

REENTRY AND THE ROLE OF BRIDGED PROGRAMMING:
RECONNECTING FORMER PRISONERS AND
THEIR COMMUNITIES

Alison Laichter

Submitted in partial fulfillment of the requirement for the degree
Master of Science in Urban Planning

Graduate School of Architecture, Planning and Preservation
Columbia University
(May 2008)

Copyright 2008, Alison Laichter.

For information about this work, please contact Alison Laichter (alisonlaichter@gmail.com). Permission is hereby granted to reproduce and distribute copies of this work for nonprofit educational purposes, provided that copies are distributed at or below cost, and that the author, source, and copyright notice are included on each copy. This permission is in addition to rights of reproduction granted under Sections 107, 108, and other provisions of the U.S. Copyright Act. Before making any distribution of this work, please contact the copyright owner to ascertain whether you have the current version.

Abstract

Alison Laichter. "Reentry and the Role of Bridged Programming: Reconnecting Former Prisoners and Their Communities." Submitted May, 2008. Advisor: Dr. Gretchen Susi.

Reentry back to communities after incarceration is a time of great challenges and opportunities. Risks of recidivism are high because the majority of former prisoners return to the same impoverished communities, and the lack of employment opportunities is one of the major obstacles to success. This thesis focuses on bridged programming between a horticultural therapy program during incarceration and a post-release internship program. Using interviews with participants of both programs and analyses of surveys and recidivism data, the research finds that this bridged model yields successful reentry outcomes in terms of low rates of recidivism, viable employment opportunities, and personal and community transformation through horticulture.

Acknowledgements

I would like to thank my advisor, Dr. Gretchen Susi, for her helpful guidance and thoughtful instruction throughout the development of this thesis topic, many drafts, many revisions, and many phone calls. I would also like to thank Dr. Mary Northridge for introducing me to the topic of horticulture therapy during incarceration and supporting and encouraging this work at every stage.

This thesis would not have been possible without the interest, support, and encouragement of the Horticultural Society of New York. I would like to thank James Jiler, GreenHouse Program Director, for patiently answering all of my many questions, inviting me to visit the program on Rikers Island, introducing me to his students and colleagues, and inspiring me to pursue this research. I am also grateful to John Cannizzo, GreenTeam Program Director, for sharing his many insights, incredible help and guidance during the interview process, and whose tireless dedication and teaching will always inspire me. I would also like to thank Hilda Krus, Horticultural Therapist, for teaching me about the practice of horticulture therapy and sharing her experiences.

I cannot end without thanking the program participants who shared their lives and stories with me during the researching and writing of this thesis. I hope that this research will benefit their lives and communities, in some small way, and it is to them that I dedicate this work.

Table of Contents

Introduction	1
Background	4
Literature Review	10
Research Design	18
Findings	21
<i>GreenHouse Participant Surveys</i>	21
<i>GreenHouse/GreenTeam Participant Interviews</i>	31
<i>Rates of Recidivism</i>	48
Discussion and Recommendations	55
Conclusion	60
Bibliography	61
Appendix A: GreenHouse Participant Survey	63
Appendix B: Interview Questionnaire	67
Appendix C: Consent Form for Interviews	69
Appendix D: Theoretical Framework	73

List of Figures

Figure 1: Number of Months Interview Subjects Participated in GreenHouse Program	32
Figure 2: Number of Months Interview Subjects Participated in GreenTeam Program	33
Figure 3: Length of Time between Release and Start of GreenTeam Internship	34
Figure 4: Reconvictions Post-Release for GreenHouse and GreenTeam Participants	53
Figure 5: Reconvictions Post-Release for GreenHouse and GreenTeam Participants, Compared to General Incarcerated Population	53

List of Tables

Table 1: Results of GreenHouse Participant Survey	27
Table 2: Reconviction Rates for GreenHouse and GreenTeam Participants	51
Table 3: Reconviction Rates for General Prison Population, 1994	51

Introduction

More than 600,000 incarcerated men and women will be released from jails and prisons this year in the United States and will reenter their communities. An overwhelming majority of former prisoners are from low-income communities with poor access to quality education, healthcare, employment, and support. Living and working in such marginalized neighborhoods is likely to have contributed to the circumstances and choices leading to incarceration. The risks of recidivism soon after reentry to their communities are high, because individuals return to their communities without the necessary tools and opportunities to shift away from the situations that led to the original outcomes of crime, conviction, and reincarceration (Travis, 2003). Programming during incarceration may offer positive benefits and new skills. However, reentry back to families, homes, and communities is a time of great challenges, and lack of employment opportunities is one of the major obstacles to stability and success. Programs offered during incarceration that focus on education and job skills are rarely linked to quality employment after release. Bridging programming during incarceration and post-release may present a disruption to the cycle of recidivism and allow formerly incarcerated people the opportunity to positively change their lives and communities.

This study evaluates the outcomes of an innovative partnership between a horticulture therapy program (GreenHouse) for incarcerated people on Rikers Island and an “after-care” post-release internship program (GreenTeam) that provides formerly incarcerated program participants with employment and mentoring in horticulture. The study seeks to

answer whether there is a positive difference in successful reentry of formerly incarcerated populations that have participated in the Horticultural Society of New York's (HSNY) GreenHouse and GreenTeam bridged programs as compared to the general national incarcerated population.

Reentry experiences of GreenHouse and GreenTeam participants were studied to determine whether these bridged programs have had an effect on reducing recidivism, and qualitative survey results taken over the past several years of GreenHouse participants were analyzed. Fifteen current and former GreenTeam interns who also participated in the GreenHouse program while incarcerated were interviewed. These interviews explored how the two programs have affected participants' reentry into their communities.

This research contributes to existing knowledge about the most effective ways of supporting formerly incarcerated people as they reenter community life by examining the unique GreenHouse/GreenTeam bridged intervention. The results of this study present a case for replicating this programming model, which begins in an incarcerated setting and continues after release, allowing formerly incarcerated populations opportunities to end the cycle of recidivism and be positive forces in their communities.

This study found that the bridged programming between the GreenHouse and GreenTeam yields very successful reentry outcomes in terms of low rates of reconviction, viable employment opportunities, and personal growth and transformation through horticulture.

Participants of both programs gain the life and job skills necessary to compete in the job market and pursue careers that enrich their lives and allow them to perceive themselves as cultivators of a healthier and more beautiful city.

This study is useful because there has been little research regarding participant outcomes of programs that include both during and post-incarceration components. The GreenHouse and GreenTeam programs are distinctive and innovative, and participant outcomes have never been analyzed in the history of the two programs. This study may influence future research in programming and employment that bridges incarceration and reentry by offering a qualitative and quantitative method to study reentry outcomes.

Background

As the prison industry has expanded, sentencing and parole policies have shifted from lighter to harsher, and the number of incarcerated people¹ has grown steadily. Prison populations throughout the United States tripled between 1978 and 1998 (Lawrence, Mears, Dublin, & Travis, 2002), and since 1998, over 600,000 people have been released each year. This results in an average of about 1,600 released per day, which is six times the number of prisoners released in 1970 (Petersilia, 2004).

Along with this increase in imprisonment, there has been a noticeable shift, in terms of programming and funding, from models of rehabilitation towards models of punishment. Harsher punishments, usually translating into longer sentences, remove prisoners from their families, communities, and viable employment opportunities, which only exacerbate reentry challenges and may ultimately lead to higher rates of recidivism in the long term. In the past several years, the role of reentry in the criminal justice system and civic society has emerged as a central focus. Incarcerated people will eventually return to their communities, with the exception of a small number of people with life sentences. A conversation has emerged among academics, community activists, politicians, and criminal justice experts about the problems and opportunities of reentry, and in his 2004

¹ This study will follow Jeremy Travis' word choices, as described in [But They All Come Back: Facing the Challenges of Prisoner Reentry](#). The terms "prisoners" or "incarcerated people" are used to refer to those currently imprisoned, and "former prisoners" or "formerly incarcerated people" are the terms used for those who are no longer incarcerated. Referring to prisoners and former prisoners with neutral and clear language is an attempt to restore dignity and respect to a population that is typically labeled with characteristics and definitions that may be offensive and/or inaccurate (Travis, 2005).

State of the Union address, President Bush announced a \$300 million prisoner reentry initiative.

The United States Bureau of Justice Statistics reports that over fifty percent of all newly released prisoners will find themselves in another legal challenge and possible re-incarceration within three years (Langan & Levin 2002). This means that thousands of people are being shuffled between imprisonment and the communities that, in many cases, deeply influenced their initial incarceration. It is well known that the majority of prisoners are from impoverished communities with limited opportunities for quality education, employment, and supportive institutions. In order to improve public safety, increase social and economic inclusion, and create a peaceful and productive society, the cycle of recidivism must be broken.

The GreenHouse and GreenTeam Programs

Rikers Island is a 413 acre island located in the East River between the Bronx and Queens and just a few miles east of Manhattan. Rikers is a New York State Department of Corrections facility that houses over 15,000 inmates.



Because Rikers Island is a jail,² prisoners serve less than year-long sentences. The incarcerated include those unable to pay bail and those who are waiting for their trials.

This is the setting of the GreenHouse, which HSNY created in 1996. The GreenHouse, in

² The basic difference between jail and prison is that jail inmates are serving less than year-long sentences for misdemeanor charges or awaiting trial and sentencing after arrest, and prison inmates have been convicted and are serving longer sentences for felony charges.

conjunction with the GreenTeam, HSNY's post-release internship program, is a unique model offering a promising practice for meeting the current reentry challenge.

The GreenHouse Program



GreenHouse gardens, Photo by J.Jiler



GreenHouse gardens, Photo by J.Jiler

The GreenHouse program incorporates horticulture therapy, education on botany, soil, and planting and maintaining all aspects of gardens and landscapes. It has also provided job readiness and social skills training to 500 men and women in the past eight years. The program's goals include fostering a sense of community and encouraging personal transformation through tangible skills, inspiration, and eventual employment. The GreenHouse builds relationships between people and place, connecting inmates with the natural environment. The GreenHouse area is composed of approximately two acres of gardens (including vegetable gardens, memorial areas, and herb gardens), a pond, gazebo, classroom, and greenhouse. The GreenHouse gardens are also home to roaming guinea hens, a duck named Donald (his companion, Daisy, died a few months ago), migratory

birds, gold fish that swim in the pond, and two rabbits (Bunny and Clyde) that live in a wooden hutch outside of the brick classroom building.

The program also creates links between the classroom and experiential learning in the GreenHouse program with internships and employment after release from jail with the GreenTeam. Often, participants in the GreenHouse work on projects on Rikers Island that will be implemented on the outside (e.g., creating raised beds and benches for the roof garden of a shelter) by the GreenTeam. This serves to connect prisoners with the outside world during their incarceration. Because of short sentences, most participants in the program are enrolled for under six months. HSNY staff considers those that have successfully participated for at least three months during their incarceration on Rikers Island to have “graduated” from the program.

The GreenTeam Internship Program



GreenTeam Interns, Photo by HSNY



GreenTeam Intern, Photo by HSNY

The GreenTeam is an internship program that was created to offer transitional employment, job training, and support during reentry to former participants of the GreenHouse program. GreenTeam interns are trained in all tasks, duties and responsibilities necessary to find entry-level employment in horticulture. Interns obtain hands-on experience in plant and soil maintenance, garden design, pruning, pest management, carpentry and masonry on projects that range from New York City Housing Authority rooftop gardens and local community gardens to landscaping for private luxury apartment buildings. Interns typically start with a beginning wage of \$7.50 per hour and with increases in skills and responsibilities, wages can reach over \$10 per hour. Life skills are an important aspect of the internship, and interns are expected to gain a deeper understanding and practice of respect, responsibility, integrity, and financial management. When interns are ready to seek more permanent employment outside of HSNY, staff members work with each individual to create resumes, cover letters, and portfolios of work, as well as interviewing skills and preparation.

