin Park. *The Boston Globe*.
- Boone, C. G., Buckley, G. L., Grove, J. M., & Sister, C. (2009). Parks and people: An environmental justice inquiry in Baltimore, Maryland. *Annals of the Association of American Geographers*, 99(4), 767–787. <https://doi.org/10.1080/00045600903102949>
- Boone, C. G., Cadenasso, M. L., Grove, J. M., Schwarz, K., & Buckley, G. L. (2010). Landscape, vegetation characteristics, and group identity in an urban and suburban watershed: Why the 60s matter. *Urban Ecosystems*, 13(3), 255–271. <https://doi.org/10.1007/s11252-009-0118-7>
- Boston Department of Parks and Recreation. (2001). *Emerald necklace plant list*. Biodiversity Heritage Library. <https://doi.org/10.5962/bhl.title.57930>
- Boston Department of Parks and Recreation. (2015). *Boston open space management plan 2015-2021*. City of Boston Archives.
- Boston Department of Parks and Recreation. (2019, April 5). *Franklin Park master plan announced by Mayor Walsh*. Boston.Gov. <https://www.boston.gov/news/franklin-park-master-plan-announced-mayor-walsh>
- Boston Department of Parks and Recreation, & Michael Weinmayr Associates. (1980). *Revised general plan for Franklin Park*.
- Boston Department of Parks and Recreation, & The Halvorson Company. (1988). *Community meeting on Master Plan proposals and priorities for Franklin Park*. Commonwealth of Massachusetts, Dept. of Environmental Management; City of Boston Archives.
- Boston Department of Parks and Recreation, & The Halvorson Company. (1990). *Franklin Park Master Plan 1990*. Arnold Arboretum Horticulture Library and Archives.
- Boston (Mass.). Dept. of Parks. (1886). *Notes on the plan of Franklin Park and related matters*. Biodiversity Heritage Library.
- Botwright, K. (1969, July 16). Garbage, trash burning in Franklin Park drive out those who would picnic there. *The Boston Globe*.
- Bradbury, K., Case, K., & Dunham, C. (1989). Geographic patterns of mortgage lending in Boston, 1982-1987. *New England Economic Review, Federal Reserve Bank of Boston*, 3–30.
- Brennan, M. J. (2017). The environmental roots of urban renewal in Boston. *Journal of Urban History*, 45(1), 23–43. <https://doi.org/10.1177/0096144217701259>

- Brown, M., & Shcheglovitova, M. (2020). What happened to Franklin Square Park? People, trees, and environmental justice. *The Professional Geographer*, 1–12. <https://doi.org/10.1080/00330124.2020.1813597>
- Brown, R. D., Vanos, J., Kenny, N., & Lenzholzer, S. (2015). Designing urban parks that ameliorate the effects of climate change. *Landscape and Urban Planning*, 138, 118–131. <https://doi.org/10.1016/j.landurbplan.2015.02.006>
- Bryson, J. (2013). The nature of gentrification. *Geography Compass*, 7(8), 578–587. <https://doi.org/10.1111/gec3.12056>
- Byrne, J., & Wolch, J. (2009). Nature, race, and parks: Past research and future directions for geographic research. *Progress in Human Geography*, 33(6), 743–765. <https://doi.org/10.1177/0309132509103156>
- Calfapietra, C., Peñuelas, J., & Niinemets, Ü. (2015). Urban plant physiology: Adaptation-mitigation strategies under permanent stress. *Trends in Plant Science*, 20(2), 72–75. <https://doi.org/10.1016/j.tplants.2014.11.001>
- Campbell, L., Newman, A., Safransky, S., & Stallmann, T. (Eds.). (2020). *A people's atlas of Detroit*. Wayne State University Press.
- Castree, N. (2003). Commodifying what nature? *Progress in Human Geography*, 27(3), 273–297. <https://doi.org/10.1191/0309132503ph428oa>
- Chaudhury, A., & Colla, S. (2020). Next steps in dismantling discrimination: Lessons from ecology and conservation science. *Conservation Letters*. <https://doi.org/10.1111/conl.12774>
- Checker, M. (2011). Wiped out by the “greenwave”: Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society*, 23(2), 210–229. <https://doi.org/10.1111/j.1548-744X.2011.01063.x>
- Cogbill, C. V., Burk, J., & Motzkin, G. (2002). The forests of presettlement New England, USA: Spatial and compositional patterns based on town proprietor surveys. *Journal of Biogeography*, 29(10–11), 1279–1304. <https://doi.org/10.1046/j.1365-2699.2002.00757.x>
- Conflicts. (1951, January 5). *The Boston Globe*, p. 2.
- Cooke, B., Landau-Ward, A., & Rickards, L. (2020). Urban greening, property and more-than-human commoning. *Australian Geographer*, 51(2), 169–188. <https://doi.org/10.1080/00049182.2019.1655828>
- Cosgrove, D. E. (1998). *Social formation and symbolic landscape*. University of Wisconsin Press.
- Cramer, M. (1993). Urban renewal: Restoring the vision of Olmsted and Vaux in Central Park's woodlands. *Restoration & Management Notes*, 11(2), 106–116.
- Cranz, G. (1982). *The politics of park design: A history of urban parks in America*. MIT Press.
- Crompton, J. L. (2005). The impact of parks on property values: Empirical evidence from the past two decades in the United States. *Managing Leisure*, 10(4), 203–218. <https://doi.org/10.1080/13606710500348060>
- Cronon, W. (1996). The trouble with wilderness—Or getting back to the wrong nature. *Environmental History*, 1(1), 7–28. <https://doi.org/10.2307/3985059>
- Cullen, K. (1985, August 12). Police arrest 3 in raid on heroin nest. *The Boston Herald*.

