

Greening Programs to Facilitate Prisoner Reentry

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February 1, 2015

Inspiration and Dedication

This paper was inspired by Yusuf Burgess, Richard Carter, Michael Gray, and Ray Gant who saw the power of nature in their personal struggle to reintegrate into their communities following incarceration, and who used their own experiences to initiate greening programs for other former prisoners and for youth at risk of being incarcerated.

This paper is dedicated to Brother Yusuf Burgess, who passed away prematurely in December 2014, in the midst of his important work. Brother Yusuf served our country in Vietnam, served time in prison, and served his God through connecting people to nature. He helped youth experience the power of nature and inspired professionals to see the importance of connecting individuals in stressed communities to nature. We hope this paper is one small contribution to carrying on the work of Brother Yusuf. Thank you Yusuf Abdul-Wasi.



Yusuf Abdul-Wasi

Acknowledgements

We thank Akiima Price for introducing us to the importance of nature and prisoner reentry. We also thank Akiima Price and Richard Carter for critical review of this paper and for their inspirational work to connect individuals reentering their communities with nature and greening. This work was supported by the USDA National Institute of Food and Agriculture, Smith-Lever project. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the National Institute of Food and Agriculture (NIFA) or the United States Department of Agriculture (USDA).

Abstract

How to successfully integrate individuals into society following incarceration is a critical issue facing the U.S. To address this issue, prisons throughout the country have partnered with local educators, environmental organizations, and outdoor facilities to offer programs for inmates that link environmental stewardship with vocational training and education. In addition, many greening programs exist to support inmates as they reenter society, through connecting ex-offenders with environmental restoration projects, while providing services such as ongoing vocational support, employment connections, and treatment for substance abuse.

Based on a review of the relevant prison studies literature and of programs in place in the U.S., we present the steps that are being taken to reduce barriers to reentry by means of environmental stewardship work. First, we outline the issue of reentry and the suggested models for successful reentry programs. Next we discuss green jobs and their relevance to former prisoners. The psychological, community, and economic benefits of direct exposure to nature—or what is referred to as therapeutic horticulture—are then examined, both for the prisoners and for the communities that profit from the former prisoners' contributions. Finally, we present short descriptions of some of the larger U.S. greening programs for prisoners that have successfully garnered support from the local community, enrolled significant numbers of participants, and prepared inmates for employment stability following release. While recognizing that a wealth of prison green jobs programs address other issues like green construction and energy, we focused on only those programs that include a hands-on experience caring for nature. We also recognize that there are a growing number of greening programs initiated by former prisoners that did not turn up in our search. Compiling descriptions of these important programs, which are not as well represented in the literature and on the internet, is a subject for future work in this area.

Although prisoner and reentry greening programs are spreading across the U.S., it is difficult to measure the success of such programs due to the varying circumstances surrounding each prisoner, preventing the establishment a single model experience. However, many programs are demonstrating recidivism rates for former inmates that are far below than the national average. Additionally, structural, as well as personal, barriers complicate successful reentry. As such, the use of greening in prison reentry is not offered as the ideal solution, but rather as an option for preparing inmates for life following prison that may help address individual issues that interfere with progress toward reentry.

The reentry issue

The U.S. incarcerates approximately one percent of its population—more than any other industrialized country in the world. [1] Additionally, around 3.2 percent of the population is under some type of correctional control. From 1998 to 2008, the number of incarcerated individuals in the U.S. quadrupled, from around 500,000 to 2.3 million individuals. [2] With the increased flow of individuals entering correctional facilities comes increased numbers of individuals returning to society; approximately 93 percent of the prison population will eventually be released. [3] In 2012, 56,000 inmates were released back into their communities. [4]

Reentry refers to the process of transitioning into society upon release from a correctional facility. It is a process that is often long and unsuccessful for former offenders, and complicated by barriers related to employment, housing, and social support for those with criminal records.

For example, for individuals with felony drug convictions, 38 states have a ban on the receipt of cash assistance and food stamps, including 17 states that impose a lifetime ban. [5] On an individual level, many enter prison with various needs that may not be met in prison or after release like poverty, limited education, physical or mental illness, and substance abuse.