The GreenHouse program is unique in offering education and job training, as well as providing incarcerated men and women with the confidence, education, and job skills necessary to access horticulture related employment immediately after their release from jail. If, upon release from jail, the GreenHouse participants avail themselves of the GreenTeam, they are able to immediately begin to work in a field that offers tangible employment and constructive ways to contribute to the world outside of criminal activity and incarceration. Horticulture is an active and physical practice that not only requires individual effort and work but also contributes to the public sphere by improving the aesthetic surroundings to be enjoyed and admired by fellow community members and city dwellers.

The programs link together to create a bridge not only between incarceration and employment but also to connect people and place. This bridged programming situates GreenHouse and GreenTeam participants in a unique position of opportunity in reentry and is worthy of further study.

Literature Review

Creating a Foundation for Studying Bridged Programming

This study focuses on bridged reentry programming through the lens of the unique and innovative GreenHouse program on Rikers Island and the post-incarceration GreenTeam internship, both programs of the Horticultural Society of New York (HSNY). The discussion begins with an overview of incarceration and reentry socio-demographics in order to provide perspective on the population of people most affected by imprisonment and reentry. The practices and outcomes of programming in jails and prisons will be examined, as will the issue of employment after incarceration and during reentry. The literature review concludes with a discussion of horticulture therapy as a practice and effective intervention.

Incarceration and Reentry Socio-demographics

The United States' record level of imprisonment has resulted in an incarceration rate of more than 700 per 100,000 people, which is over five times the rate of most other industrialized countries (Mauer, 2005). With the realization that almost all prisoners will be released at some point, the sharp increases of incarceration over the past decade have magnified the challenges of reentry.

Many studies document the disparities between the general and prison populations, including gender, age, ethnicity, education and work experience: "Namely, most prisoners are 'overwhelmingly young, minority males with a higher percentage of high school dropouts and a lower percentage of college experiences than the general

population” (LoBuglio 2001 as cited by Lawrence, Mears, Dublin, & Travis, 2002). The racial disparities between the general and prisoner populations cannot be underestimated. In 2002, over ten percent of all African-American men aged 25 to 29 in the United States were in prison, in comparison to 2.4 percent and 1.2 percent of Hispanic and white men, respectively (Travis, 2005).

A recent report by The Pew Center on the States confirmed that these statistics continue to shape our current prison populations. The report stated that one in one hundred adults in the United States are currently incarcerated, and Justice Department figures report that one in nine black men between the ages of 20 and 34 were incarcerated in 2006 (Liptak, 2008). Due to the rise in incarceration rates, Tucker and Cadora (2003) posit that residents of low-income communities of color have become “permanent consumers of correctional services,” leading to the conclusion that entire communities, not just individuals, are caught in the destructive cycle of incarceration and recidivism.

A Bureau of Justice Statistics report of prisoners released in 1994 stated that within three years post-release, 67.5 percent of formerly incarcerated people are rearrested and 46.9 percent are reconvicted (Langan & Levin, 2002). This cycle of recidivism is poised to increase as the prison industry continues to expand. However, the problems of reentry and recidivism are complicated by sentencing policies and demographics that have positioned prisoners and former prisoners at an even more extreme disadvantage than their historical peers. Petersilia (2004) asserts that at the present time, “Returning prisoners will have served longer prison sentences than in the past, be more disconnected

from family and friends, have a higher prevalence of untreated substance abuse and mental illness, and be less educated and employable than their predecessors.”

Travis (2003), referring to the 2002 Bureau of Justice Statistics study, states, “Nearly thirty percent of the released prisoners were arrested within the first six months after leaving prison. The cumulative total rose to about 44 percent within the first year, and almost 60 percent within the first two years. Clearly, the months right after release from prison present the highest risk to public safety.” This situation has contributed to the increased focus on reentry-related programming. Former prisoners face a complex series of challenges at the point of reentry. Housing, returning to families, maintaining sobriety and availability of employment³ all coalesce and are especially present in the first few months post-release.

Reentry Programming⁴

An oft-cited research study by Martinson from the early 1970s pessimistically asserted that programs successfully rehabilitating prisoners are rare exceptions (Martinson, 1974). However, recent studies have evaluated numerous programs that have successfully reduced recidivism, improved employability, and decreased rates of substance abuse relapses (Cullen and Gendreau 2000; Gates et al. 1999; Gerber and Fritsch 1994; Wilson,

³ Formerly incarcerated people are legally restricted from obtaining employment in several fields including healthcare and childcare, and there continues to be a strongly negative stigma associated with having a criminal record. There is legal precedence to protect former prisoners from discrimination; however, the reality is that the availability of employment is severely limited for those with a record of convictions.

⁴ Because almost all prisoners will eventually face reentry, all programs during and post-incarceration should be considered part of a larger reentry program structure. Therefore, in this section, all programming with the intention of preparing prisoners for community reintegration is considered reentry programming.

Gallagher, and Mackenzie 2000; as cited by Travis, 2005). Even with these purported successes, the reality is that while incarceration rates have increased and the prisoner population has increased dramatically, funding for programs has decreased (Lawrence, Mears, Dublin, & Travis, 2002).

With increased evidence of the effectiveness of programming for prisoners, reentry experts are grappling with the nuanced questions of which programs work for various incarcerated populations and how different programs function together in combination to create successful reentry experiences for formerly incarcerated individuals (Lawrence, Mears, Dublin, & Travis, 2002). The main obstacle to program evaluation is defining and determining what constitutes success and how to quantify qualitative outcomes:

“...virtually all of these evaluations use recidivism as the sole outcome criteria. Programs that reduce the level of criminal behavior among program participants are said to work. Recidivism is an important, perhaps the most important, measure of correctional impact, but it is insufficient as a sole measure of the effectiveness of reentry programs. After all, the ultimate goal of reentry programs is reintegration, which clearly includes more than remaining arrest-free for a specified time period” (Petersilia, 2004).

Travis (2003) extrapolates this discussion of indicators of success and puts forward the concept of “measures of reintegration,” referring to quality employment, inclusion in family and supportive networks, interaction with community activities and organizations, sobriety, and maintenance of healthcare and treatment programs. This rubric of structuring positive outcomes is much more dynamic than simply quantifying recidivism

statistics. However, this kind of qualitative data is implicitly difficult to measure, and rates of recidivism calculated through reconvictions, rearrests, or reincarceration rates can and should be used as benchmarks in conjunction with qualitative research to determine programmatic success.

Adding to the difficulty in evaluating reentry programs is the fact that although programs can be divided into categories—educational/academic, vocational training, prison industries, employment/transitional training, life skills training, mental health treatment, substance abuse treatment, faith-based programs, etc (Lawrence, Mears, Dublin, & Travis, 2002)—prisoners often participate in a combination of programs. These amalgamations of programming (combined in some cases with after-care programming) may contribute to successful reentry, but this situation has proven difficult for researchers to identify and isolate successful programming (Travis, 2005).

Employment Linkages

One of the key components to successful reentry is employment. Travis (2005) asserts, “By failing to achieve full employment and failing to prepare prisoners for a return to work, our current prison policies damage the American economy...these negative effects are not evenly distributed. They are concentrated in impoverished communities that already experience high rates of unemployment and social disadvantage” and incarceration. The communities that are home to a disproportionately large number of incarcerated people have high unemployment and poverty rates and low overall

educational attainment, and returning prisoners have significant challenges in transitioning back into the workforce (Solomon, Johnson, Travis, & McBride, 2004).

The lack of opportunities for employment is often present with initial incarceration, as well as subsequent recidivism. A 2003 study commissioned to evaluate employment opportunities for former prisoners in Connecticut asserted that “83 percent of all probationers and parolees [in New York State] who violate the conditions of their release and are returned to prison were unemployed” (Austin, Cadora and Jacobson 2003).

Although the above percentage is high, it should be noted that many of the incarcerated may have been illegally employed at the time of arrest and conviction: “Many inmates are incarcerated because of economic crimes—they chose to sell drugs or commit burglaries rather than work for minimum wage at fast-food restaurants. The work [during and after incarceration to prevent recidivism] must have meaning while the inmates are performing it as well as provide promise that it will make a difference in their futures” (McAuley 1999; as cited by Harrison & Schehr, 2004).

The Urban Institute’s Reentry Roundtable puts forth that the lack of job training and links to employment during and after incarceration is a “missed opportunity” and argues that “if individuals emerged from prison with fortified skill sets, solid work experience, and connections to legitimate jobs at market wages...the prospects for positive outcomes in terms of earnings, family support, self-esteem, and recidivism could be amplified” (Solomon, Johnson, Travis, & McBride, 2004). Travis (2005) argues for programming that recognizes the importance of employment and offers interventions that begin during

incarceration and continue into “flexible work opportunities immediately after release...These programs would link the world of work, job training and skill-building programs in prison with the world of work and programs in the community.”

Horticulture Therapy

The bridged GreenHouse Project and Green Team programs that are the focus of this study fulfill Travis’ requirements, and center on the concept of horticulture therapy. James Jiler, the Director of the GreenHouse Project, has described horticulture as unique among the myriad of education and vocation programming typically offered during incarceration: “Plants respond to care, and a garden rewards the caretaker with food, beauty, flowers, and a positive response from the community...that is not readily found in other settings or work sites... For prisoners, many of whom have suffered frequent failures in the job place and the frustrations of being marginalized in society, horticulture is a process that allows them to control their environment through shared responsibilities in an unspoken contract between person and plant” (Jiler, 2006).

Studies have cited anecdotal evidence of the positive impact of prison-based horticulture therapy programs; however, there have been numerous studies calling for more statistical evaluations (Berry 1975; Cotton 1975; Francis and Cordts 1990; Gilreath 1976; Hiott 1975; Horne 1974; Relf 1981; Tereshkovich 1973; as cited by Rice, 1993). Horticulture therapy is a means for individuals to physically connect with the natural world, and horticulture therapists guide a process of emotional healing through working with plants.

Spending time working in a garden offers time and a safe place for reflection, which is essential for personal transformation (Simson & Straus, 1998). This link to a physical place may also offer benefits to imprisoned populations simply because isolation is inherent in incarceration and this aspect combined with the specific demographics of incarcerated populations discussed previously (typically low-income, young males of color) only contributes to the feeling of marginalization and hopelessness.

In Rice's evaluation of the San Francisco Sheriff's Department horticulture therapy program in a county jail, it was concluded that although positive changes were observed in participants of the program, these benefits were usually lost because the program did not have any follow-up or after-care during reentry and post-release (Rice, 1993). Based on the lack of documented outcomes of horticulture therapy programs and the lack of reentry programs that begin during incarceration and continue post-release, there is a definite need for further research in the area of reentry, specifically regarding replicable programs that have shown successful outcomes.

Combining the beneficial therapeutic aspects of horticulture with linkages to employment and personal connections during reentry may lead to successful outcomes. However, there is a lack of documented outcomes of horticulture therapy programs for prisoners. If reentry programs based in horticulture prove to produce positive outcomes, research is necessary to develop best principles and practices in order to replicate and scale-up programs as one potential solution to the cycle of recidivism in impoverished communities.

