# Designing Therapeutic Environments for Inmates and Prison Staff in the United States: Precedents and Contemporary Applications

Amy L. Lindemuth<sup>1</sup>

<sup>1</sup> Landscape architect at HBB in Seattle, Washington, USA. amylindemuth@gmail.com

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## Abstract

American correctional facilities are stressful social environments within stark institutional settings. Although these settings are experienced by millions of inmates and staff every day and have negative effects on health, the restorative and therapeutic benefits that the architecture and landscape could provide are rarely given careful consideration by designers and other individuals involved in their planning, construction, or administration. Research has shown that gardens and natural settings can be physically and psychologically beneficial for inmates and prison staff in terms of reducing stress and alleviating mental fatigue. While gardens have been used in U.S. prisons since at least the 19<sup>th</sup> century for vocational training and therapy, their design has received little consideration. Further, the design and process of creating a garden with restorative and therapeutic qualities in a prison environment has received little attention in the Landscape Architecture literature. This paper discusses the potential benefits of prison gardens as well as the elements necessary to design, implement, and maintain a successful prison garden project. Research into historic and contemporary precedents of prison gardens is discussed as well as the author's experience developing a design for prison staff and mentally ill inmates within a state facility northeast of Seattle, Washington.

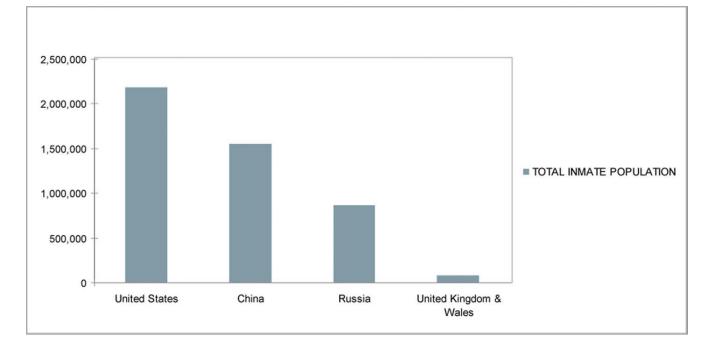
# American corrections

The American penal system touches the lives of millions of Americans every day. Over two million Americans (or 738 per 100,000) are incarcerated in the United States today, the highest rate in the world (International Centre for Prison Studies). Other U.S. prison statistics reveal a system that includes millions of Americans beyond those incarcerated who are involved in and affected by the U.S. prison industry including family members and individuals working in the industry. Although these settings are experienced by millions of inmates and staff every day, the potential to achieve restorative and therapeutic benefits with the architecture and landscape design is rarely supported by administrators and other individuals involved in their planning, construction, or administration.

Yet, there are exceptions. Gardens have historically been used for vocational training and therapy in some U.S. prisons. In a few contemporary facilities this tradition continues and has been shown to be physically and psychologically beneficial for inmates and staff. While gardens cannot solve all the health and stress-related issues associated with incarceration, they can soften some of the harmful effects and improve the ability of individuals to cope with life inside and outside these institutions. Through the creation of spaces to reflect and grieve, inmates can heal from the circumstances that brought them into the corrections system. From a psychological perspective, the therapeutic qualities found in the gardens may help inmates manage behavioral symptoms exacerbated by the sterility, tension, and alienation of the prison environment. For staff, gardens can provide a moment of relief from the harsh social environment of their work place and provide healthful benefi ts in terms of stress reduction. This article will review some of the potential benefi ts gardens can offer within a prison environment. Historic and contemporary prison gardens will be discussed and the strategies they have employed may shed light on how these important elements can be built within the prison landscape.

# Potential benefits of prison gardens

Past research demonstrates that naturalistic settings may offer benefits in terms of stress reduction and improved mental states. In several studies conducted within U.S. correctional facilities, access to views out and the quality of these views has been shown to have a measurable infl uence on the behavior and psychological outlook of inmates and staff. Moore (1981) and West (1986) showed that views out from prison cells have a significant impact on the physical wellbeing of inmates. In particular, Moore found that the views out from the cells (exterior or interior), the cell's relative



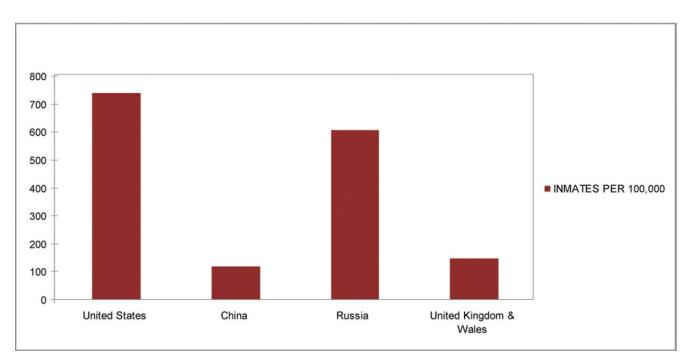


Figure 1. U.S. prison population as compared to other nations with highest incarceration rates in the world.