The types of jobs that offenders can get upon release are also limited. Most states have restrictions on hiring individuals with criminal records for some professions, including medicine, nursing, law, education, and real estate. [6] Additionally, at least six states—Alabama, Delaware, Iowa, Mississippi, Rhode Island, and South Carolina—permanently ban ex-offenders from assuming jobs in public employment. [6] Additionally, prisoners have education levels far below the general population. The typical jobs that prisoners qualify for are low-skill, blue collar, or manufacturing jobs. [7] But few unskilled jobs—less than 5 percent—do not require a high school diploma or work experience. [8] Forty percent of ex-offenders lack a high school diploma and 20-40 percent were unemployed before entering prison. [8]

Without societal support, these obstacles are often difficult for an individual to overcome. Barriers in one area affect an individual's ability to attain other opportunities, further debilitating the transitioning individual. For example, two difficulties of reentry—finding housing and employment—are often dependent on one another. It is difficult to get and then keep a stable home when unemployed, and it is difficult to keep a job when homeless. Some studies suggest that the more stable one's employment is, the less likely one is to participate in criminal activities. [9] Without a job or house, many former prisoners live in homeless shelters and frequent soup kitchens, where they often encounter other ex-felons, some of whom they were with in prison. This return to familiarity often pushes prisoners back into their old, dangerous habits.

Recidivism—the return to criminal behavior following imprisonment—accounts for a large percent of prison entries each year. In fact, within three years, 70 percent of former offenders will return to prison, either for a new crime or for violating conditions of their previous release. [10] By making reentry more difficult for former prisoners, society in many ways only hurts itself. Each individual who is incarcerated costs the state or federal government approximately \$30,000 per year. [5] While these individuals are locked up behind bars, their contributions to economic growth are limited. On the other hand, when an ex-felon gets a job, he/she pays taxes and consumes, and thus increases the demand for goods and services. A former prisoner's successful reentry is thus in society's economic interests.

In the 1980s and 1990s, parole was strongly scrutinized and viewed as ineffective. This was because parole agents were having trouble finding jobs for former offenders who lacked significant employment history and necessary job skills. Before this time, parole agents were often well informed about available programming for ex-offenders, such as job training programs and drug and mental health treatment. Yet, during the 1980s and 1990s, many of these community programs also disappeared because of insufficient funding and policy changes. [11] Today, opportunities for change in the reentry process often come through the collaboration of prisons with outside organizations and funding to provide post-release training and support. Further, increased pressure is being placed on community-based corrections to offer support in the reentry process. [3]

Some prisons and community programs are adopting innovative reentry strategies and training individuals to cater to the needs of the current labor market, while addressing the offenders' personal barriers to employment. And some of these strategies include engaging

inmates and former inmates in greening programs—providing them with job skills training and with opportunities to connect with nature.

The reentry model

Reentry is one of the least understood aspects of corrections. [3] Since there is no standardized reentry plan, and reentry plans differ according to the varying backgrounds and profiles of the prisoners, there is little concrete data regarding what works. Even though control-based tools such as deterrence, incapacitation, and surveillance have been frequently used to reduce recidivism, they have not proven continued effectiveness. [12,13]

Recently, there has been a shift towards vocational programs to implement change on an individual-level. This encourages cognitive, behavioral and skill-based growth, which has been successful in some instances. Additionally, vocational programs can make prisoners seem more attractive to employers. Through these programs, offenders can build an employment history and also learn relevant technical and literacy skills and workplace norms. On average, participants in vocational programs are more likely to be employed following release, and to have a recidivism rate 20 percent lower than nonparticipants of these programs. [6]

In 2010, the U.S. Department of Justice awarded over 100 million dollars to state and local agencies to offer reentry programming. [3] As increased pressure has been placed on corrections facilities to assume a greater reentry focus, several reentry models have been proposed. Most share three distinct stages. [3] The first stage, institutional, involves a close analysis of the individual, often through assessments, in order to create a personalized plan. This plan incorporates programs and opportunities within the institution and also matches the individual to opportunities within the community. The second stage, which is called structured reentry, begins at least six months before release and continues into the first month after release. During this stage, the offender undergoes thorough preparation for reentering society. He/she designs a reentry plan, begins to establish connections within the community to address basic needs, and continues to receive any necessary treatments (e.g., for substance abuse). Finally, in the third stage called community reintegration, the former prisoner works to maintain stability, to adhere to the goals and plans he/she already established, and to slowly attain independence as a member of the community.