Research Design

In order to answer the question of whether offering employment linkages and bridged programming between incarceration and reentry help formerly incarcerated people reach new ground in their lives and positively affect their communities, the following research design has been implemented.

This study is structured around three research procedures: analyzing surveys of GreenHouse program participants, interviewing participants of the GreenHouse and GreenTeam initiatives, and reviewing rates of reconviction of GreenHouse and GreenTeam program participants. The study analyzed approximately fifty GreenHouse administered surveys for participants prior to release to determine how the horticulture therapy program has affected each participant personally and if the program has influenced their future plans post-incarceration. Interviews were conducted with fifteen current and former GreenTeam participants who graduated from the GreenHouse program prior to their participation in the GreenTeam internship program. Recidivism rates based on reconvictions for New York State and prisoners are publicly available, and the GreenHouse and GreenTeam reconviction rates were calculated based on data obtained through the New York State Division of Criminal Justice Statistics (DCJS).

Recidivism rates are calculated by DCJS and the Bureau of Justice as the percent of released prisoners that are rearrested or reconvicted within certain time frames. For the purposes of this study, reconviction rates were calculated for program participants and

compared to State and Federal statistics. Lists of GreenHouse and GreenTeam participants were collected and coded by HSNY program staff. Data concerning these populations were then analyzed using no markers of the participants' identities. The rates for both groups were compared to determine if there is a difference in recidivism between the general incarcerated population and GreenHouse/GreenTeam program participants.

Fifty surveys of GreenHouse participants were collected by GreenHouse staff over the past two years prior to each participants' release. The survey includes a range of questions created to study the experiences of participants regarding skill acquisition and development. For example, there are inquiries into how participants felt physically after participating in the program and what effect their participation in the program had on their connection to nature and overall well-being. Questions were multiple choice as well as open-ended. Each question and choices for answers were coded and analyzed using database software to determine percentages for each answer choice and prevalent themes throughout the dataset.

I conducted interviews with current and former GreenTeam interns who also participated in the GreenHouse program during incarceration. These interviews were scheduled with the assistance of the GreenTeam Program Director (John Cannizzo), the GreenHouse Program Director (James Jiler) and the staff Horticultural Therapist (Hilda Krus) and took place in January and February, 2008. Because this research is focused on the partnership between the two programs, participation in this section of the study did not include participants of the GreenHouse program that elected not to continue with the

Green Team nor did it include interns with the GreenTeam who did not participate in the GreenHouse program. Inclusion in the interview pool depended on availability and geographic location of current and former GreenTeam participants during the time of study. If subjects were not located in the New York City area or could not schedule in-person meetings, phone interviews were conducted. Participants were not excluded due to subjective opinions about the programs, gender, or age. All interviewed persons gave their consent to be interviewed, acknowledging their participation and the objectives of the interviews (see Appendix C).

Findings

GreenHouse Participant Surveys

Between 2005 and 2007, the GreenHouse program on Rikers Island collected participant surveys prior to their release from jail (see Table 1). A total of 50 surveys were collected.⁵ The survey questions were designed by the GreenHouse Program Director, and participants were given printed surveys and pens to circle their answers and respond to open-ended questions. The surveys were collected and stored, and this study is the first time results have been analyzed.

The survey (see Appendix A) asked a range of questions to determine whether participants experienced changes in skill acquisition and development. The surveys also inquired about how participants felt physically after working in the greenhouse and garden, shifts in their connection to nature, and what effect their participation in the program had on their self-confidence and overall well-being. Other questionnaire items asked participants to rank a list of activities from one to five in terms of which benefited them the most (with one as the most beneficial activity and five as the least beneficial activity). The last two questions on the survey were open-ended and asked participants if

⁵ Seven of the fifty collected surveys contained different questions than the other 43; these seven surveys were not analyzed. Over two hundred GreenHouse participants were released between 2005 and 2007. The rate of response (21%) is relatively low, because many prisoners do not report to the GreenHouse in the week prior to their release. GreenHouse staff reported that this transitional time is typically rushed and chaotic, and surveys cannot be distributed and collected if participants do not physically come to the GreenHouse area.

they had any other comments to share and what improvements they would recommend for the program.

The ranking item proved to be difficult for many participants to understand, given the range of responses. A few respondents simply ranked all of the activities from one to twenty-one, and these responses were not included in the final analysis. The rest of the respondents ranked each activity on a scale of one to five, leaving some activities blank or writing in N/A (not applicable). Surveys with blank responses were included in the N/A category.

Data Analysis

As seen in the tabulated results of the survey, compiled in Table 1, totals of responses for each question vary because more than one answer may have been selected. The first two questions asked what changes were noticed after working in the greenhouse (including maintaining plants, watering, seeding) and the gardens (including pruning and spring cleaning). When asked about working in the greenhouse, 95.3 percent of respondents answered that they noticed a change in skill development and an increased interest in learning, and 90.7 percent noticed these same changes after working in the garden.

The third question asked participants to rate the importance of learning a new skill or acquiring new knowledge after working in the greenhouse, and a total of 90.7 percent of respondents selected “important” or “very important” from the choices of “not at all important,” “a little important,” “important,” “very important,” and “not applicable.”

When asked specifically about pruning and spring cleanup, forty percent responded that they “hope to use the skills for a career after learning more,” and over twenty-five percent selected the answer “it showed me that I can learn new things if I want to.”

Participants were asked to evaluate how they physically felt after one month of working in the garden or greenhouse. Forty-six percent responded that they felt “relaxed and less anxious.” Another 42 percent responded that they felt “energized and strong and clear-headed.” The survey continued with a question regarding how participants may think differently about their health after working in the gardens and greenhouse. In response to the sixth question, approximately 57 percent of respondents reported that they want to learn more about the healing potential of nature. In addition, almost 35 percent of respondents chose the answer “I am inspired to use more fresh ingredients for cooking, because I saw how they grow and can be used.”

Question number seven asked participants to evaluate the lectures presenting horticulture education and information during their time in the GreenHouse program. Of the total number of respondents, over 50 percent reported that these lectures supplied them with “knowledge and confidence in pursuing a profession.” Over 35 percent of participants chose the response “was very helpful,” in regards to the lectures based on the choices of “was not useful” (zero percent), “was somewhat helpful to pass time” (10.9 percent), “was very helpful” (37 percent), “gave me knowledge and confidence in pursuing a profession” (52.2 percent), and “not applicable” (zero percent).

The survey asked participants to assess their overall experience in the program, and very few responded, “it helped me pass time only” (5.8 percent) or “made me focus on unhappy moments in life” (5.8 percent). The majority of respondents circled the choices “helped me think of positive things about life” (50 percent) and “helped me to develop a new perspective on my life” (38.5 percent). One hundred percent of participants chose either “I feel appreciation I had not felt before” (45.7 percent) or “a strong appreciation of nature” (53.4 percent) in response to the ninth question which asked participants about how learning and working as a horticulturist affected their appreciation of nature. Following this question, participants were asked how learning about nature affected their interest in horticulture. No participant responded that s/he had not learned anything, and almost 40 percent replied that the program encouraged them to “pursue a career working in the field of horticulture.” An additional 53.2 percent answered that they are now more interested in learning about horticulture. When asked directly about work in the horticulture field, over 35 percent of participants responded that they “want to pursue a career in the horticulture field.”

When asked to rank activities performed in the greenhouse or garden, responses varied widely. The most commonly chosen activities that were given a ranking of one (most beneficial) were “pruning trees, shrubs, hedges” (64.9 percent), “taking care of a specific area (watering, planting, mulching)” (63.4 percent), and “taking care of animals” (58.5 percent). On the opposite end of the spectrum, participants ranked the following activities with the number five, signifying the least beneficial activities: “hanging out and socializing” (25 percent), “working on the computer” (20 percent), and “developing an

exit plan” (15 percent). The most notable activities ranked with an “N/A” were “working on the computer” (60 percent) and “construction” (31.7 percent).

Lastly, participants were asked for further comments and any improvements that the program should incorporate. The two major themes that emerged from these responses were requests for more time in the garden and greenhouse (21.2 percent) and requests for more lectures and workshops (18.2 percent).

Overall, the survey responses were predominantly positive with little variation. Over 90 percent of all respondents felt that their time in the GreenHouse program taught them new skills, enriched their lives, and allowed them to find solace during incarceration. The ranking question responses should be noted for what activities were ranked on either side of the spectrum. It’s possible that “working on the computer” received low marks and high rates of “N/A,” because this is not an activity that is actively promoted in the GreenHouse. Also, “construction” may not have been an activity that occurred during certain months when respondents participated in the GreenHouse. Because students’ schedules are not uniform, sentences change, and participation is correlated with varying timetables, it’s difficult to offer a uniform program to each participant. It’s notable that “developing an exit plan” was considered one of the least beneficial activities, because that is considered, by HSNY staff, to be one of the most important aspects of the GreenHouse program and allows participants to be informed about entering the GreenTeam program upon release.

Limitations

Distributing surveys in the GreenHouse allows for little anonymity, although names and identifying characteristics were not recorded on the surveys. There are usually less than ten inmates in the GreenHouse at any given time, and it is possible that respondents thought that their identity would be known. Answers could be skewed because of that perception.

The survey was originally designed without test-runs or analysis of first collected surveys, therefore the survey questions may be repetitive and not allow for varying responses. There are limited opportunities, within the survey, for respondents to express drawbacks or negative experiences in the program. This lack of pessimistic or disapproving response options may have influenced respondents in their replies even to the open-ended questions.

Table 1: Results of GreenHouse Participant Survey

1. After working in the greenhouse (maintaining plants, watering, seeding), I have experienced the following changes in skill development:

	Number	Percent
a) no change because there is no interest in task	0	0.0%
b) interest in task but no change in learning method	0	0.0%
c) small change noticed but not defined	2	4.7%
d) change noticed in terms of skill development, interest in more learning, etc	41	95.3%
e) not applicable	0	0.0%
<i>total</i>	43	100%

2. After working in the garden pruning and spring cleaning I have experienced the following changes in skill development:

	Number	Percent
a) no change because there is no interest in task	0	0.0%
b) interest in task but no change in learning noticed	0	0.0%
c) small change noticed but not defined	4	9.3%
d) change noticed in terms of skill development, interest in more learning, etc	39	90.7%
e) not applicable	0	0.0%
<i>total</i>	43	100%

3. As a result of working in the greenhouse I have learned a new skill or have knowledge that for me is:

	Number	Percent
a) not at all important	1	2.3%
b) a little important	2	4.7%
c) important	17	39.5%
d) very important	22	51.2%
e) not applicable	1	2.3%
<i>total</i>	43	100%

4. The newly obtained skills and knowledge about pruning and spring cleanup for me have the following meaning:

	Number	Percent
a) no meaning, because I don't plan to use this skill after release	0	0.0%
b) I don't know yet	3	5.5%
c) I want to use it in my free time for my garden or my houseplants	15	27.3%
d) I hope to use the skills for a career after learning more	22	40.0%
e) It showed me that I can learn new things if I want to	15	27.3%
<i>total</i>	55	100%

Table 1, Continued.