- Cunard, C., & Lee, T. D. (2009). Is patience a virtue? Succession, light, and the death of invasive glossy buckthorn (*Frangula alnus*). *Biological Invasions*, 11(3), 577–586. <https://doi.org/10.1007/s10530-008-9272-8>
- Curran, W., & Hamilton, T. (2012). Just green enough: Contesting environmental gentrification in Greenpoint, Brooklyn. *Local Environment*, 17(9), 1027–1042. <https://doi.org/10.1080/13549839.2012.729569>
- Curran, W., & Hamilton, T. (Eds.). (2018). *Just green enough: Urban development and environmental gentrification*. Routledge.
- Dale, D., Fry, M., & White, R. (1984). *Franklin Park wilderness study: Jamaica Plain, Massachusetts* [Community Assistance Program Project]. Harvard Graduate School of Design.
- Delmelle, E. C. (2017). Differentiating pathways of neighborhood change in 50 US metropolitan areas. *Environment and Planning A: Economy and Space*, 49(10), 2402–2424. <https://doi.org/10.1177/0308518X17722564>
- DeLuca, K. M., & Teresa Demo, A. (2001). Imagining nature and erasing class and race: Carleton Watkins, John Muir, and the construction of wilderness. *Environmental History*, 6(4), 541–560. <https://doi.org/10.2307/3985254>
- Demuzere, M., Orru, K., Heidrich, O., Olazabal, E., Geneletti, D., Orru, H., Bhawe, A. G., Mittal, N., Feliu, E., & Faehnle, M. (2014). Mitigating and adapting to climate change: Multi-functional and multi-scale assessment of green urban infrastructure. *Journal of Environmental Management*, 146, 107–115. <https://doi.org/10.1016/j.jenvman.2014.07.025>
- Derek H. Alderman. (2008). Martin Luther King Jr. streets in the South: A new landscape of memory. *Southern Cultures*, 14(3), 88–105. <https://doi.org/10.1353/scu.0.0013>
- Derickson, K., Klein, M., & Keeler, B. L. (2021). Reflections on crafting a policy toolkit for equitable green infrastructure. *Npj Urban Sustainability*, 1(1), 21. <https://doi.org/10.1038/s42949-021-00014-0>
- Des Roches, S., Brans, K. I., Lambert, M. R., Rivkin, L. R., Savage, A. M., Schell, C. J., Correa, C., De Meester, L., Diamond, S. E., Grimm, N. B., Harris, N. C., Govaert, L., Hendry, A. P., Johnson, M. T. J., Munshi-South, J., Palkovacs, E. P., Szulkin, M., Urban, M. C., Verrelli, B. C., & Alberti, M. (2021). Socio-eco-evolutionary dynamics in cities. *Evolutionary Applications*, 14(1), 248–267. <https://doi.org/10.1111/eva.13065>
- Doody, B. J., Perkins, H. C., Sullivan, J. J., Meurk, C. D., & Stewart, G. H. (2014). Performing weeds: Gardening, plant agencies and urban plant conservation. *Geoforum*, 56, 124–136. <https://doi.org/10.1016/j.geoforum.2014.07.001>
- Dooling, S. (2009). Ecological gentrification: A research agenda exploring justice in the city. *International Journal of Urban and Regional Research*, 33(3), 621–639. <https://doi.org/10.1111/j.1468-2427.2009.00860.x>
- Douda, J., Boublík, K., Doudová, J., & Kyncl, M. (2017). Traditional forest management practices stop forest succession and bring back rare plant species. *Journal of Applied Ecology*, 54(3), 761–771. <https://doi.org/10.1111/1365-2664.12801>
- Drummond, M. A., & Loveland, T. R. (2010). Land-use pressure and a transition to forest-cover loss in the Eastern United States. *BioScience*, 60(4), 286–298. <https://doi.org/10.1525/bio.2010.60.4.7>

- Dukes, J. S., Pontius, J., Orwig, D., Garnas, J. R., Rodgers, V. L., Brazee, N., Cooke, B., Theoharides, K. A., Stange, E. E., Harrington, R., Ehrenfeld, J., Gurevitch, J., Lerda, M., Stinson, K., Wick, R., & Ayres, M. (2009). Responses of insect pests, pathogens, and invasive plant species to climate change in the forests of northeastern North America: What can we predict? *Canadian Journal of Forest Research*, 39(2), 231–248. <https://doi.org/10.1139/X08-171>
- Eisenman, T. S. (2013). Frederick Law Olmsted, green infrastructure, and the evolving city. *Journal of Planning History*, 12(4), 287–311. <https://doi.org/10.1177/1538513212474227>
- Elliott, C. (1985, April 11). Franklin Park centennial under care of Coalition. *Bay State Banner*, 3.
- Ellis, E. C., & Ramankutty, N. (2008). Putting people in the map: Anthropogenic biomes of the world. *Frontiers in Ecology and the Environment*, 6(8), 439–447. <https://doi.org/10.1890/070062>
- Elton, C. (2020, December 8). How has Boston gotten away with being segregated for so long? *The Boston Globe*. <https://www.bostonmagazine.com/news/2020/12/08/boston-segregation/>
- Emerald Necklace Conservancy, Bartlett Tree Experts, Moreno Forestry Associates, & Shary Page Berg Landscape Preservation. (2015). *Emerald Necklace tree inventory, conditions assessment, and management Plan*.
- Ernwein, M. (2020). Bringing urban parks to life: The more-than-human politics of urban ecological work. *Annals of the American Association of Geographers*, 1–18. <https://doi.org/10.1080/24694452.2020.1773230>
- Farmer, J. (2019). Taking liberties with historic trees. *Journal of American History*, 105(4), 815–842. <https://doi.org/10.1093/jahist/jaz001>
- Finfer, L. (2019, January 18). The ‘good intentions’ program that devastated Boston’s neighborhoods. *The Boston Globe*. <https://www.bostonglobe.com/opinion/2019/01/18/the-good-intentions-program-that-devastated-boston-neighborhoods/7ZWLqOYfM03SaTBJn4jRiK/story.html>
- Finney, C. (2014). *Black faces, white spaces: Reimagining the relationship of African Americans to the great outdoors*. The University of North Carolina Press.
- Foster, D. R., Donahue, B., Kittredge, D., Motzkin, G., Hall, B., Turner, B., & Chilton, E. (2008). New England’s forest landscape: Ecological legacies and conservation patterns shaped by agrarian history. In *Agrarian Landscapes in Transition: Comparisons of Long-Term Ecological and Cultural Change* (pp. 44–88). Oxford University Press.
- Franklin Park Coalition. (1979). *Franklin Park Coalition Board Meeting Notes*. Roxbury Community College Archive.
- Franklin Park Coalition. (1980a). *Franklin Park Coalition Annual Meeting Notes*. Roxbury Community College Archive.
- Franklin Park Coalition. (1980b). *Franklin Park Coalition Board Meeting Notes*. Roxbury Community College Archive.
- Franklin Park Coalition. (1985). *1985 Centennial Annual Report*. Franklin Park Coalition; Roxbury Community College Archive.
- Franklin Park Coalition. (1986). *The Influence of the Franklin Park Coalition on Franklin Park*. Roxbury Community College Archive.