Green job training

According to the U.S. Department of Justice, about a third of U.S. prisons are already integrating green education and training programs, and another third are developing strategies for how to integrate such programs into their facilities. [14] Community colleges are also playing a role in this movement. Many community colleges are offering environmental science courses in correctional facilities, and some community colleges offer spots in their clean energy programs to incarcerated individuals upon release.

Reentry through programs that involve gardening and other hands-on environmental stewardship activities can be not only beneficial to the offenders' mental health and well-being, but also to society's attitudes towards the offenders—which can further boost the individuals' self-esteem. In the mid 1990s, the Vermont Department of Corrections conducted a study on citizens' attitudes towards prisoners and found that what citizens want from violent offenders is safety, accountability for the crime they committed, treatment, and involvement in decision-making. Further, they noted that they want offenders to accept responsibility for their behavior, acknowledge their wrongdoing—i.e., give an apology—and repair any harm inflicted upon

victims and the community. [15] By committing themselves to environmental work, former offenders can help “repair” the community by working towards the “repair” of the Earth.

Why green? Horticultural therapy in individual-level improvement

Prisons have a long history of using inmates as laborers on their farms to produce food. [16] This was found to be cost-effective, as well as productive for the prisoners. Today, however, horticulture is used in many settings as a form of direct or indirect therapy. In prisons, horticulture is often used as rehabilitation, providing inmates with a pastime while in prison, improving their psychological health, and preparing them with useful skills for after their release.

Therapeutic gardening has been used for decades [16] and generally follows one of two traditions: horticulture therapy and therapeutic horticulture. Horticulture therapy is the use of plants by trained professionals for achieving predefined clinical goals. Therapeutic horticulture, according to the UK horticulture journal *GrowthPoint*, refers to “the process by which individuals may develop well-being using plants and horticulture,” either through “active or passive involvement.” [17] Green prison programs involving gardening, landscaping, and any direct involvement in nature are forms of therapeutic horticulture.

Nature has been shown to have many cognitive, therapeutic, and social benefits. Viewing or taking a walk in nature has been found to mitigate stress, [18,19] improve post-surgery recovery times in a hospital, [20] and improve social and emotional well-being. [16] Additionally, interaction with plants in a garden can provide opportunities for reflection and regulating one’s emotions. [21] Studies also show that seeing or actively experiencing plants and green spaces can result in such benefits as reducing domestic violence and improving physical health. [20,22-25]

The role of nature in reducing stress is especially relevant to prisoners’ personal recovery and growth. For incarcerated individuals, the presence of plants and nearby nature can provide relief from the stress of overcrowded indoor confinement. [26,27] Gardens contrast with the society in which most prisoners grew up; the garden is a friendly, safe, and welcoming setting and plants are “non judgmental, non threatening, and non discriminating.” [16] Plants respond to care, regardless of who is providing it. Gardening can also give participants a sense of identity and status; being referred to as a “gardener” versus unemployed person or prisoner can increase self-esteem. [28] Prisoners who garden also find comfort and experience success in the growth of the plants that they tend to and care for, enhancing their self-perceptions. [16]

Recognition is an important component of how one views personal success. [29] Many horticulture programs in prisons also reward participants, whether for a job well done or in the form of a certificate upon completion of the program. This reward can further heightens prisoners’ self-esteem, and “for most of the individuals, this is their first certificate of achievement.” [29] Further, one’s knowledge of the subject matter and learned skills give the prisoner a sense of self-confidence. [28] Poor self-esteem contributes to how one treats one’s surroundings, oneself and others.