5. After one month of work in the garden/greenhouse I had the following physical sensation when I returned to the housing area:		
	<u>Number</u>	<u>Percent</u>
a) I felt more tired	3	6.0%
b) I felt sore and weak	2	4.0%
c) I felt relaxed and less anxious	23	46.0%
d) I felt energized and strong and clear-headed	21	42.0%
e) not applicable	1	2.0%
<i>total</i>	50	100%
6. After completing my time in the garden/greenhouse I think differently about my health:		
	<u>Number</u>	<u>Percent</u>
a) there is no change in how I think about my health	2	4.1%
b) I want to be more caring with myself, but don't know how	1	2.0%
c) I am inspired to use more fresh ingredients for cooking, because I saw how they grow and can be used	17	34.7%
d) I want to learn more about the healing potential of nature	28	57.1%
e) not applicable	1	2.0%
<i>total</i>	49	100%
7. The information presented in lectures had the following effect on my interest in horticulture:		
	<u>Number</u>	<u>Percent</u>
a) was not useful	0	0.0%
b) was somewhat helpful to pass time	5	10.9%
c) was very helpful	17	37.0%
d) gave me knowledge and confidence in pursuing a profession	24	52.2%
e) not applicable	0	0.0%
<i>total</i>	46	100%
8. Work in the garden/greenhouse gave me the following sensation:		
	<u>Number</u>	<u>Percent</u>
a) it helped me pass time only	3	5.8%
b) made me focus on unhappy moments in life	3	5.8%
c) helped me to develop a new perspective on my life	20	38.5%
d) helped me think of positive things about life	26	50.0%
e) not applicable	0	0.0%
<i>total</i>	52	100%
9. Learning and working as a horticulturist has given me the following appreciation about nature:		
	<u>Number</u>	<u>Percent</u>
a) none at all	0	0.0%
b) I feel less appreciation	0	0.0%
c) I feel appreciation I had not felt before	21	45.7%
d) a strong appreciation of nature	25	54.3%
e) not applicable	0	0.0%
<i>total</i>	46	100%

Table 1, Continued.

10. Learning about nature in the program has made me feel:	<u>Number</u>	<u>Percent</u>
a) nothing because I haven't learned anything	0	0.0%
b) no more interested in horticulture than I was before	3	6.4%
c) more interested in learning about horticulture	25	53.2%
d) has given me interest to pursue a career working in the field of horticulture	18	38.3%
e) not applicable	1	2.1%
<i>total</i>	47	100%
11. After participating in the program I feel horticulture has changed the way I think about work in the following way:	<u>Number</u>	<u>Percent</u>
a) my feelings have not changed at all	0	0.0%
b) I've always liked to work and this was just another job to do	4	8.2%
c) horticulture has inspired me to find work that I enjoy and that makes me feel creative	26	53.1%
d) I want to pursue a career in the horticulture field	18	36.7%
e) not applicable	1	2.0%
<i>total</i>	49	100%
12. After performing a task (weeding, mulching, seeding...) which I never did before, I feel:	<u>Number</u>	<u>Percent</u>
a) the task didn't change anything for me	1	2.2%
b) I did something which I didn't think I could	3	6.5%
c) my self confidence has increased	11	23.9%
d) I want to do more new tasks and see what else I can do	31	67.4%
e) not applicable	0	0.0%
<i>total</i>	46	100%

13. Please give a number from one to five the activities you felt benefited you most in the program (one is most beneficial, 5 is least beneficial).

If you have not experienced a specific task mark N/A in the blank space.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>N/A</u>	<u>totals</u>
a) Lectures about plants and ecology	53.7%	12.2%	22.0%	4.9%	0.0%	7.3%	41
b) Pruning trees, shrubs, hedges	64.9%	10.8%	13.5%	2.7%	2.7%	5.4%	37
c) General clean-up and maintenance	45.0%	15.0%	27.5%	5.0%	0.0%	7.5%	40
d) Harvesting vegetables and herbs	46.3%	7.3%	14.6%	4.9%	4.9%	22.0%	41
e) Planting trees, shrubs, herbs, etc.	51.2%	9.8%	14.6%	2.4%	4.9%	17.1%	41
f) Construction	31.7%	4.9%	7.3%	22.0%	2.4%	31.7%	41
g) Taking care of a specific area	63.4%	14.6%	9.8%	2.4%	4.9%	4.9%	41
h) Greenhouse tasks	41.5%	19.5%	12.2%	7.3%	4.9%	14.6%	41
I) Cooking food	46.3%	9.8%	14.6%	2.4%	12.2%	14.6%	41
j) Learning names and uses of plants	48.8%	14.6%	14.6%	9.8%	2.4%	9.8%	41
k) Making cosmetics	39.0%	7.3%	7.3%	14.6%	12.2%	19.5%	41
l) Hanging out and socializing	25.0%	5.0%	20.0%	2.5%	25.0%	22.5%	40
m) Developing an exit plan	25.0%	2.5%	22.5%	7.5%	15.0%	27.5%	40
n) Learning about landscape design	42.5%	10.0%	17.5%	5.0%	5.0%	20.0%	40
o) Taking care of animals	58.5%	12.2%	12.2%	4.9%	4.9%	7.3%	41
p) Learning about and using tools	57.5%	10.0%	20.0%	5.0%	2.5%	5.0%	40
q) Reading books in the greenhouse library	22.5%	25.0%	12.5%	10.0%	10.0%	20.0%	40
r) Working on computer	12.5%	5.0%	2.5%	0.0%	20.0%	60.0%	40
s) Arts & crafts projects (mosaics)	35.9%	7.7%	7.7%	5.1%	10.3%	33.3%	39
t) Discussions about life	53.8%	5.1%	15.4%	7.7%	5.1%	12.8%	39
14. Anything you care to see done differently to make a stronger program?							
Total number of comments	33						
Requesting more time, longer hours	7	21.2%					
Requesting more lectures and workshops	6	18.2%					

Table 1, Continued.

Interviews with Participants of GreenHouse and GreenTeam Programs

Over the months of January and February of 2008, interviews were conducted with fifteen former GreenHouse program participants who elected to join the GreenTeam program after their release from Rikers Island. Interviews were designed to study a comprehensive sample of all participants of the two programs. A semi-structured instrument was designed for this study, and interviews were conducted with an open framework based on prepared questions (see Appendix B) and more specific questions subsequently created during the interview in order to gather more details or clarification.

The instrument obtained basic demographic data such as gender and age, as well as chronological descriptions of participants' lives before, during, and after incarceration. Questions explored respondents' incarceration and employment histories, experiences in jail and in the GreenHouse program, experiences and perceptions of working in the GreenTeam, efforts to re-enter and re-integrate within communities and civic society after release, and future goals.

Data Analysis

Fifteen interviews were conducted with eight female and seven male respondents. Ages of interviewees ranged from 27 to 54, and the average and median ages were calculated to be 42 and 44, respectively. Respondents' year of last release from Rikers Island, when they participated in the GreenHouse program, ranged from 1999 to 2007. Sixty percent of respondents were released in the last five years. Incarceration histories are varied; however, over 50 percent of respondents reported that they have been incarcerated

frequently since adolescence. Less than 30 percent reported that their time in the GreenHouse coincided with their only experience of incarceration.

Although interview questions did not ask respondents to describe the circumstances of their convictions, many volunteered details about their arrests and prior convictions; sixty percent reported that their incarceration was due to substance abuse. With few exceptions, participants' employment histories were characterized by a variety of low-skilled and low paying jobs. Many respondents did not have any income prior to incarceration because of substance abuse and/or unemployment.

Figure 1: Number of Months Interview Subjects Participated in GreenHouse Program

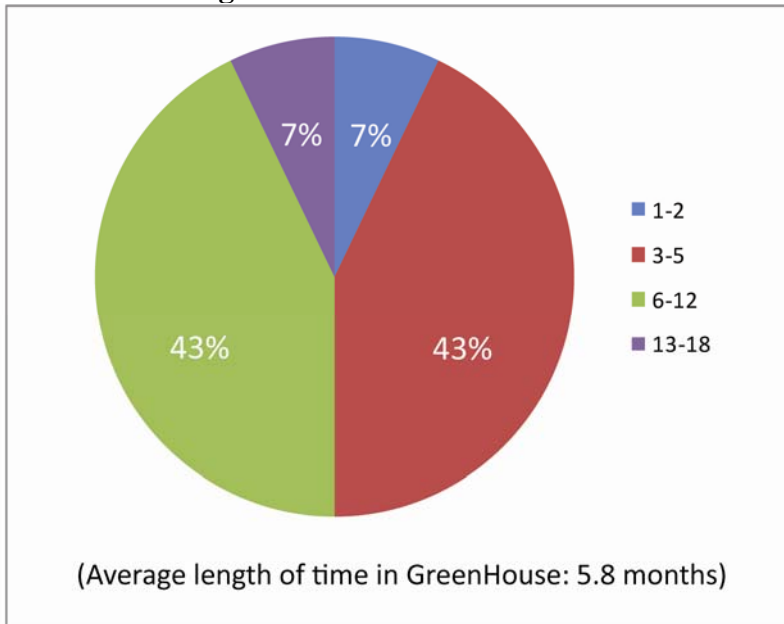
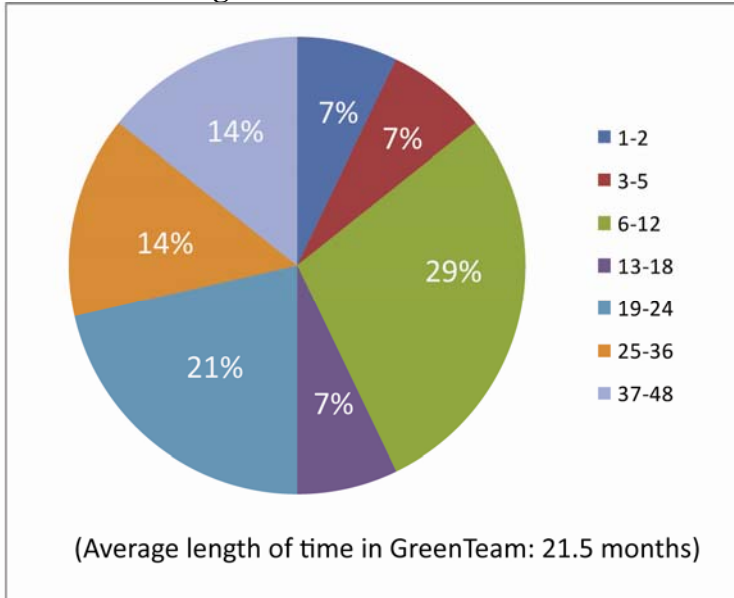


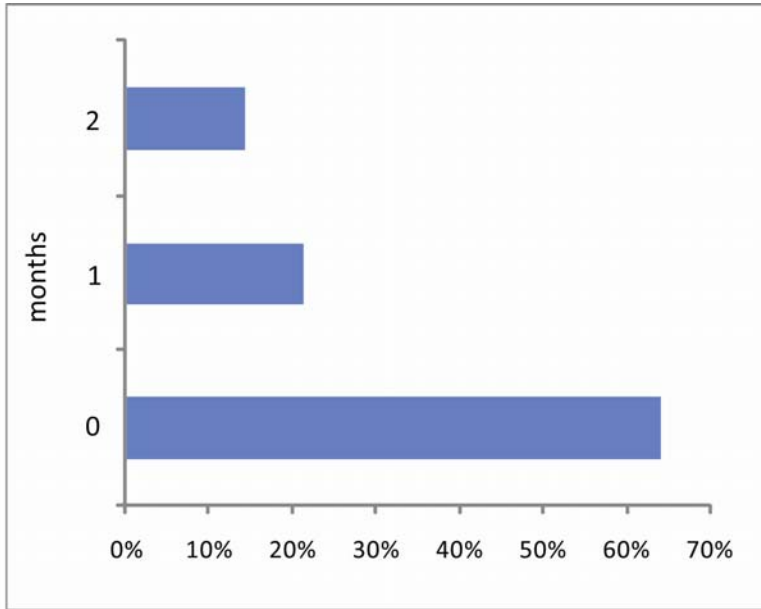
Figure 2: Number of Months Interview Subjects Participated in GreenTeam Program



Discussion of Emergent Themes

Respondents were collectively very positive about the programs and several themes emerged in each interview: the value of an immediate employment opportunity post-incarceration, the power of creating personal connections through the Horticultural Society of New York, the relativity of horticulture to their lives, and, finally, how respondent self-perceptions and perceptions of their role in their communities and the city have changed. Further detail on each of these themes follows.