- Franklin Park Coalition. (1987). *Wharton Trust Work*. Roxbury Community College Archive.
- Frappier, B., Eckert, R. T., & Lee, T. D. (2003). Potential impacts of the invasive exotic shrub *Rhamnus Frangula* L. (glossy buckthorn) on forests of southern New Hampshire. *Northeastern Naturalist*, 10(3), 21.
- Free, J. (2009). What is the Use of Parks?: The debates over parks and the response of Louisville's African American community to racial segregation, 1895–1930. *Ohio Valley History*, 9(1), 21–39.
- Fröhlich, A., & Ciach, M. (2020). Dead tree branches in urban forests and private gardens are key habitat components for woodpeckers in a city matrix. *Landscape and Urban Planning*, 202, 103869. <https://doi.org/10.1016/j.landurbplan.2020.103869>
- Gabriel, A. G., De Vera, M., & B. Antonio, M. A. (2020). Roles of indigenous women in forest conservation: A comparative analysis of two indigenous communities in the Philippines. *Cogent Social Sciences*, 6(1), 1720564. <https://doi.org/10.1080/23311886.2020.1720564>
- Gabrys, J. (2012). Becoming urban: Sitework from a moss-eye view. *Environment and Planning A: Economy and Space*, 44(12), 2922–2939. <https://doi.org/10.1068/a44671>
- Gerstenberg, T., & Hofmann, M. (2016). Perception and preference of trees: A psychological contribution to tree species selection in urban areas. *Urban Forestry & Urban Greening*, 15, 103–111. <https://doi.org/10.1016/j.ufug.2015.12.004>
- Gillis, A. M. (1990). The new forestry. *BioScience*, 40(8), 558–562. <https://doi.org/10.2307/1311294>
- Gobster, P. H. (2007). Urban park restoration and the “museumification” of nature. *Nature and Culture*, 2(2), 95–114. <https://doi.org/10.3167/nc2007.020201>
- Goodling, E., Green, J., & McClintock, N. (2015). Uneven development of the sustainable city: Shifting capital in Portland, Oregon. *Urban Geography*, 36(4), 504–527. <https://doi.org/10.1080/02723638.2015.1010791>
- Gould, K. A., & Lewis, T. L. (2012). The environmental injustice of green gentrification. In *The World in Brooklyn: Gentrification, Immigration, and Ethnic Politics in a Global City* (p. 28).
- Grove, M., Ogden, L., Pickett, S., Boone, C., Buckley, G., Locke, D. H., Lord, C., & Hall, B. (2018). The legacy effect: Understanding how segregation and environmental injustice unfold over time in Baltimore. *Annals of the American Association of Geographers*, 108(2), 524–537. <https://doi.org/10.1080/24694452.2017.1365585>
- Hall, B. (2003, November 23). Getting Franklin Park out of the woods. *The Boston Globe*.
- Hamelin, C., Truax, B., & Gagnon, D. (2016). Invasive glossy buckthorn impedes growth of red oak and sugar maple under-planted in a mature hybrid poplar plantation. *New Forests*, 47(6), 897–911. <https://doi.org/10.1007/s11056-016-9551-7>
- Hardy, S. (1980). “Parks for the people”: Reforming the Boston park system, 1870-1915. *Journal of Sports History*, 7(3), 5–24.
- Harper, E. T. (2020). Ecological gentrification in response to apocalyptic narratives of climate change: The production of an immuno-political fantasy. *International*

- Journal of Urban and Regional Research*, 44(1), 55–71.  
<https://doi.org/10.1111/1468-2427.12842>
- Harvey, D. (1989). *The condition of postmodernity: An enquiry into the origins of cultural change*. Blackwell.
- Head, L. (2017). The social dimensions of invasive plants. *Nature Plants*, 3(6), 17075.  
<https://doi.org/10.1038/nplants.2017.75>
- Head, L., & Atchison, J. (2009). Cultural ecology: Emerging human-plant geographies. *Progress in Human Geography*, 33(2), 236–245.  
<https://doi.org/10.1177/0309132508094075>
- Head, L., Atchison, J., Phillips, C., & Buckingham, K. (2014). Vegetal politics: Belonging, practices and places. *Social & Cultural Geography*, 15(8), 861–870.  
<https://doi.org/10.1080/14649365.2014.973900>
- Heath, R. (1977, March 30). *Letter to Parks Commissioner Peter Meade*. Roxbury Community College Archive.
- Heath, R. (1982, February 10). *Letter to City Councilor Bruce Bolling*. Roxbury Community College Archive.
- Heath, R. (1983a, December 19). *Notes on the Three Most Important Issues Facing the Black Community from the Perspective of the Franklin Park Coalition*. Roxbury Community College Archive.
- Heath, R. (1983b, December 22). *Letter to Van Valkenburgh*. Roxbury Community College Archive.
- Heath, R. (1984, December 28). *Letter to Mathew Storin, Managing Editor of the Boston Globe*. Roxbury Community College Archive.
- Heath, R. (1985a). Franklin Park: A century's appraisal. *Franklin Park Coalition Bulletin*, 58. Roxbury Community College Archive.
- Heath, R. (1985b, October 17). *Letter to Jamaica Plain Citizen Editor*. Roxbury Community College Archive.
- Heath, R. (1986, May 30). *Letter to Boston City Council*. Roxbury Community College Archive.
- Heath, R. (1990). *An act of faith: The building of the Washington Park urban renewal area, 1960-1967*. Boston University. <http://archive.org/details/actoffaithbuildi00heat>
- Heynen, N. (2018). Uneven racial development and the abolition ecology of the city. In H. Ernstson & E. Swyngedouw, *Urban Political Ecology in the Anthro-po-obscene* (pp. 111–128). Routledge. <https://doi.org/10.4324/9781315210537-6>
- Heynen, N. (2016). Urban political ecology II: The abolitionist century. *Progress in Human Geography*, 40(6), 839–845. <https://doi.org/10.1177/0309132515617394>
- Heynen, N. (2003). The scalar production of injustice within the urban forest. *Antipode*, 35(5), 980–998. <https://doi.org/10.1111/j.1467-8330.2003.00367.x>
- Heynen, N., Perkins, H. A., & Roy, P. (2006). The political ecology of uneven urban green space: The impact of political economy on race and ethnicity in producing environmental inequality in Milwaukee. *Urban Affairs Review*, 42(1), 3–25.  
<https://doi.org/10.1177/1078087406290729>
- Hoover, F.-A., & Lim, T. C. (2021). Examining privilege and power in US urban parks and open space during the double crises of antiblack racism and COVID-19. *Socio-Ecological Practice Research*, 3(1), 55–70. <https://doi.org/10.1007/s42532-020-00070-3>