Prisoners often have broken relationships outside of prison, and live in isolation without much interaction within the correctional facilities. Prisoners find that the loss of outside relationships is one of the most painful aspects of living in a corrections facility. [30] Any sort of social engagement is thus highly valuable to the prisoner’s experience, particularly in preparing for release. Through hands-on environmental stewardship and restoration projects, prisoners join other prisoners as team members, and come in contact with clients, staff, and educators. Participants in these programs also gain experience in the management and running of the

projects. This gives the offenders a sense of civic engagement through leadership, which is particularly valuable to them, [28] and a sense of responsibility. [31] Offenders are able to maintain this sense of worth and coexistence in the community as some move on upon release to work on other community projects, such as community gardening and landscaping projects.

Example greening prison and reentry programs

In this section, we briefly describe environmental programs for prisoners and former prisoners. The examples are some of the better known, larger-scale programs that are being used as models for other prisons and organizations, but are nowhere near a complete list of such programs. We recognize that our focus on these larger programs for which information is readily available does not do justice to the many smaller efforts that are emerging in reentry communities, often initiated by ex-offenders themselves. We encourage future efforts to document a greater diversity of greening prison and reentry programs.

Insight Garden Program and Planting Justice, San Francisco Bay Area, CA

Insight Garden Program (IGP) was established in 2003 as a prison gardening program that provides green job and general job skills training to inmates at Solano and San Quentin State Prisons in California. IGP's weekly classes feature a holistic curriculum that addresses both the "inner" and "outer" gardener. The "inner" gardener is tended to through lessons that deal with



Photo: Kirk Crippens/ Insight Garden Program

concepts of transformation and change, like meditation, emotional process work, and eco-therapy. The "outer" side is developed through lessons in human and ecological systems, and in organic vegetable and flower gardening. Through its extensive programming, IGP also emphasizes overarching life skills, such as team building, leadership training, relationship building, and participatory decision-making—inmates even help co-create the curriculum of IGP classes.

IGP is able to connect its participants to opportunities for post-prison life through close collaboration with organizations like Planting Justice, a Bay Area organic food production and

sustainability training program. Planting Justice, through a project called Pathways to Resilience, already offers support to eligible current and recently released offenders in Bay Area correctional facilities who are reentering Alameda County communities. Planting Justice/Pathways to Resilience provide inmates with vocational certification, employment skills, entrepreneurial training, paid work experience, and job placement support, as well with access to an extensive network of social service providers for legal services, mental health and substance abuse support, and housing aid. Planting Justice also works with IGP to provide volunteer instructors at San Quentin's H-Unit, utilizing their first-hand knowledge to educate inmates about urban permaculture design, food justice, and sustainable food production. After prisoners are released, Planting Justice offers employment to select former inmates.

A 2011 study found that of 117 IGP participants who were paroled from 2003-2009, less than 10 percent returned to jail or prison, saving the state \$40 million.

GreenHouse, Rikers Island, NY

GreenHouse is a jail-to-street horticultural therapy program for men and women at Rikers Island founded in 1996. Rikers Island is home not only to a large prison but also to the largest farm in New York City; up to 40,000 pounds of produce are produced each year on the island. [32] Under GreenHouse, inmates enroll in courses on plant and soil science, work, undergo horticultural therapy, and receive vocational training. At Rikers Island, the program has its own greenhouse, classroom, and over two-and-a-half acres of landscaped gardens, which were designed and built by inmates in a distinct manner to facilitate peaceful reflection and to foster engaged instruction and learning about horticulture. [33] The focus of the green program is on skill development and vocational training in horticulture, with activities like designing, installing, and maintaining multi-use gardens, and designing and constructing garden fixtures, like benches, trellises, and planters.