Figure 3: Length of Time between Release and Start of GreenTeam Internship



Immediate Employment

All participants reported that they began working with the Green Team within two months of their release from Rikers Island (see Figure 3). Eighty percent of respondents began working immediately (within days) after release, and 60 percent began their internship within one month. The average length of time working with the GreenTeam was twenty-two months, and respondents, and internships ranged in time from a few weeks to four years of working. Most respondents reported that they worked full-time with the GreenTeam for the first few months after release and then worked only seasonally or on specific projects while they pursued other employment opportunities with support from the GreenTeam staff.

Respondents repeatedly stated the difficulty of finding quality employment with a record of incarceration: *“I can’t work because of my felony,” “I am not able to get jobs now because of my record.”* The possibility of working with the GreenTeam immediately after release is seen as a very attractive opportunity, and participants discussed how they planned on participating in the internship while still participating in the GreenHouse (*“I knew exactly that I was going to call John [Director of Green Team] when I got out”*). Because relationships with the Horticultural Society begin during incarceration, participants feel a connection to the internship program and are comfortable contacting the staff after their release, because they know who they are, how they work, and that they are flexible.

Lisa⁶ has been incarcerated frequently throughout her entire adult life. Her last sentence was completed about a year ago. During her eight months on Rikers Island, she participated in the GreenHouse program for approximately five months. Since her release, she has moved frequently between homeless shelters and participates in substance abuse programs and meetings. Because of the instability of her living situation and frequently scheduled appointments with doctors and case workers, she discussed how the internship’s flexibility and the GreenTeam staff’s understanding has allowed her to maintain her employment: *“Their understanding that my days that I cannot show up due to another appointment [is the most beneficial part of the Green Team]- there’s no repercussion for that. They totally understand... sometimes I come home and find a notice on my bed that evening, which means there’s a scheduled appointment the very*

⁶ Names and identifying characteristics have been changed to protect the privacy of participants.

next day. That's how it works in the shelter. They're very understanding about that. I'd like to be there every day, but there are times that I can't because of my circumstances. Another job probably would have fired me for that."

Like Lisa, Maria had a very busy schedule after her release- a young, single mother with limited options for employment, she stated that she began working for the GreenTeam immediately after her release from Rikers Island because it was a very simple and easy process: *"All you have to do is give them a call- talk to them and let them know when you're available."* Maria continued, *"You get immediate help. You tell them, 'I don't have a job,' and they'll say 'come tomorrow, you can help with this project.' [It's] an immediate jumpstart... this doesn't exist on the outside, too much."* This sentiment was repeated throughout many of the interviews, and respondents reiterated the point about the ease with which they could begin interning when they were ready.

Creating Connections

This possibility of immediate employment was bolstered by the connections that participants felt with the staff of HSNY. Almost every respondent spoke about the positive attitudes and atmosphere of the GreenHouse and Green Team programs and how the program staff cares unconditionally about the participants (*"They treat you with dignity, and it works!"* and *"They care. They care. That's the way it is... because when you have a problem and you call to talk to John [GreenTeam Director] or talk to Jiler [GreenHouse Director] and they'll talk to you. There's help. You can reach out."*). Phone

calls made by GreenHouse and GreenTeam staff to check-in were the most frequently cited activity used to attest to this personal attention.

Michael struggled with substance abuse for many years and has been incarcerated at both the City and Federal level over ten times. In the past fifteen years, he was consistently in and out of jail or prison except for the past year and a half that he's been working with the GreenTeam and his recently acquired new job (also in horticulture). He credits HSNY with his year-long sobriety and introducing him to what he considers his passion of working with plants: *“Everybody at the Hort [HSNY] have been very supportive of me. They helped me a lot along the way. If I needed something, they'd go out there and are ready to help me. They didn't hesitate... The people at the Hort are there if you need them- they're like family.”*

One participant, Joe, reported that most of the people participating in the programs did not have a solid and supportive connection to family and positive communities before or during incarceration. During reentry, this lack of positive connections intensifies an already difficult and stressful situation. In the GreenHouse, relationships are created with the Director and Horticultural Therapist, and even the Corrections Officers who are assigned to the GreenHouse form positive relationships with prisoners. Being able to maintain those connections during reentry is invaluable: *“After Rikers, the next day, I missed it [the gardens and the positive atmosphere], so I wanted to come to work the very next day... They give you a chance here, and it worked.”* Joe has worked off and on with the GreenTeam for about two years, and says that coming back *“wasn't really hard to do,*

not complicated, because they work with your schedule and your needs... Everybody looks out for you. That's what it is. It's like totally different... it's the positive atmosphere."

A female participant in her forties, Robin, participated in the GreenHouse for seven months about two years ago. For five years prior to that incarceration, she spent every other month in Rikers Island for possession of crack cocaine. After working in the GreenHouse, Robin decided to begin working with the Green Team immediately after her release. She also spoke confidently about the value of creating connections with the program staff: *"It's going on two years now, and I've had no trouble with the law, and I'm grateful for that. I have the Horticultural Society on my side... I like being part of the Horticultural Society. Everyone there has good ears- they're there for me. That listening and respect helps people like me blossom and flower."*

Frequent mentions of the ability to return to the Green Team were also noted (*"You know you can come back. That's what makes it work. They'll be there."*). The Green Team may be one of the first positive communities that participants are exposed to, and knowing that they can return at any time to work, receive help with their resumes or job searching, or simply to just say hello was repeated throughout all of the interviews as one of the most valuable aspects of the programming. Respondents that no longer work with the GreenTeam spoke often about their continuing connection with program staff. They stated the importance of having unconditional support without a timeline: *"Even if I'm not here all the time, James is always calling and checking up on me. Hilda*

[Horticultural Therapist] and John are checking up on me. Checking in to see if I'm okay, if I need anything... The greatest thing is that they are a network. If you ever need them they are there. Even if I'm ten years gone, I know I can call James and he'll be there for me. He'll help me find work, whatever I need. If I need to come here and work on a resume, I can do that. I know they've got my back if I need it."

This concept of the ability to come back to the GreenTeam and HSNY staff resonated with all of the respondents. Past participants that have completed their internships and found employment spoke about the accessibility of the staff and their appreciation of help with resumes and job searching. Joe has been back frequently to use the computers at the HSNY offices and work with staff on his resume: "*Whenever I need my resume redone, they kept my files and have computers that that I can use when I need to... I use their great library... look for resources that I can use for my next job.*"

Dorothy participated in the GreenHouse over five times during different stints at Riker Island. It wasn't until her last incarceration, in 2000, that she decided to join the Green Team. Since that time, Dorothy has been successful in her sobriety and employment- she created and runs her own horticulture business, teaches, and volunteers on Rikers Island to inspire other women to empower themselves. She describes her experience in the internship during resume building and employment workshops: "*We were working on resumes and job searching. I'd come in and we'd build my resume. They'd send me out on interviews. I made phone calls that John or Jiler had referred me to. I'd go in for interviews, and I'd get the job!*"

Dorothy, Joe and many other former Green Team interns continue to be a part of the HSNY network. Of course not all past participants keep in touch; however, it is a small minority, and GreenTeam staff dedicates much time and energy to keeping lines of communication open and offering support for all former participants, regardless of situation or time lapsed.

Role of Horticulture

Very few of the respondents had any gardening or horticulture experience prior to their time in the GreenHouse. However, each participant spoke of the beneficial aspects and value of working with plants and being in the gardens in the GreenHouse and while working outside with the GreenTeam. Many of the respondents spent most of their lives in the low-income communities in New York City and had little interaction with green spaces (“*You see dirty lots and just concrete in the neighborhoods that I grew up at. There, there wasn’t really much of a garden anywhere*” and “*I only used to see brick and concrete and garbage. People in the inner city don’t see nature and trees, can’t smell roses or lilies. Working with the GreenTeam, you can get that. You can have that.*”).

Learning about botany and how plants work, and then physically planting and caring for the gardens allowed participants to have experiential education that transcended horticulture. Rebecca was last at Rikers and the GreenHouse about seven years ago. Since learning about horticulture and working with the GreenTeam, she has been working very successfully for the New York City Parks Department. Before her last time

at Rikers, Rebecca struggled with substance abuse and lived on the streets and in and out of jail for many years. Her voice softens when she describes the first time she walked into the GreenHouse program's gardens: *"I grew up in the Lower East Side... Then I lived in the Bronx. Basically, everywhere I went, where were the middle to lower class neighborhoods, there's not much garden designs like the one I had seen at Rikers. And the ducks. And the rabbits. It was like I saw life in a whole different way. I started waking up- seeing things."* Rebecca said that this continued after her release: *"Working with the GreenTeam and learning about plants and learning more about life- it made my spirit lifted. It lifted up my spirit just being with plants. My whole life changed. I was around plants and beautiful things. I started being more aware of what life is about. You know, I started noticing the trees and the birds. It just... it was a whole new world for me."*

Almost all participants related stories about how working with plants is consoling and soothing (*"I'm more calm now. I used to be fast to fight, but now I'm calm [after participating in the GreenHouse and GreenTeam]"*) and *"There's just something about that soil. It relaxes me."*) and helpful in channeling emotions into positive action. The most common metaphor that was brought up in multiple interviews was the experience of digging up plants. For example, *"You get a lot of frustration out when you're digging a hole- it's like 'this person made me mad, let me dig this hole' and as time goes by, you forget what you were frustrated and mad about. [Horticulture] taught me a lot of positive things to do in my life."*

All of the respondents spoke about their transformative experiences in the GreenHouse and how they were able to retain many of those new perceptions and feelings once outside because of their involvement with the GreenTeam. As stated previously, most of the respondents did not have experience with gardening and many lived in communities with little access to quality green spaces. Spending time in the GreenHouse on Rikers Island awakened a latent appreciation for nature in many participants: *“What I really liked was when I was at Rikers, and working with the GreenTeam, it’s serene. There’s something about it that just calms you down and makes me feel good.”*

Horticultural metaphors came easily to respondents when describing how the programs have affected their lives. Robin spoke about how she learned to plant marigolds around her fruits and vegetables in order to prevent pests- they don’t like the smell of the flowers. Later in the interview, when describing how she had to leave her old friends and community behind in order to *“plant the seeds for change,”* she laughed and realized that her new friends and the HSNY staff were acting as her own personal marigolds.

Horticulture seemed, to many participants, the perfect field for them. This was especially true for most after spending time in the gardens and GreenHouse on Rikers and having their interest sparked in not only the learning about the science and practice of horticulture but later learning the employment opportunities that they could pursue after their release. Many of the respondents did not have quality or legal employment prior to their incarcerations, and knowing that they could find that within this field was exciting. As Dorothy said, *“I always hustled, so I never earned an honest paycheck, because I*

always did a crime. [Working for the GreenTeam] was just turning over a new leaf. Literally, [laughs] turning over leaves! Working with my hands and liking what I do. The work was exhausting, but I need that. I needed that to take some of the negative energy and turn it into something positive.”