- Hope, D., Gries, C., Zhu, W., Fagan, W. F., Redman, C. L., Grimm, N. B., Nelson, A. L., Martin, C., & Kinzig, A. (2003). Socioeconomics drive urban plant diversity. *Proceedings of the National Academy of Sciences*, 100(15), 8788–8792. <https://doi.org/10.1073/pnas.1537557100>
- Houston, D., Hillier, J., MacCallum, D., Steele, W., & Byrne, J. (2018). Make kin, not cities! Multispecies entanglements and ‘becoming-world’ in planning theory. *Planning Theory*, 17(2), 190–212. <https://doi.org/10.1177/1473095216688042>
- Hubbard, P., & Brooks, A. (2021). Animals and urban gentrification: Displacement and injustice in the trans-species city. *Progress in Human Geography*, 030913252098622. <https://doi.org/10.1177/0309132520986221>
- Huber, M. T. (2017). Value, nature, and labor: A defense of Marx. *Capitalism Nature Socialism*, 28(1), 39–52. <https://doi.org/10.1080/10455752.2016.1271817>
- Hwang, Y. H., & Yue, Z. E. J. (2019). Intended wildness: Utilizing spontaneous growth for biodiverse green spaces in a tropical city. *Journal of Landscape Architecture*, 14(1), 54–63. <https://doi.org/10.1080/18626033.2019.1623548>
- Irons, M. E., & Fatima, S. (2021, August 13). Boston is losing Black population, new census data show, even as it could soon elect its first Black mayor. *BostonGlobe.Com*. <https://www.bostonglobe.com/2021/08/13/metro/boston-is-losing-its-black-population-new-census-data-show-even-it-could-elect-its-first-black-mayor/>
- Iverson, L., Prasad, A., & Matthews, S. (2008). Modeling potential climate change impacts on the trees of the northeastern United States. *Mitigation and Adaptation Strategies for Global Change*, 13(5–6), 487–516. <https://doi.org/10.1007/s11027-007-9129-y>
- Jiang, M., Medlyn, B. E., Drake, J. E., Duursma, R. A., Anderson, I. C., Barton, C. V. M., Boer, M. M., Carrillo, Y., Castañeda-Gómez, L., Collins, L., Crous, K. Y., De Kauwe, M. G., dos Santos, B. M., Emmerson, K. M., Facey, S. L., Gherlenda, A. N., Gimeno, T. E., Hasegawa, S., Johnson, S. N., ... Ellsworth, D. S. (2020). The fate of carbon in a mature forest under carbon dioxide enrichment. *Nature*, 580(7802), 227–231. <https://doi.org/10.1038/s41586-020-2128-9>
- Johnson, A. (2017, June 1). The forgotten riot that sparked Boston’s racial unrest. *The Boston Globe*. <https://www.bostonglobe.com/metro/2017/06/01/the-forgotten-protest-that-sparked-city-racial-unrest/0ry39I37z87TwdBfrqUnTP/story.html>
- Johnson, L. R., & Handel, S. N. (2019). Management intensity steers the long-term fate of ecological restoration in urban woodlands. *Urban Forestry & Urban Greening*, 41, 85–92. <https://doi.org/10.1016/j.ufug.2019.02.008>
- Johnson, L. R., Johnson, M. L., Aronson, M. F. J., Campbell, L. K., Carr, M. E., Clarke, M., D’Amico, V., Darling, L., Erker, T., Fahey, R. T., King, K. L., Lautar, K., Locke, D. H., Morzillo, A. T., Pincetl, S., Rhodes, L., Schmit, J. P., Scott, L., & Sonti, N. F. (2020). Conceptualizing social-ecological drivers of change in urban forest patches. *Urban Ecosystems*. <https://doi.org/10.1007/s11252-020-00977-5>
- Johnson, N. C. (2006). Cultivating science and planting beauty: The spaces of display in Cambridge’s botanical gardens. *Interdisciplinary Science Reviews*, 31(1), 42–57. <https://doi.org/10.1179/030801806X84192>
- Jones, A. (1971, November 29). Franklin Park: Oasis for non-violent crime? *The Boston Globe*.



- Jordan, R. (1969, August 28). Atkins attacks Warner for Franklin Park blight. *The Boston Globe*.
- Kabisch, N., Frantzeskaki, N., Pauleit, S., Naumann, S., Davis, M., Artmann, M., Haase, D., Knapp, S., Korn, H., Stadler, J., Zaunberger, K., & Bonn, A. (2016). Nature-based solutions to climate change mitigation and adaptation in urban areas: Perspectives on indicators, knowledge gaps, barriers, and opportunities for action. *Ecology and Society*, 21(2). <http://www.jstor.org/stable/26270403>
- Katz, J. (2021). Anarchy's neighborhoods: The formation of a quadriplex urban ecology. *Qualitative Sociology*, 44(2), 175–204. <https://doi.org/10.1007/s11133-021-09474-3>
- Kay, K., & Kenney-Lazar, M. (2017). Value in capitalist natures: An emerging framework. *Dialogues in Human Geography*, 7(3), 295–309. <https://doi.org/10.1177/2043820617736584>
- Kelling, G. L., & Wilson. (1982, March 1). Broken Windows. *The Atlantic*. <https://www.theatlantic.com/magazine/archive/1982/03/broken-windows/304465/>
- Kelty, M. (1998). *Vegetation inventory and map of The Wilderness of Franklin Park*. University of Massachusetts Amherst; Northeastern Archive: Elma Lewis School of Fine Arts Special Collection.
- Kocisky, K. (2021). Towards conceptions of green gentrification as more-than-human. *Environment and Planning E: Nature and Space*, 251484862110017. <https://doi.org/10.1177/25148486211001754>
- Kohn, E. (2013). *How forests think: Toward an anthropology beyond the human*. University of California Press.
- Kowarik, I., Hiller, A., Planchuelo, G., Seitz, B., von der Lippe, M., & Buchholz, S. (2019). Emerging urban forests: Opportunities for promoting the wild side of the urban green infrastructure. *Sustainability*, 11(22), 6318. <https://doi.org/10.3390/su11226318>
- Krinsky, J., & Simonet, M. (2017). *Who cleans the park?: Public work and urban governance in New York City*. University of Chicago Press. <https://press.uchicago.edu/ucp/books/book/chicago/W/bo25338739.html>
- Kühn, N. (2006). Intentions for the unintentional: Spontaneous vegetation as the basis for innovative planting design in urban areas. *Journal of Landscape Architecture*, 1(2), 46–53. <https://doi.org/10.1080/18626033.2006.9723372>
- Landis, J. D. (2016). Tracking and explaining neighborhood socioeconomic change in US metropolitan areas between 1990 and 2010. *Housing Policy Debate*, 26(1), 2–52. <https://doi.org/10.1080/10511482.2014.993677>
- Lang, S., & Rothenberg, J. (2017). Neoliberal urbanism, public space, and the greening of the growth machine: New York City's High Line Park. *Environment and Planning A: Economy and Space*, 49(8), 1743–1761. <https://doi.org/10.1177/0308518X16677969>
- Lanzer, N. B., Lee, T. D., Ducey, M. J., & Eisenhaure, S. E. (2017). Sapling white pine (*Pinus strobus* L.) exhibits growth response following selective release from competition with glossy buckthorn (*Frangula alnus* P. Mill) and associated vegetation. *Forest Ecology and Management*, 404, 280–288. <https://doi.org/10.1016/j.foreco.2017.08.049>
- Laurance, W. F. (2002). Hyperdynamism in fragmented habitats. *Journal of Vegetation Science*, 13(4), 595–602. <https://doi.org/10.1111/j.1654-1103.2002.tb02086.x>