Photo: Lindsay Morrison/ *Edible Manhattan*

Upon graduating from the program and being released from prison, participants have the option to join the GreenTeam, a vocational paid internship that operates in five boroughs of New York City (NYC). Members of the GreenTeam work on public and private gardens and spaces, participate in garden maintenance, landscape parts of NYC parks, install custom planters made at GreenHouse, and plant trees along neighborhood streets. [34]. As soon as inmates begin the program, their information is placed into a database, which assists program staff in tracking each participant's development and status throughout the program and following release. The individualized nature of the database allows the staff to prepare and pursue a personal plan for each inmate—through making contacts with programs, agencies, and employers while the inmates are still at Rikers Island. Participants are also encouraged to attend classes and drug treatment programs. [33] The GreenHouse program has proven successful, with less than 10 percent of participants returning to jail—a significant difference from the average recidivism rate of 65 percent at Rikers Island. [33]

Roots to Re-entry, Philadelphia, PA



Photo: Roots to Re-Entry

The Pennsylvania Horticulture Society's (PHS) Roots to Re-Entry Job Training and Placement Program offers gardening and basic landscaping training to inmates at the Philadelphia Prison System's Northeast Complex. Selected inmates receive 14 weeks of training under the supervision of PHS staff. They start by taking health and job preparedness workshops at prison that are offered by the Federation of Neighborhood Centers Career Support Network. They then undergo an intensive training at the prison greenhouse and garden through PHS' City Harvest program. In the City Harvest program, which has included over 700

inmates in its efforts, inmates grow seedlings at a prison greenhouse. [35] The seedlings are then transplanted and grown by volunteers in over 40 community gardens and tended by inmates in the prison's onsite garden. The resulting produce is donated to food kitchens throughout Philadelphia.

After completing this "first phase," inmates who are approved for work release status—the ability to simultaneously serve a sentence while being employed—enter an intensive six-week training program involving hands-on landscaping work at one of three locations in the Philadelphia region—Bartram's Garden, Awbury Arboretum, or Friends Hospital—while living in a halfway house. Here, they learn about landscape management skills, with training related to equipment use, safety, plant identification and function, and turf and vegetation upkeep. Upon completion of the program, the former inmates receive job-skills training and placement assistance to prepare for employment in local food production and landscape management. Since 2010, 42 participants have graduated from the Roots to Re-entry program by successfully completing both phases, and 36 have been placed in jobs with local employers. [36] After graduating and completing the program, the former offenders continue to receive services like housing support, drug and alcohol counseling, and GED preparation through the Mayor's Office of Reintegration Services.

The Garden Project, San Francisco, CA

Catherine Sneed initially founded the San Francisco County Jail Horticulture Project in 1982, which at the time marked a milestone in prisoner rehabilitation. [37] While this program was successful, it did not address the question of reentry and left few options for inmates after release. Sneed thus went on to develop The Garden Project in 1992, with the goal of providing employment for former offenders. [37]

The program is supported by over 25 community organizations, including the San Francisco Sheriff's Department, the San Francisco Public Utilities Commission, and the San Francisco Police Department. According to the organization's website, "The Garden Project model is a community-based response to crime, unemployment and

underemployment, that links the stewardship of the environment to the stewardship of the community." [37] Upon release, former offenders receive job training and support and can participate in the Market Garden Program and Tree Corps. The Market Garden Program trains individuals in landscaping and gardening at the San Francisco County Jail and at a site in downtown San Francisco. [38]

Inmates cultivate and harvest organic herbs and vegetables. The program then donates the grown food to local food pantries and sells to local restaurants,

farmers markets, and supermarkets. Tree Corps participants plant and take care of trees in various San Francisco neighborhoods, and receive training from Department of Public Works. [38]



Photo: <http://www.gardenproject.org>

Sustainability in Prisons Project, WA

The Sustainability in Prisons Project (SPP), established in 2008, is run by the Evergreen State College and Washington Department of Corrections and has been implemented in all 12 Washington state prisons. SPP, as an environmental literacy program, simultaneously strives to improve prison sustainability and to introduce inmates to sustainability practices, scientific research, conservation strategies, and community service. Prisoners explore environmental topics through lectures, workshops, and training, including plant and wildlife ecology, sustainable agriculture, urban horticulture, native plant identification, alternative energy, composting, and green building, among others. Examples of hands-on activities, which differ at each prison,