Participants acknowledged that learning how to plant and prune, mulch and compost, also taught them many life lessons, such as patience and caring. This connection between nurturing and planting is intrinsic in the practice of horticulture therapy. Learning to care for a plant offers lessons quickly- if you don't go back to care for a plant, it will die; if you take care of a plant and nurture it, you will see it grow and blossom. The results are tangible and participants are very responsive to the concept. Robin echoed this principle when she spoke of learning patience while working with the GreenTeam: *“You also learn patience. You can't rush it. Plants need time. You can't just throw a tree in anywhere. You have to turn it and make sure it's level, which side will get sun. You have to make sure there are no air bubbles when you put it in the ground.”* Learning to care for plants has been a successful way to engage people who are cut off from their families and communities and help them relearn how to care for themselves and others. Dorothy credits this lesson with changing the way she relates to everyone around her, and she said, *“It's about learning to care for things... for living things, not just plants... If you can care for a plant, you can care for a person.”*

Perceptions of Self on Reentry to Communities

Each respondent was asked to describe how they viewed themselves and their role in their communities before and after participating in the GreenHouse and GreenTeam programs. No respondent reported that they felt like a positive force in their communities prior to their incarceration. Most participants remember feeling disconnected and some even avoided being outside in their neighborhoods during the day. Every respondent reported that they now feel proud of the work that they do (whether or not they continue to be employed in horticulture). Several cited the example of compost in the garden. In the GreenHouse, they learn about the value of compost—waste and scraps of food or plant material that aren't going to be used—and how this waste product is the most nutrient-rich ingredient you can use to create a beautiful garden. This principle of recycling something negative into positive was used throughout the responses to describe how perceptions of self were transformed by working on green spaces throughout New York City.

Rebecca, who lived on the streets for years, recalled her experience:

“I wasn't really engaged [before] in my community. I was always in the neighborhood, but I wasn't doing anything positive. I was going into stores and stealing stuff. Plotting how to get money for drugs... I didn't even know what day it was. I lost days. I was just living until the next drug. I was a walking zombie... [Now], when I come out, people in my neighborhood know what I do. I feel so good. I feel helpful and I feel good when people ask me my opinion... People in my community see me working and stuff like that makes me feel great. It makes me feel like I'm actually a part of the city.”

Other examples of this change included the following: *“I was just hanging out on the corner doing that. You know, the Hort and this internship really helped me out because it gave me a chance to really work and be positive”* and *“Once you see what you've done...*

and then come back and see our finished product, we think 'we are a part of that!' Most people were looking at us [in the past] like we were a piece of shit or whatever, and now they're looking at us and saying 'wow, look at all of that creativity.' We turned something negative into something positive. And we get to see what we're capable of..."

Working with the GreenTeam to create public and private gardens has also allowed participants to re-engage with the people in their neighborhoods or the neighborhoods in which they are working—an activity that was avoided prior to participation. However, in their capacity as horticulturists, they are now in a much different position, because they are on the receiving end of praise and admiration. This source of feedback, many times from strangers, was recalled repeatedly with remarks about how rewarding they find the work: *"It felt so good- people seeing me with my tools on my side...a lot of women are in the landscaping business and there are good jobs out there...it's something that you can feel good about and make money at the same time...This is what I want to do with my life...When I see [a garden I've worked on] I can look at it and smell the flowers, it feels like an extension of me. It's part of me..."* and *"It's so rewarding. People will say such nice things., and I'll say 'thank you, it's my pleasure.' It's such a good feeling. It's a reflection on me, and I like that."*

Many participants now actively participate in community gardens near their homes. They've formed new relationships with other gardeners in their communities, and a few spoke of getting private clients after being seen working in a garden. One participant had many stories of strangers approaching her about her work:

“I’ve gotten a lot of my own clients—private clients through seeing what I was working on. You would never think there were so many nice people left in New York—but there are some decent people in this city! That’s another thing I like about this work: a lot of people—strangers—will come up to me and say ‘Oh, it looks so nice. Thank you for doing this.’ It’s a very rewarding job... Seeing the looks on other people’s faces when they see the finished project... And it’s going to be there forever, and I can bring people to look at it. [I’m] trying to leave my name, leave a positive mark on the city.”

Participants talked easily about how proud they are when they complete a garden, and many spoke about how they feel they are adding beauty to the city and making it a healthier place- bringing up this concept of caring and nurturing on a larger scale. Many respondents spoke about visiting gardens that they worked on in the past just to see if they were being maintained and check on plants they cultivated. They also spoke of the pleasure they felt when seeing other people enjoying the gardens: *“We worked on gardens, gazebos, making places beautiful—places where someone can sit down and feel calm...that makes me feel good...I feel pride in all of my work...I look at myself as a role model now.”*

Not every respondent has had an easy time during reentry— many have struggled with relationships, housing, and substance abuse. However, each respondent spoke about how immediate employment with a program that they knew and trusted, in a field that they were interested in and enjoyed, helped them immensely to reenter their communities and reshape their lives. Maria calls this *“the GreenHouse effect. It lifted my spirits- knowing that all is not lost. When you come back to society, you’re forgotten. Everybody deserves a next step, another chance... you’ve messed up, paid up, now move on.”* Each of the respondents interviewed recognized the bridged programming between the GreenHouse

and GreenTeam programs as a vehicle for them to move on and move forward in a positive direction.

Limitations

Using this method of semi-structured interviews has inherent limitations in collecting unbiased data. Respondents who were no longer working with the Green Team were contacted because the HSNY staff has their contact information. Therefore, participants who elected not to keep in touch with program staff were not contacted, because their location and contact information was unknown.

At times during interviews, some respondents repeated what seemed to be prepared verbal scripts— repeating lines that they’ve heard and used before about how to maintain sobriety and remain positive in difficult situations (“*You’ve got to learn your triggers and change your friends*”). It’s unclear if these respondents repeat these lines to themselves as a coping mechanism, if they strongly believe in these concepts, or if they have been in many different therapeutic settings and think this is the “correct” response to questions about their lives. For example, one respondent reported their success in maintaining sobriety since release and spoke of how the Green Team has helped during the reentry process to keep them “*on the straight and narrow.*” Shortly after that particular interview, the respondent committed a low-level crime (it did not result in incarceration but did yield a sentence in community service). It’s possible that this respondent was being honest in the interview and was making progress or that the respondent was struggling and didn’t want to admit this weakness. It’s also possible that the participant was making

progress and doing well and then another factor (substance abuse, unstable housing, etc) waylaid their best intentions.

Because interviews were semi-structured and allowed for divergent topics to be discussed, answers to previously designed questions varied in clarity, making it difficult at times to compare and contrast responses. Each respondent had a different rapport with the interviewer and some were more forthcoming with personal experiences than others. A few interviews went on longer than the others because the respondent wanted to continue the conversation. In these situations, stories and personal reflections emerged after the scheduled questions had been asked and the respondent was asked if they'd like to add anything else—many times respondents brought up different experiences in an attempt to prolong the interview. For respondents that didn't have this amount of time to devote to the interview, their responses may not have shared the depth of longer interviews.

Rates of Recidivism

In order to ascertain recidivism rates for the participants of the GreenHouse and Green Team programs, New York State Identification numbers (NYSIDs) were collected by the HSNY staff and submitted to the New York State Division of Criminal Justice Statistics (DCJS). DCJS tabulated and aggregated unsealed convictions post-release from Rikers for 519 formerly incarcerated people who participated in both the GreenHouse and GreenTeam programs. In order to have a uniform sample, only people who participated fully in the GreenHouse program for at least three months were included in the data set.

This is to ensure that the sample was composed only of participants who received the same amount of programming and education through the HSNY GreenHouse program prior to release and interning with the GreenTeam.

This data was segregated into four categories: convictions within three months of release, within one year of release, within three years of release, and after three years post-release (see Table 2). The most often cited national statistics consider rearrest in recidivism rates. However, after discussing recidivism with HSNY staff and program participants, it became clear that arrests are not good indicators in New York City, because there are often “sweeps” of arrests that rarely result in convictions. This study looked specifically at convictions as indicators of return to crime and possible reincarceration.

The 2002 Bureau of Justice report discussed in the literature review section of this study found that of 272,111 prisoners released in 1994 (representing two-thirds of all released prisoners in the U.S. at that time) from fifteen states, 67.5 percent were rearrested within three years post-release, 46.9 percent were reconvicted, and 51.8 percent were back in prison (see Table 3). Within one year of release, 21.5 percent were reconvicted and 36.4 percent were reconvicted within two years (Langin & Levin, 2002). A 2007 report published by the New York State Division of Criminal Justice Statistics found that of people released from incarceration in the New York State Department of Correction Services in 2004, 32.2 percent returned to prison within three years because of new felony convictions or rule violations (NYS DCJS 2007). The number of reconvictions is higher than that 32.2 percent, because there is typically a large number of convicted

persons who do not return to jail, but might be sentenced to community service or prolonged probations.

Data Analysis

Table 2: Reconviction Rates for GreenHouse and GreenTeam Participants

Program	Total Number of Participants	Convictions Post-Release							
		3 months		1 year		3 years		> 3 years	
GreenHouse	519	28	5.4%	75	14.5%	114	32.5%	21	6.0%
GreenTeam	49	3	6.1%	5	10.2%	8	25.0%	1	3.1%

Table 3: Reconviction Rates for General Prison Population, 1994

Convictions Post-Release		
1 year	2 years	3 years
21.5%	36.4%	46.9%

Source: Langin & Levin, 2002

Table 2 shows the aggregated data for GreenHouse participants and formerly incarcerated people who participated in both the GreenHouse and GreenTeam post-release. Release dates ranged from June 1999 to December 2007. During these eight and a half years, forty-nine GreenHouse participants also interned with the GreenTeam, totaling 9.4 percent of the entire GreenHouse/GreenTeam bridged programming population. Within the first three months after release, 28 of the people who only participated in the GreenHouse had convictions (5.4 percent), which is comparable to the 6.1 percent of GreenTeam participants who had convictions within the first three months of reentry.

Within one year, of the 519 participants of the GreenHouse, there were 75 people with convictions post-release (14.5%). Of the 49 GreenHouse/GreenTeam participants, there were five cases of post-release convictions (10.2%). Between three months and one year

after release the percentage of people with convictions who participated in both programs was 9.1%, and 4.1% for GreenTeam participants.

In order to analyze conviction records for three or more years after release, participants who were released after 2005 were not included in the analysis. This left 351 total GreenHouse participants. Of these participants, 32 participated in the GreenTeam as well. Approximately 11 percent of those that participated in only the GreenHouse program showed convictions between one and three years after release from Rikers Island (the total percentage of convictions within three years post-incarceration was calculated to be 32.5%). Of the 32 GreenTeam participants who were released prior to 2005, three participants had convictions between one and three years after release.

Overall, GreenHouse and GreenTeam participants had significantly lower reconviction rates compared to the Bureau of Justice and New York State Division of Criminal Justice Statistics (see Figure 4). The data concerning GreenTeam members comprises a comparatively small sample size (49 participants compared to the 519 GreenHouse participants) and this limits the accuracy of the analysis. However, based on the post-release conviction data for each timeframe and overall, the collected GreenTeam data decisively shows that those who participated in the post-release internship had significantly lower reconviction rates than those who only participated in the GreenHouse program.