- Lawrence, A., De Vreese, R., Johnston, M., Konijnendijk van den Bosch, C. C., & Sanesi, G. (2013). Urban forest governance: Towards a framework for comparing approaches. *Urban Forestry & Urban Greening*, 12(4), 464–473.  
<https://doi.org/10.1016/j.ufug.2013.05.002>
- Leahy, C. W. (1989). Some ecological values to be considered in the restoration of Boston's Franklin Park. In *Franklin Park Master Plan 1990*. Arnold Arboretum Horticulture Library and Archives.
- Levy, J. (2022). *Franklin Park* [Map].
- Lewis, E. (1971, August 22). A special commission to rescue Franklin Park. *The Boston Globe*.
- Linday, N. (1980). The social function/social use of Franklin Park 1887-1980. *Franklin Park Coalition Bulletin*.
- Lindenmayer, D., Thorn, S., & Banks, S. (2017). Please do not disturb ecosystems further. *Nature Ecology & Evolution*, 1(2). <https://doi.org/10.1038/s41559-016-0031>
- Liptzin, D., & Ashton, P. M. S. (1999). Early-successional dynamics of single-aged mixed hardwood stands in a southern New England forest, USA. *Forest Ecology and Management*, 116(1–3), 141–150. [https://doi.org/10.1016/S0378-1127\(98\)00448-4](https://doi.org/10.1016/S0378-1127(98)00448-4)
- Loughran, K. (2016). Imbricated spaces: The High Line, urban parks, and the cultural meaning of city and nature. *Sociological Theory*, 34(4), 311–334.  
<https://doi.org/10.1177/0735275116679192>
- Loughran, K. (2017). Race and the construction of city and nature. *Environment and Planning A: Economy and Space*, 49(9), 1948–1967.  
<https://doi.org/10.1177/0308518X17713995>
- Loughran, K. (2020). Urban parks and urban problems: An historical perspective on green space development as a cultural fix. *Urban Studies*, 57(11), 2321–2338.  
<https://doi.org/10.1177/0042098018763555>
- MacLaury, D., Jeffries, J. L., & Nicklas, S. (2018). The Black Panther Party and community development in Boston. In *The Black Panther Party in a City Near You*. University of Georgia Press.
- McClure. (2012). Brokering culture: Elma Lewis, cultural politics, and community building in postwar Boston. *Black Women, Gender and Families*, 6(2), 55.  
<https://doi.org/10.5406/blacwomengendfami.6.2.0055>
- McDonald, R. I., Motzkin, G., Bank, M. S., Kittredge, D. B., Burk, J., & Foster, D. R. (2006). Forest harvesting and land-use conversion over two decades in Massachusetts. *Forest Ecology and Management*, 227(1), 31–41.  
<https://doi.org/10.1016/j.foreco.2006.02.006>
- McFadden, R. D. (2015, October 5). Grace Lee Boggs, human rights advocate for 7 decades, dies at 100. *The New York Times*.  
<https://www.nytimes.com/2015/10/06/us/grace-lee-boggs-detroit-activist-dies-at-100.html>
- McPhearson, T., Kremer, P., & Hamstead, Z. A. (2013). Mapping ecosystem services in New York City: Applying a social–ecological approach in urban vacant land. *Ecosystem Services*, 17.
- Meade, P. (1976, October 15). *Letter from Parks Commissioner Peter Meade to Richard Heath*. Roxbury Community College Archive.

- Medoff, P., & Sklar, H. (1994). *Streets of hope: The fall and rise of an urban neighborhood*. South End Press.
- Melnick, R. (2000). Considering Nature and Culture in Historic Landscape Preservation. In *Preserving Cultural Landscapes in America*. Johns Hopkins University Press.
- Miletsky, Z. V. (2017). Before busing: Boston's long movement for Civil Rights and the legacy of Jim Crow in the "cradle of liberty." *Journal of Urban History*, 43(2), 204–217. <https://doi.org/10.1177/0096144216688280>
- Millar, C. I., Stephenson, N. L., & Stephens, S. L. (2007). Climate change and forests of the future: Managing in the face of uncertainty. *Ecological Applications*, 17(8), 2145–2151. <https://doi.org/10.1890/06-1715.1>
- Miller, J. T. (2020). Temporal analysis of displacement: Racial capitalism and settler colonial urban space. *Geoforum*, 116, 180–192. <https://doi.org/10.1016/j.geoforum.2020.08.005>
- Miller, N. (1985, August 13). Greener pastures: The Grassroots revival of Franklin Park. *The Boston Phoenix*. Roxbury Community College Archive.
- Moore, D. S., Kosek, J., & Pandian, A. (Eds.). (2003). *Race, nature, and the politics of difference*. Duke University Press. <https://doi.org/10.2307/j.ctv11hpmfj>
- Munoz, A. P., Kim, M., Chang, M., Jackson, R. O., Hamilton, D., & Darity Jr., W. A. (2015). *The color of wealth in Boston* (p. 40). Federal Reserve Bank of Boston, Duke University, The New School. <https://www.bostonfed.org/publications/one-time-pubs/color-of-wealth.aspx>
- Nassauer, J. I., & Raskin, J. (2014). Urban vacancy and land use legacies: A frontier for urban ecological research, design, and planning. *Landscape and Urban Planning*, 125, 245–253. <https://doi.org/10.1016/j.landurbplan.2013.10.008>
- Nelson, R. K., & University of Richmond Digital Scholarship Lab. (2016). *Mapping Inequality*. <https://dsl.richmond.edu/panorama/redlining/>
- Nesbitt, L., Meitner, M. J., Girling, C., Sheppard, S. R. J., & Lu, Y. (2019). Who has access to urban vegetation? A spatial analysis of distributional green equity in 10 US cities. *Landscape and Urban Planning*, 181, 51–79. <https://doi.org/10.1016/j.landurbplan.2018.08.007>
- Newton, N. (1979). Olmsted's Work in Boston. *Franklin Park Coalition Bulletin* 6, 6.
- Nicholson, C. (2004). Elegance and grass roots: The neglected philosophy of Frederick Law Olmsted. *Transactions of the Charles S. Peirce Society*, 40(2), 335–348.
- Norwood, S. (2003). Marauding youth and the christian front: Antisemitic Violence in Boston and New York During World War II. *American Jewish History*, 91(2), 233–267.
- Nowak, D. J., Hoehn, R. E., III, Crane, D. E., Stevens, J. C., & Walton, J. T. (2007). *Assessing urban forest effects and values, Philadelphia's urban forest* (NRS-RB-7; p. NRS-RB-7). U.S. Department of Agriculture, Forest Service, Northern Research Station. <https://doi.org/10.2737/NRS-RB-7>
- Nyelele, C., & Kroll, C. N. (2020). The equity of urban forest ecosystem services and benefits in the Bronx, NY. *Urban Forestry & Urban Greening*, 53, 126723. <https://doi.org/10.1016/j.ufug.2020.126723>
- Ogden, L. A., Aoki, C., Grove, J. M., Sonti, N. F., Hall, W., Locke, D., Pickett, S. T. A., Avins, M., Lautar, K., & Lagrosa, J. (2019). Forest ethnography: An approach to