Photo: Benji Drummond & Sara Joy Steele/ SPP

include gardening, food waste composting, and beekeeping. Some SPP activities are considered as vocational horticulture, a horticultural therapy program type as defined by the American Horticultural Therapy Association. [39] SPP also utilizes its partnerships with regional organizations to set-up collaborative projects, such as prisoners rearing endangered Oregon spotted frogs through the Washington Department of Fish and Wildlife and breeding endangered Taylor's Checkerspot butterflies with funding from the Army Compatible Use Buffer program and the U.S. Fish and Wildlife Service. SPP participants have grown more than 200,000 native plants to help The Nature Conservancy reclaim native prairies. [40] SPP also offers job and academic skills training for post-release adjustment. Using its vast network, SPP can inform inmates about educational and employment opportunities to pursue post-prison, and helps match inmates with programs that fit their needs and interests.

Safer Foundation, Chicago, IL

Safer Foundation is a nonprofit organization that was established in 1972 to provide employment assistance to individuals with criminal backgrounds in Illinois. It has expanded through the years, thanks to funding from individuals, private foundations, and the public, and it now offers additional support in areas such as education, housing, and substance abuse treatment.

The core component of Safer Foundation's plan is its transitional employment program. Through this program, formerly incarcerated individuals take short-term paid jobs, during which they acquire marketable job skills, learn about workplace ethics and behaviors, and develop an employment record with employer references, in order to be better prepared for the job market. Approximately 81 percent of transitional employment graduates move on to unsubsidized employment positions. [41] To facilitate successful reentry, Safer also manages two secured residential transition centers, which allow select inmates of the Illinois Department of Corrections to serve out the last 30 days to 24 months of their sentences in a community-oriented work-release setting. [41]

Safer has only recently turned to the green jobs sector for employment opportunities for its clients. Using stimulus funds from the American Recovery and Reinvestment Act (ARRA), Safer created several new green projects including an urban sustainable landscaping program in collaboration with Garfield Park Conservatory, in which clients landscape and revitalize vacant plots of land and establish community and indoor agricultural gardens; and the Neighborhood



Source: Safer Foundation

Clean-Up Program, which consists of community enhancement projects such as alley preservation and snow removal in Chicago neighborhoods. [41] Another of their green job programs, albeit involving an indirect relationship to nature, is the Deconstruction Work Services Training Program, which teaches clients about basic building deconstruction, material reuse, and hazardous waste training, in preparation for construction jobs, which are usually accessible to people with criminal records. These ARRA-funded projects led to the creation of over 290 jobs for Safer clients, and if each of these job-holders stays out of prison for at least one year, it will save Illinois over \$6 million in prison-related costs. [42]

Safer also offers adult literacy and GRE preparation; a weekly job readiness class to go over interviewing and workplace etiquette, and rental and utility assistance to recently released, homeless individuals. Participants of Safer's program have a recidivism rate of just 13 percent—much lower than Illinois' average recidivism rate of 52 percent. [41]

Sustainable South Bronx, Bronx, NY



Photo: Sustainable South Bronx

Sustainable South Bronx, which was founded in 2001, is an environmental stewardship and green job training program that engages in environmental restoration while addressing economic and social concerns in the South Bronx. The organization offers the Bronx Environmental Stewardship Training (BEST), a 14-16 week green jobs training program for low-income residents and for those with serious barriers to employment. Around half of its participants have prison records. [43] The curriculum was designed with the help of local employers and includes seven categories: career development, green construction, building operations and maintenance, financial

education, community service, externship, and environmental literacy. Examples of hands-on training include lessons in riverbank restoration; water and soil quality testing; plant, tree, and shrub identification; and ecological restoration. BEST also offers classes with the New York Botanical Garden, such as “Intro to Horticulture” and “Intro to Wetland Restoration.” [44]

Upon completion of the program, participants earn a professional certificate and should be prepared for full-time employment. Program coordinators work with graduates to match them with jobs and they track their graduates’ progress for three years.