Figure 4: Reconvictions Post-Release for GreenHouse and GreenTeam Participants

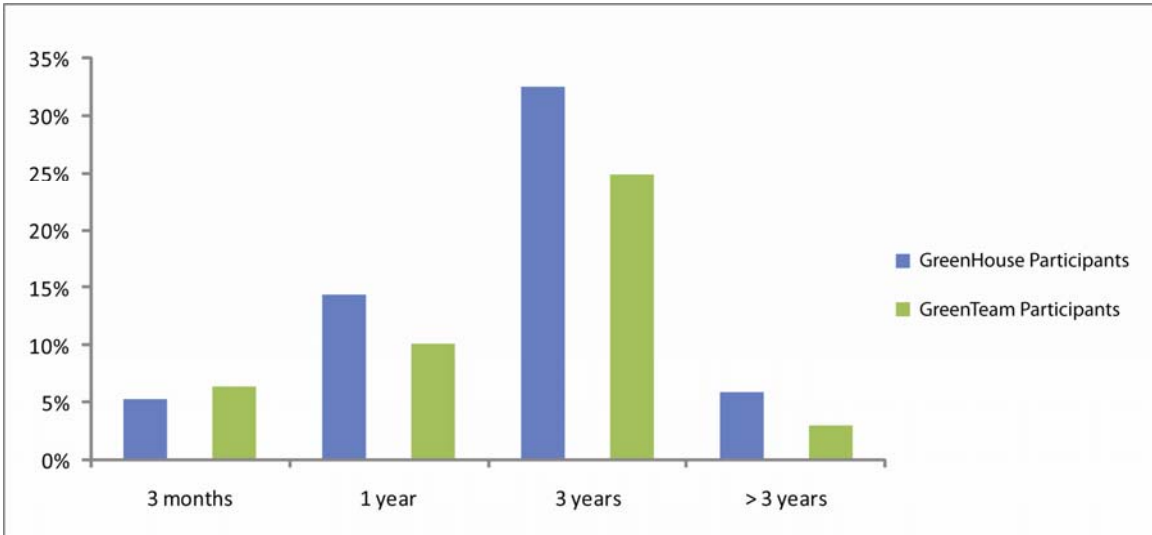
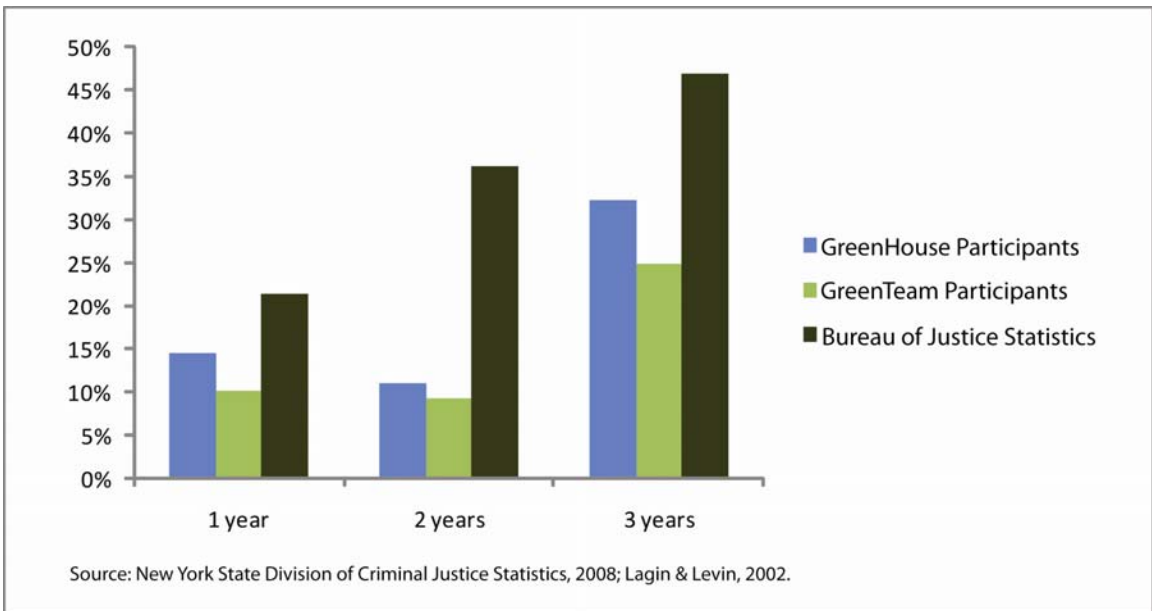


Figure 5: Reconvictions Post-Release for GreenHouse and GreenTeam Participants, Compared to General Incarcerated Population



As stated in the literature review section of this study, the first three months of reentry are often the most difficult, and this is the time where studies show there is the highest recidivism. The data collected in this study shows that there was a higher rate of recidivism in the first year, but not necessarily in the first three months for participants of the GreenHouse and GreenTeam programs. In fact, the first three months showed a very low rate of recidivism (5.4 percent for GreenHouse and 6.1 percent for GreenTeam participants). When looking at data from three years or more after release from Rikers Island, only one participant of both programs had a record of convictions (3.1 percent).

Limitations

At least eight of the NYSIDs for formerly incarcerated people were recorded incorrectly by GreenHouse staff. It is possible that not all program participants were included in the data analysis because HSNY did not have accurate records of participant NYSIDs. HSNY does have the names of every participants, however DCJS did not have adequate time to match names with NYSIDs. This process could take months because in order to match case files, DCJS needs to do extensive research into physical characteristics and sealed data that requires different levels of access.

It may be difficult to compare conviction records post-release with commonly used recidivism data, because national statistics frequently use arrest records as evidence of recidivism. However, in order to research the efficacy of the GreenHouse and GreenTeam programs, it was decided that convictions records are more indicative of rates of success than arrests.

Discussion and Recommendations

This study showed a positive correlation between bridged programming and successful reentry post-incarceration. My review of the GreenHouse and GreenTeam programs leads to the conclusion that linking incarceration and post-incarceration programming has had a beneficial effect on the program participants and has allowed for unique opportunities of employment, reentry, and reconnecting people and place. Besides offering immediate employment post-release directed by people that program participants know and respect, two components of the bridged programs seemed to have assured success: work based in horticulture and continuous and unconditional individual support.

The HSNY programs work with fairly small populations and with low ratios of staff to participants. The size of the programs is an asset, because the kind of individual attention that each participant receives would be difficult to replicate with much larger populations without associated increases in trained staff members. In order to replicate and scale-up bridged programs, based on the HSNY model, the following recommendations are proposed:

Policy Recommendations

- State and Federal Departments of Correction should implement reentry programs that begin as soon as prisoners begin their sentences and carry through to reentry, possibly tapping into the Federal Prisoner Reentry Initiative funding. The recently passed Second Chance Act of 2007 authorizes a variety of grants aggregating up to \$165

million to government agencies and nonprofit groups to provide employment assistance, substance abuse treatment, housing, and other services to help reduce recidivism. This Act recognizes the value of programming and partnerships to reduce recidivism, but doesn't contain any language requiring or suggesting reentry programming that begins immediately upon incarceration and is bridged with programming and/or employment after release.

- Communities that have disproportionately high levels of incarceration should be targeted as reinvestment areas where interventions to decrease poverty, increase education, and increase quality employment should be implemented, disrupting the cycle of recidivism and preventing incarceration for the younger population.
- “Green Collar” job initiatives should include provisions specifically for returning prisoners, as well as currently incarcerated populations that will be released in the future. This may include programming during incarceration that teaches horticulture, building retrofitting for energy efficiency, green technology installation, environmental remediation, as well as post-incarceration employment and/or internships linking these new skills with public utilities, government agencies, and private and nonprofit companies in need of a trained and qualified workforce. The Green Jobs Act of 2007 authorizes up to \$125 million in funding to establish national and state training programs to be administered by the U.S. Department of Labor. This Act was created to address workforce shortages that may be impairing the development of green industries. This Act, combined with

legislation requiring climate change mitigation (energy efficient buildings and construction, renewable energy, etc) would encourage the development of new employment opportunities. This combination would complement reentry programming that incorporates green job training and green jobs, and ultimately may decrease unemployment, reduce recidivism, and allow cities to mitigate climate change on a large scale.

Recommendations for Future Research

- Further study of bridged programming is necessary in order to determine whether the HSNY programs are an isolated success and whether the GreenHouse and GreenTeam programs have best principles and practices that can be replicated and brought to scale throughout the country.
- More in-depth study of HSNY programs including more time for data collection by HSNY staff and for DCJS to gather the full data pool of participants, given names instead of inaccurate NYSIDs, would result in more accurate research. Also, with more time, further interviews can be conducted and a wider range of participants may be reached, including those that do not currently keep in touch with HSNY staff.

GreenHouse Program Recommendations

- Better record keeping should be implemented into the program; perhaps each new student should fill out a form with their NYSID, name, and contact

information. At this time, a pre-participation survey could also be administered to gauge participants' interests and backgrounds.

- The opportunity to join the GreenTeam after release should be better integrated in the program curriculum. This could be achieved with the distribution of a simple flyer explaining the program to all participants.
- After analysis of the GreenHouse surveys in this study, questions should be redesigned to better assist program staff with useful, quantitative and qualitative data to inform program direction and offerings.

GreenTeam Program Recommendations

- All current and former participants' names and contact information should be kept in a database accessible to HSNY staff.
- Surveys and participant performance reviews should be conducted every few months in order to evaluate and monitor program and individual successes and challenges.
- HSNY staff should hold regular job fairs or conferences to bring employers and interns together, as well as possibly leading partnerships with other nonprofits, City agencies, and private sector involvement in programming for formerly incarcerated people (this can be a part of a green collar job initiative).

- Former interns who have found success should be involved as mentors for current interns.
- Interns with skill and interest should be incorporated as partners in the internship program with increasing responsibility for teaching, as well as procuring contracts for income generating projects.

Conclusion

Recidivism rates for formerly incarcerated people who participated in the bridged programs of the GreenHouse and GreenTeam are much lower than reconviction rates published by the Bureau of Justice and the New York State Division of Criminal Justice Statistics. However, as discussed previously, recidivism data should not be the only indicator of successful reentry after incarceration. The qualitative interviews conducted for this study reveals that GreenTeam participants rely upon the internship program for employment as well as supportive networking that builds upon the skills and relationships formed while participating in the GreenHouse program during incarceration. Surveys collected prior to release from Rikers Island of GreenHouse program participants show, unequivocally, that participants perceived the program as a positive influence on their lives, introducing them to the field of horticulture and the benefits of working in the field. Interviews reinforce this concept and add the personal experiences of former participants who credit the bridged programming with their successful reentry to society and reconnection with their communities and the city.

The Horticultural Society of New York's GreenHouse and GreenTeam programs offer an exciting case study of an innovative model of a horticulture therapy program that begins during incarceration and is linked to horticulture employment post-release. The findings of this study show that program participants not only gain the capacity to transform their lives but also positively affect the city and reconnect with their communities.

Bibliography

Austin, James, Eric Cadora, and Michael Jacobson. *Building Bridges: From Conviction to Employment, A Proposal to Reinvest Corrections Savings in an Employment Initiative*. Criminal Justice Programs, Council of State Governments, New York: Council of State Governments, 2003.

Bazell, R.J. "Urban Health and Environment: A new approach." *Science*, December 1971: 1005-1006.

Harrison, Byron, and Robert Carl Schehr. "Offenders and Post-Release Jobs: Variables Influencing Success and Failure." *Journal of Offender Rehabilitation* 39, no. 3 (2004): 35-68.