- study the environmental history and political ecology of urban forests. *Urban Ecosystems*, 22(1), 49–63. <https://doi.org/10.1007/s11252-018-0744-z>
- Oke, T. R., Crowther, J. M., McNaughton, K. G., Monteith, J. L., & Gardiner, B. (1989). The micrometeorology of the urban forest. *Philosophical Transactions of the Royal Society of London. B, Biological Sciences*, 324(1223), 335–349. <https://doi.org/10.1098/rstb.1989.0051>
- Olmsted, F. L. (1861). *The cotton kingdom: A traveler's observations on cotton and slavery in the American slave states. Based upon three former volumes of journeys and investigations*. Mason Brothers.
- Olmsted, F. L. (2020). Public parks and the enlargement of towns. In R. T. LeGates & F. Stout (Eds.), *The City Reader* (7th ed., pp. 377–383). Routledge. (Original work published 1870). <https://doi.org/10.4324/9780429261732-44>
- Olmsted Tree Sponsorship. (n.d.). The Emerald Necklace Conservancy. Retrieved April 6, 2022, from <https://www.emeraldnecklace.org/olmsted-tree-society/sponsorship/>
- Parish, J. (2019). Re-wilding Parkdale? Environmental gentrification, settler colonialism, and the reconfiguration of nature in 21st century Toronto. *Environment and Planning E: Nature and Space*, 3(1), 263–286. <https://doi.org/10.1177/2514848619868110>
- Patrick, D. J. (2014). The matter of displacement: A queer urban ecology of New York City's High Line. *Social & Cultural Geography*, 15(8), 920–941.
- Payne, L. L., Mowen, A. J., & Orsega-Smith, E. (2002). An examination of park preferences and behaviors among urban residents: The role of residential location, race, and age. *Leisure Sciences*, 24(2), 181–198. <https://doi.org/10.1080/01490400252900149>
- Pearsall, H., & Eller, J. K. (2020). Locating the green space paradox: A study of gentrification and public green space accessibility in Philadelphia, Pennsylvania. *Landscape and Urban Planning*, 195, 103708. <https://doi.org/10.1016/j.landurbplan.2019.103708>
- Pellow, D. N. (2014). *Total liberation: The power and promise of animal rights and the radical earth movement*. University of Minnesota Press.
- Perkins, K. S., Nimmo, J. R., Medeiros, A. C., Szutu, D. J., & von Allmen, E. (2014). Assessing effects of native forest restoration on soil moisture dynamics and potential aquifer recharge, Auwahi, Maui. *Ecohydrology*, 7, 1437–1451. <https://doi.org/10.1002/eco.1469>
- Phillips, C., & Atchison, J. (2020). Seeing the trees for the (urban) forest: More-than-human geographies and urban greening. *Australian Geographer*, 51(2), 155–168. <https://doi.org/10.1080/00049182.2018.1505285>
- Phillips, D., & Lindquist, M. (2021). Just weeds? Comparing assessed and perceived biodiversity of urban spontaneous vegetation in informal greenspaces in the context of two American legacy cities. *Urban Forestry & Urban Greening*, 62, 127151. <https://doi.org/10.1016/j.ufug.2021.127151>
- Piana, M. R., Hallett, R. A., Aronson, M. F. J., Conway, E., & Handel, S. N. (2021a). Natural regeneration in urban forests is limited by early-establishment dynamics: Implications for management. *Ecological Applications*, 31(2). <https://doi.org/10.1002/eap.2255>

- Piana, M. R., Pregitzer, C. C., & Hallett, R. A. (2021b). Advancing management of urban forested natural areas: Toward an urban silviculture? *Frontiers in Ecology and the Environment*, 19(9), 526–535. <https://doi.org/10.1002/fee.2389>
- Pickett, S. T. A., Cadenasso, M. L., Childers, D. L., McDonnell, M. J., & Zhou, W. (2016). Evolution and future of urban ecological science: Ecology in, of, and for the city. *Ecosystem Health and Sustainability*, 2(7), e01229. <https://doi.org/10.1002/ehs2.1229>
- Pickett, S. T., & Grove, J. M. (2020). An ecology of segregation. *Frontiers in Ecology and the Environment*, 18(10), 535–535. <https://doi.org/10.1002/fee.2279>
- Prach, K., & Walker, L. R. (2011). Four opportunities for studies of ecological succession. *Trends in Ecology & Evolution*, 26(3), 119–123. <https://doi.org/10.1016/j.tree.2010.12.007>
- Pregitzer, C. C., Ashton, M. S., Charlop-Powers, S., D’Amato, A. W., Frey, B. R., Gunther, B., Hallett, R. A., Pregitzer, K. S., Woodall, C. W., & Bradford, M. A. (2019). Defining and assessing urban forests to inform management and policy. *Environmental Research Letters*, 14(8). <https://doi.org/10.1088/1748-9326/ab2552>
- Protests cancels classes at Jamaica Plain High. (1970, April 17). *The Boston Globe*.
- Pulido, L. (2000). Rethinking environmental racism: White privilege and urban development in Southern California. *Annals of the Association of American Geographers*, 90(1), 12–40.
- Pulido, L. (2017). Geographies of race and ethnicity II: Environmental racism, racial capitalism and state-sanctioned violence. *Progress in Human Geography*, 41(4), 524–533. <https://doi.org/10.1177/0309132516646495>
- Quastel, N. (2009). Political ecologies of gentrification. *Urban Geography*, 30(7), 694–725. <https://doi.org/10.2747/0272-3638.30.7.694>
- Rademacher, A., Cadenasso, M. L., & Pickett, S. T. A. (2019). From feedbacks to coproduction: Toward an integrated conceptual framework for urban ecosystems. *Urban Ecosystems*, 22(1), 65–76. <https://doi.org/10.1007/s11252-018-0751-0>
- Rahm, J., Sternudd, C., & Johansson, M. (2021). “In the evening, I don’t walk in the park”: The interplay between street lighting and greenery in perceived safety. *URBAN DESIGN International*, 26(1), 42–52. <https://doi.org/10.1057/s41289-020-00134-6>
- Rigolon, A. (2016). A complex landscape of inequity in access to urban parks: A literature review. *Landscape and Urban Planning*, 153, 160–169. <https://doi.org/10.1016/j.landurbplan.2016.05.017>
- Rigolon, A., & Németh, J. (2018). “We’re not in the business of housing:” Environmental gentrification and the nonprofitization of green infrastructure projects. *Cities*, 81, 71–80. <https://doi.org/10.1016/j.cities.2018.03.016>
- Rigolon, A., & Németh, J. (2020). Green gentrification or ‘just green enough’: Do park location, size and function affect whether a place gentrifies or not? *Urban Studies*, 57(2), 402–420. <https://doi.org/10.1177/0042098019849380>
- Riley, C., Perry, K., Ard, K., & Gardiner, M. (2018). Asset or liability? Ecological and sociological tradeoffs of urban spontaneous vegetation on vacant land in shrinking cities. *Sustainability*, 10(7), 2139. <https://doi.org/10.3390/su10072139>