Benevolence Farm, Graham, NC

Benevolence Farm is a nonprofit sustainable farming program that is exclusively geared towards formerly incarcerated women. The goal, according to its website, is “to create a more equitable, just, and nurturing world for women and communities they transform.” [45] The



Photo: <http://benevolencefarm.org>

program was just launching at the time we were writing this report in fall 2014. [45]

A unique aspect of Benevolence Farm is its residential nature; all of its participants live on the 13-acre farm in Graham, North Carolina. A housing unit is being built to accommodate up to 12 women. The women are expected to play a significant role in farm operations. They will have an influence on what will be grown on the farm, financial operations, and marketing the farm products to community members, all under the guidance of a farm manager.

Benevolence Farm, in addition to its focus on the mental and physical benefits of working in nature, has an entrepreneurial component. While participants learn about sustainable farming, they will also gain an understanding of small business practices and food preparation and earn an income for their farm work. The women will not need to pay to enroll in the program, but part of the income they receive will go towards covering room, board and other fees. The remainder of each woman’s income will be divided and deposited into her spending and saving accounts. In this way, Benevolence Farm hopes to encourage the women to “set up a household on their own.” [45] In addition to establishing a financial support base, Benevolence Farm will help its residents establish a support network in the communities that they will return to, for example, through finding the participants’ jobs or housing before they leave the farm.

Assessing program outcomes

A number of greening programs have tracked success in reducing recidivism rates. However, assessments of program outcomes for individuals are hampered by the variable circumstances, backgrounds, and goals of each inmate. Despite these barriers, several evaluations do exist of these greening programs that go beyond just looking at recidivism rates.

In one study, six juvenile offenders in Virginia were examined as they went through a hands-on vocational horticulture program over a 17-week period. [46] Upon completion of the curriculum each of the six participants showed more positive scores in all six categories included in the pretest and posttests, including their views about peers, their selves, and towards the environment. The profiles of the six participants showed that vocational horticulture programs can fortify an offender's bonds with society. This triggers changes in one's perception of personal success and of one's personal job readiness, and encourages an individual to think more practically about careers. [46]

Another study analyzed The Garden Project, looking at a sample of 48 out of 330 inmates at a San Francisco area correctional facility. [47] These 48 individuals, who were serving sentences for drug-related charges, were randomly assigned to The Garden Project or to another therapeutic program in order to examine the psychological value of horticultural therapy. Data were gathered through questionnaires and interviews at three points: upon admission, departure from the prison, and at least three months after discharge. Researchers were interested in looking at the effects of violence history, drug use history, family background, and psychosocial functioning; and how these effects varied according to race and gender. In the study's comparison of the Garden Project with the alternative program, it was found that Garden Project participants had a stronger urge to seek help following three months of release. Inmates in both programs demonstrated decreased drug use following release, although The Garden Project participants reported the greatest decrease. [47]

Other efforts

In our search for greening reentry programs, we found many more examples of green jobs programs that focused on energy, green building, recycling and other areas that do not involve the inmate or former inmate in direct contact with nature. Whereas these programs are important in that they provide job skills, we focus here on programs that include nature contact because of our interest in the emotional and psychological benefits provided by such contact.

In addition to the larger more established programs described in this paper, we have encountered ex-prisoners who themselves have started green jobs and volunteer stewardship programs for fellow inmates and youth at risk of entering the prison system. These programs include Michael Gray's [I Can I Will](#) community gardening program and Richard Carter's Chester Prison Reentry program in Chester PA, former Yusuf Burgess' youth programs in Albany NY, and Raymond Gant's [The Ray of Hope Project](#), Inc in Philadelphia PA. Another ex-prisoner, [Rodney Stotts](#), is a professionally-trained falconer and conducts numerous events to help youth and adults connect with nature. We salute the courageous men and women who have the strength to turn their hardship into something positive for their community and nature.

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