Huges, Timothy, and Doris James Wilson. *Reentry Trends in the United States: Inmates returning to the community after serving time in prison*. August 20, 2003. www.ojp.usdoj.gov/bjs/reentry/reentry.htm#highlights (accessed December 2007).

Jiler, James. *Doing Time in the Garden: Handbook of Prison Horticulture*. Oakland: New Village Press, 2006.

Langan, Patrick, and David Levin. "Recidivism of Prisoners Released in 1994." Bureau of Justice Statistics, US Department of Justice, Washington, DC, 2002.

Lawrence, S., D. Mears, G. Dublin, and J. Travis. "The Practice and Promise of Prison Programming." Justice Policy Center, The Urban Institute, Washington, DC, 2002.

Liptak, Adam. "1 in 100 U.S. Adults Behind Bars, New Study Says." *New York Times*, February 28, 2008.

Martinson, R. "What Works? Questions and Answers About Prison Reform." *The Public Interest* 35 (1974): 22-54.

Mauer, Marc. "Thinking About Prison and its Impact in the Twenty-First Century." *Ohio State Journal of Criminal Law* 2 (2005): 607-618.

Moses, Marilyn C., and Cindy J. Smith. "Factories Behind Fences: Do Prison 'Real Work' Programs Work?" *National Institute of Justice Journal*, no. 257 (2007).

"Offender Re-Entry: 2006 Crimestat Update." New York State Division of Criminal Justice Statistics, 2007.

Petersilia, J. *When Prisoners Come Home: Parole and Prisoner Reentry*. New York: Oxford University Press, 2003.

Petersilia, Joan. "What Works in Prisoner Reentry? Reviewing and Questioning the Evidence." *Federal Probation, a journal of correctional philosophy and practice* 68, no. 2 (2004).

Rice, Jay Stone. "Self Development and Horticultural Therapy in a Jail Setting." PhD Thesis, The Professional School of Psychology, San Francisco, 1993.

Simson, Sharon, and Martha C. Straus. *Horticulture as Therapy: Principles and Practice*. New York: Haworth Press, 1998.

Solomon, Amy L., Kelly Dedel Johnson, Jeremy Travis, and Elizabeth C. McBride. "From Prison to Work: The Employment Dimensions of Prisoner Reentry." Reentry Roundtable Report, Justice Policy Center, The Urban Institute, Washington, DC, 2004.

Travis, Jeremy. *But They All Come Back: Facing The Challenges Of Prisoner Reentry*. Washington, DC: The Urban Institute Press, 2005.

Travis, Jeremy. "In Thinking About 'What Works,' What Works Best?" Justice Policy Center, The Urban Institute, Washington, DC, 2003.

Tucker, Susan B., and Eric Cadora. "Justice Reinvestment: to invest in public safety by reallocating justice dollars to refinance education, housing, healthcare, and jobs." *Ideas for an Open Society* (Open Society Institute) 3, no. 3 (November 2003).

Appendix A: GreenHouse Participant Survey

1. After working in the greenhouse (maintaining plants, watering, seeding), I have experienced the following changes in skill development
 - a) no change because there is no interest in task
 - b) interest in task but no change in learning method
 - c) small change noticed but not defined
 - d) change noticed in terms of skill development, interest in more learning, etc
 - e) not applicable

2. After working in the garden pruning and spring cleaning I have experienced the following changes in skill development:
 - a) no change because there is no interest in task
 - b) interest in task but no change in learning noticed
 - c) small change noticed but not defined
 - d) change noticed in terms of skill development, interest in more learning, etc
 - e) not applicable

3. As a result of working in the greenhouse I have learned a new skill or have knowledge that for me is:
 - a) not at all important
 - b) a little important
 - c) important
 - d) very important
 - e) not applicable

4. The newly obtained skills and knowledge about pruning and spring cleanup for me have the following meaning:
 - a) no meaning, because I don't plan to use this skill after release
 - b) I don't know yet
 - c) I want to use it in my free time for my garden or my houseplants
 - d) I hope to use the skills for a career after learning more
 - e) It showed me that I can learn new things if I want to

5. After one month of work in the garden/greenhouse I had the following physical sensation when I returned to the housing area:
 - a) I felt more tired
 - b) I felt sore and weak
 - c) I felt relaxed and less anxious
 - d) I felt energized and strong and clear-headed
 - e) Not applicable

6. After completing my time in the garden/greenhouse I think differently about my health:
 - a) There is no change in how I think about my health
 - b) I want to be more caring with myself, but don't know how
 - c) I am inspired to use more fresh ingredients for cooking, because I saw how they grow and can be used
 - d) I want to learn more about the healing potential of nature
 - e) Not applicable

7. The information presented in lectures had the following effect on my interest in horticulture:

- a) Was not useful
- b) Was somewhat helpful to pass time
- c) Was very helpful
- d) Gave me knowledge and confidence in pursuing a profession
- e) Not applicable

8. Work in the garden/greenhouse gave me the following sensation:

- a) It helped me pass time only
- b) Made me focus on unhappy moments in life
- c) Helped me to develop a new perspective on my life
- d) Helped me think of positive things about life
- e) Not applicable

9. Learning and working as a horticulturist has given me the following appreciation about nature

- a) None at all
- b) I feel less appreciation
- c) I feel appreciation I had not felt before
- d) A strong appreciation of nature
- e) Not applicable

10. Learning about nature in the program has made me feel

- a) Nothing because I haven't learned anything
- b) No more interested in horticulture than I was before
- c) More interested in learning about horticulture
- d) Has given me interest to pursue a career working in the field of horticulture
- e) Not applicable

11. After participating in the program I feel horticulture has changed the way I think about work in the following ways:

- a) My feelings have not changed at all
- b) I've always liked to work and this was just another job to do
- c) Horticulture has inspired me to find work that I enjoy and that makes me feel creative
- d) I want to pursue a career in the horticulture field
- e) Not applicable

12. After performing a task (weeding, mulching, seeding...) which I never did before, I feel

- a) The task didn't change anything for me
- b) I did something which I didn't think I could
- c) My self confidence has increased
- d) I want to do more new tasks and see what else I can do
- e) Not applicable

13. Please give a number from one to five the activities you felt benefited you most in the program (one is most beneficial, 5 is least beneficial).

If you have not experienced a specific task mark N/A in the blank space.

- a) Lectures about plants and ecology
- b) Pruning trees, shrubs, hedges
- c) General clean-up and maintenance
- d) Harvesting vegetables and herbs
- e) Planting trees, shrubs, herbs, etc.
- f) Construction
- g) Taking care of a specific area (watering, planting, mulching)
- h) Greenhouse tasks
- I) Cooking food
- j) Learning names and uses of plants
- k) Making cosmetics
- l) Hanging out and socializing
- m) Developing an exit plan
- n) Learning about landscape design
- o) Taking care of animals
- p) Learning about and using tools
- q) Reading books in the greenhouse library
- r) Working on computer
- s) Arts & crafts projects (mosaics)
- t) Discussions about life

Any additional comments about your experience in the greenhouse?

Anything you care to see done differently to make a stronger program?

Appendix B: Interview Questionnaire

INTERVIEW QUESTIONNAIRE FOR FORMER PARTICIPANTS OF THE
GREENHOUSE PROGRAM AND CURRENT OR FORMER GREENTEAM INTERNS

Thank you for taking the time to speak with me about your experiences participating in the GreenHouse program at Rikers Island and being employed by the GreenTeam after your release. I'm working on a study of the partnership between these two programs to see if there is a positive correlation between programs that begin during incarceration and connect to employment after release. I'm interested in the ways that you feel this sort of bridge towards reentry affected your experience and perceptions after your release and ultimately whether this type of bridged programming can stop the cycle of recidivism in communities that have high rates of incarceration and poverty.

1. What is your gender?
2. What is your age?
3. Please tell me your history of incarceration.
4. What date were you last released from Rikers?
5. What date did you begin your GreenTeam internship?
6. How long have you been/were you employed by the GreenTeam?
7. How long did you participate in the GreenHouse program?
8. Where did you live before and after you were incarcerated?
9. Please describe your employment history prior to incarceration.
10. What skills did you learn in the GreenHouse that have been useful since your release?
11. In what ways does/did the GreenTeam fit into your future goals?
12. Please tell me about the way you perceived your role in community before incarceration and now.
13. Did you have a release plan?
14. What services or activities were part of your release plan?
15. In which of these services or activities are you currently participating?
16. What do you think are the most beneficial aspects of the Green Team?
17. What do you think are the most challenging aspects of the Green Team?
18. What was your income before incarceration?
19. What is your current income?

Appendix C: Consent Form for Interviews

CONSENT FORM FOR FORMER PARTICIPANTS OF THE GREENHOUSE PROGRAM
AND CURRENT OR FORMER GREENTEAM INTERNS

Dear Participant,

My name is Alison Laichter, and I am a graduate student of Urban Planning in the Graduate School of Architecture, Planning and Preservation of Columbia University. I am conducting a study, entitled **Reentry and the Role of Bridged Programming: Reconnecting Formerly Incarcerated People and Their Communities**. The objective of this study is to evaluate the outcomes of the innovative partnership between the GreenHouse horticulture therapy program on Rikers Island and the “after care” post-release GreenTeam internship program.

By investigating this unique partnership, the results of this study may contribute to further research and program implementation that begins in incarcerated settings and continues post-incarceration, allowing formerly incarcerated populations opportunities to improve their ability to be positive forces in their communities and ultimately disrupt the cycle of recidivism.

I would like to interview you about your experiences participating in the GreenHouse and the GreenTeam programs. The interview will last approximately 30 minutes. With your permission, I would like to record written notes and/or audio of this interview so that I can transcribe details accurately. These notes and/or tapes will only be read and/or heard by my advisors and me. All information will be kept strictly confidential and will be stored in a locked container in my home office. If you are uncomfortable with this interview being recorded, then you may wish to refrain from being interviewed.

Questions will include basic details such as gender and age, as well as questions regarding your perceptions about the GreenHouse and GreenTeam, your history of employment and incarceration, and your future goals. I may also ask you subsequent questions based on your answers to the preliminary topics. You can refuse to answer any question without penalty and should feel free to ask me to clarify anything that seems unclear or confusing. You may also discontinue your participation at any time.

I may publish results of the study, but names and any identifying characteristics will not be used in any of the publications without your permission. I may show the transcripts and my notes (without any identification) to my advisors and the committee that supervises my research.

Participating in this research will not present any risks to you. The foreseeable benefit is the opportunity to reflect on your experiences with the GreenHouse Project and Green Team. There will be approximately 15 people participating in this study.

I will answer any inquiries you may have concerning the goals of the research and the research procedures. I will provide a summary of the results of my research if you so request. If you have questions about the research you can contact me by email at ajl2140@columbia.edu or my advisor, Dr. Gretchen Susi, at 212-677-5510 ext. 31, or by email at ges2122@columbia.edu. If at any time you have comments regarding the conduct of this research or questions about your rights as a research participant, you should contact the Columbia University Institutional Review Board by email at askirb@columbia.edu, by phone at 212-851-7041, or by fax at 212-851-7044

Thank you for your time and consideration. I will give you a copy of this form to take with you.

If you agree to be interviewed, please sign below:

I _____ agree to participate in this research.

(please your print name)

Participant's Signature

Date

Signature of Researcher, Alison Laichter

Date

I agree to have this interview taped, please circle one:

Yes

No

Appendix D: Theoretical Framework