- Ríos, S. (2021, April 15). WBUR poll finds 8 In 10 Bostonians say racism Is A significant problem. *WBUR*. <https://www.wbur.org/news/2021/04/15/poll-boston-issues-racism-hostility>
- Robbins, P. (2007). *Lawn people: How grasses, weeds, and chemicals make us who we are*. Temple University Press.
- Robinson, C. J. (1983). *Black Marxism: The making of the Black radical tradition*. University of North Carolina Press.
- Robinson, S. L., & Lundholm, J. T. (2012). Ecosystem services provided by urban spontaneous vegetation. *Urban Ecosystems*, 15(3), 545–557. <https://doi.org/10.1007/s11252-012-0225-8>
- Royo, A. A., Vickers, L. A., Long, R. P., Ristau, T. E., Stoleson, S. H., & Stout, S. L. (2021). The forest of unintended consequences: Anthropogenic actions trigger the rise and fall of black cherry. *BioScience*, 71(7), 683–696. <https://doi.org/10.1093/biosci/biab002>
- Sax, D., Manson, C., & Nesbitt, L. (2020). Governing for diversity: An exploration of practitioners' urban forest preferences and implications for equitable governance. *Frontiers in Sustainable Cities*, 2, 572572. <https://doi.org/10.3389/frsc.2020.572572>
- Schein, R. H. (2006). *Landscape and race in the United States*. Routledge.
- Schein, R. H. (2009). A methodological framework for interpreting ordinary landscapes: Lexington, Kentucky's Courthouse Square\*. *Geographical Review*, 99(3), 377–402. <https://doi.org/10.1111/j.1931-0846.2009.tb00438.x>
- Schell, C. J., Dyson, K., Fuentes, T. L., Des Roches, S., Harris, N. C., Miller, D. S., Woelfle-Erskine, C. A., & Lambert, M. R. (2020). The ecological and evolutionary consequences of systemic racism in urban environments. *Science*, 369(6510), 4497. <https://doi.org/10.1126/science.aay4497>
- Shackleton, C. M., & Gwedla, N. (2021). The Legacy Effects of Colonial and Apartheid Imprints on Urban Greening in South Africa: Spaces, Species, and Suitability. *Frontiers in Ecology and Evolution*, 8, 579813. <https://doi.org/10.3389/fevo.2020.579813>
- Sheehan, R., & Speights-Binet, J. (2019). Negotiating strategies in New Orleans's memory-work: White fragility in the politics of removing four Confederate-inspired monuments. *Journal of Cultural Geography*, 36(3), 346–367. <https://doi.org/10.1080/08873631.2019.1641996>
- Sikowitz, J. (2021). *The Boston Black United Front and community-centered Alternatives to the carceral state*. University of Massachusetts Boston.
- Sit-in escalates into riot. (1967, June 3). *The Boston Globe*.
- Smith, N. (1984). *Uneven development: Nature, capital, and the production of space*. Blackwell.
- Solecki, W. D., & Welch, J. M. (1995). Urban parks: Green spaces or green walls? *Landscape and Urban Planning*, 32(2), 93–106. [https://doi.org/10.1016/0169-2046\(94\)00193-7](https://doi.org/10.1016/0169-2046(94)00193-7)
- Speer, J., & Goldfischer, E. (2020). The city Is not innocent: Homelessness and the value of urban parks. *Capitalism Nature Socialism*, 31(3), 24–41. <https://doi.org/10.1080/10455752.2019.1640756>
- Spotswood, E. N., Benjamin, M., Stoneburner, L., Wheeler, M. M., Beller, E. E., Balk, D., McPhearson, T., Kuo, M., & McDonald, R. I. (2021). Nature inequity and higher

- COVID-19 case rates in less-green neighbourhoods in the United States. *Nature Sustainability*, 4(12), 1092–1098. <https://doi.org/10.1038/s41893-021-00781-9>
- Sreetheran, M., & van den Bosch, C. C. K. (2014). A socio-ecological exploration of fear of crime in urban green spaces: A systematic review. *Urban Forestry & Urban Greening*, 13(1), 1–18. <https://doi.org/10.1016/j.ufug.2013.11.006>
- Steenberg, J. W. N., Millward, A. A., Nowak, D. J., & Robinson, P. J. (2016). A conceptual framework of urban forest ecosystem vulnerability. *Environmental Reviews*, 25(1), 115–126. <https://doi.org/10.1139/er-2016-0022>
- Swyngedouw, E., & Heynen, N. C. (2003). Urban political ecology, justice and the politics of scale. *Antipode*, 35(5), 898–918. <https://doi.org/10.1111/j.1467-8330.2003.00364.x>
- Talal, M. L., Santelmann, M. V., & Tilt, J. H. (2021). Urban park visitor preferences for vegetation: An on-site qualitative research study. *Plants, People, Planet*. <https://doi.org/10.1002/ppp3.10188>
- Taylor, A. F., Wiley, A., Kuo, F. E., & Sullivan, W. C. (1998). Growing up in the inner city: Green spaces as places to grow. *Environment and Behavior*, 30(1), 3–27. <https://doi.org/10.1177/0013916598301001>
- Taylor, D. E. (1999). Central Park as a model for social control: Urban Parks, social class and leisure behavior in nineteenth-century America. *Journal of Leisure Research*, 31(4), 420–477. <https://doi.org/10.1080/00222216.1999.11949875>
- Thomas, J. (1990, June 1). Some want Franklin Park as rally site. *The Boston Globe*.
- Thompson, E. L. (2022). *Smashing statues: The rise and fall of America's public monuments*. W. W. Norton & Company.
- Thorn, S., Seibold, S., Leverkus, A. B., Michler, T., Müller, J., Noss, R. F., Stork, N., Vogel, S., & Lindenmayer, D. B. (2020). The living dead: Acknowledging life after tree death to stop forest degradation. *Frontiers in Ecology and the Environment*, 18(9), 505–512. <https://doi.org/10.1002/fee.2252>
- Tidball, K. G., Krasny, M. E., Svendsen, E., Campbell, L., & Helphand, K. (2010). Stewardship, learning, and memory in disaster resilience. *Environmental Education Research*, 16(5–6), 591–609. <https://doi.org/10.1080/13504622.2010.505437>
- Tierney, M. T. (1987). *Fire at the door: The Black Student Union Movement at Boston English High School, 1968-1971*. University of Massachusetts Boston.
- Troy, A. R., Grove, J. M., O'Neil-Dunne, J. P. M., Pickett, S. T. A., & Cadenasso, M. L. (2007). Predicting opportunities for greening and patterns of vegetation on private urban lands. *Environmental Management*, 40(3), 394–412. <https://doi.org/10.1007/s00267-006-0112-2>
- Tzaninis, Y., Mandler, T., Kaika, M., & Keil, R. (2021). Moving urban political ecology beyond the 'urbanization of nature.' *Progress in Human Geography*, 45(2), 229–252. <https://doi.org/10.1177/0309132520903350>
- Ulrich, R. S. (1984). View through a window may influence recovery from surgery. *Science*, 224(4647), 420–421. <https://doi.org/10.1126/science.6143402>
- Varuzzo, A., & Harvey, D. C. (2017). Disproportionalities in the urban forest: Analyzing the role of stewardship agencies in dictating the distribution of an urban environmental resource. *Landscape and Urban Planning*, 167, 232–239. <https://doi.org/10.1016/j.landurbplan.2017.06.006>

- von Hoffman, A. (1988). "Of greater lasting consequence": Frederick Law Olmsted and the fate of Franklin Park, Boston. *Journal of the Society of Architectural Historians*, 47(4), 339–350. <https://doi.org/10.2307/990380>
- Walker, P. A. (2005). Political ecology: Where is the ecology? *Progress in Human Geography*, 29(1), 73–82. <https://doi.org/10.1191/0309132505ph530pr>
- Walters, Q. (2020, June 12). Boston Mayor declares racism a public health crisis. *NPR*. <https://www.npr.org/sections/live-updates-protests-for-racial-justice/2020/06/12/876327158/boston-mayor-declares-racism-a-public-health-crisis>
- Warner, S. B. (1978). *Streetcar suburbs: The process of growth in Boston, 1870-1900* (2nd ed.). Harvard University Press.
- Watkins, S. L., & Gerrish, E. (2018). The relationship between urban forests and race: A meta-analysis. *Journal of Environmental Management*, 209, 152–168. <https://doi.org/10.1016/j.jenvman.2017.12.021>
- Wilson, O., & Hughes, O. (2011). Urban green space policy and discourse in England under New Labour from 1997 to 2010. *Planning Practice and Research*, 26(2), 207–228. <https://doi.org/10.1080/02697459.2011.560462>
- Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough.' *Landscape and Urban Planning*, 125, 234–244. <https://doi.org/10.1016/j.landurbplan.2014.01.017>
- Zaitzevsky, C. (1982). *Frederick Law Olmsted and the Boston Park System*. Harvard University Press.
- Zimmerer, K. S. (1994). Human geography and the "new ecology": The prospect and promise of integration. *Annals of the Association of American Geographers*, 84(1), 108–125.
- Zimmerer, K. S. (2007). Cultural ecology (and political ecology) in the 'environmental borderlands': Exploring the expanded connectivities within geography. *Progress in Human Geography*, 31(2), 227–244. <https://doi.org/10.1177/0309132507075372>
- Zipperer, W. C. (2008). The process of natural succession in urban areas. In *The Routledge Handbook of Urban Ecology*. Routledge. <https://doi.org/10.4324/9780203839263.ch16>



VITA

**CHELSEA PARISE**

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**Education**

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- 2022      **University of Kentucky**, Lexington, Kentucky  
Master of Arts, Geography  
Thesis: *Undoing Colorblind Ecologies:  
Redlining and Just Green Enough in the Urban Forest of Boston's Franklin Park*  
Advisor: Dr. J. Anthony Stallins  
Committee: Dr. Richard Schein & Dr. Nari Senanayake
- 2011      **College of the Holy Cross**, Worcester, Massachusetts  
Bachelor of Arts, Major: Biology, Minor: Environmental Science  
Thesis: *The Effects of Land Use Patterns and Biological Characteristics on Changes  
in Frequency of Alien Plants Species in Worcester County, Massachusetts*  
Advisor: Dr. Robert I. Bertin

**Certifications**

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- 2016      **Harvard Division of Continuing Education**, Cambridge, Massachusetts  
Natural Resources Management and Sustainable Ecosystems

**Publications & Grants**

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- 2011      Bertin, R., & Parise, C. (2014). Patterns and Changes in the Nonnative Flora of  
Worcester County, Massachusetts. *The American Midland Naturalist*, 172(1), 37-60.  
<https://doi.org/10.1674/0003-0031-172.1.37>
- 2021      Barnhardt Withington Research Funding: \$1,680  
Geography Department Graduate Student Research Grant  
University of Kentucky, Lexington, KY

**Conference Panels & Posters**

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- 2022      “A Future Forest: Successional Socio-Ecologies of Resistance Through Restoration”  
Session: More-Than-Human Ecologies  
Dimension of Political Ecology Conference, Lexington, KY

2022	<p><i>“Forests are Not Statues: The Socio-successional Tensions of Redlined Urban Forests in a Time of Racial Re-awakening and Climate Change Imperatives”</i></p> <p>Session: New Approaches to Urban Nature: Landscapes, Practices, Ideas</p> <p>American Association of Geographers Annual Conference, New York, NY</p>
2017	<p>Poster: <i>The Challenges of Databasing a Historical Herbarium Collection</i></p> <p>Northeast Algal Society Symposium, Bretton Woods, NH</p>
2015	<p>Poster: <i>Patterns and Changes in the Nonnative Flora of Worcester County, MA</i></p> <p>New England Botanical Club Research Conference, Northampton, MA</p>

## Academic Work Experience

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2020 – 2022	<p><b>Teaching Assistant</b></p> <p>University of Kentucky, Department of Geography, Lexington, KY</p>
2022	<p><b>Research Assistant</b></p> <p>Dr. Nari Senanayake</p>

## Professional Work Experience

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2021	<p><b>Lead Teacher – Organic Gardening and Sustainability</b></p> <p>Usdan, Long Island, NY</p>
2020	<p><b>Horticulturalist</b></p> <p>Friends of the High Line, New York, NY</p>
2018 – 2019	<p><b>Horticulturalist</b></p> <p>Riverside Park Conservancy, New York, NY</p>
2011 – 2018	<p><b>Curatorial Assistant</b></p> <p>Harvard University Herbaria, Cambridge, MA</p>
2013	<p><b>Isabella Wells Hunnewell Horticultural Intern</b></p> <p>Arnold Arboretum, Jamaica Plain, MA</p>