Figure 2. Regional context map for Ossining, NY.

privacy, and noise level within the cell are correlated with the number of sick-calls to the infirmary. Cells with exterior views, lower noise levels, and/or more privacy logged fewer sick-calls. Using Moore's methodology, West correlated the number of sick-calls to the type of exterior views from inmates' cells. West's findings show that inmates with a higher percentage of naturalistic elements visible from their cell make fewer sick-calls than inmates with views dominated by the built environment. In addition, Spafford (1991) suggests that view quality within a prison setting affects inmate behavior and staff perceptions. Her research, conducted at two Illinois prisons, showed inmates and staff felt calmer when the facility offered more visually complex views. This research suggests that simply having access to visually complex views can improve the physical and mental health of corrections staff and inmates.

In addition, several long-running prison garden programs have noted positive long-term outcomes for participating inmates. Rice (1993) investigated post-release outcomes for 48 participants in the San Francisco County Jail's horticulture therapy program, the Garden Project. His analysis showed that inmates benefited from involvement in the program both during incarceration and post-release. Participants reduced negative or self-destructive behaviors in several ways. These changes included reduction in illegal activities (from 66.7% to 25%), fewer friendships with criminal associates, limited reliance on damaging familial relationships, less drug use, and an increased desire for help. Psychological benefits included higher self-esteem and reduced anxiety, depression, and risk-taking behavior. The GreenHouse project on Rikers Island in New York City has seen a recidivism rate of about 10 percent for participants with recidivism overall at Rikers Island jails being about 65 percent (CBS News 2003). Officers at Rikers Island Jails have commented that being in the garden was relaxing for them in addition to having an observable calming and positive effect on inmate behavior (Rikers Island officers, personal communication with the author, June 2005). Spafford (1991) reports this same sentiment from officer responses to written questionnaires regarding the planting areas around their facility.

The following quotes from staff and inmates working in and with U.S. prison gardens further suggest the positive outcomes that these landscapes offer:

It's just you and the fl owers. It gets you away from all the drama of the prison, all the gangs, all the gossip and all the other nonsense. - Anna Winston, inmate (as quoted in Associated Press 1997)

Sometimes when I am working on the plants, I'm in my own world, thinking about my life and what I did to get here, and it helps me a lot. - Terry Knickerbocker, inmate (as quoted in Hiller 2001)

When you walked out in the yard [when I first came here], there were 100 eyes looking at you and it was not a good feeling...I don't feel that confrontation anymore in the yard and I think it's the plants. - Glen Whorton, prison staff (as quoted in Hiller 2001).

This research suggests that gardens within correctional facilities can help reduce stress among inmates and staff by providing more complex, visually engaging views within the prison landscape. Further, individuals interacting with garden plants for prolonged periods of time, whether through active gardening or quiet contemplation, may have the opportunity to experience significant, long-term emotional and psychological changes. Of course, the degree to which these positive benefits can be achieved is partially determined by the richness and diversity of the materials and plantings within the garden. While prison gardens can be rich designs that provide the necessary complexity for a therapeutic experience, garden designers must contend with several factors typical of working in a corrections environment. These factors include the historical



Figure 3. Warden Lewis E. Lawes (left) and Charles Chapin (right). (Lawes 1932; Morris 2003).



Figure 4. Chapin's garden in the Sing Sing prison yard (Lawes 1932).

context of the site, the physical context of the garden within the facility, degree of advocacy for the project, security concerns and requirements, frequent changes in prison personnel and leadership, and longer time frames for implementing projects. The following historic and contemporary case studies will consider these issues in greater detail.

#### **Case studies**

#### Sing Sing Correctional Facility

The historic gardens at the Sing Sing Correctional Facility in Ossining, New York were made possible due to the particular social and political culture of their time, both within the institution and larger society, and as a result of the relationship between Warden Lewis Lawes and inmate Charles Chapin (in the eastern states, wardens fulfill the same role and responsibilities as superintendents in western institutions).

Lawes' twenty years as warden at Sing Sing were characterized by humaneness, intelligence, enlightenment, and a paternalistic attitude toward his wards. Like all warden positions of the day, Lawes' post was obtained through political appointment allowing him greater flexibility in the management of Sing Sing (Conover 2001). On the other hand, Charles Chapin was a powerful newspaper editor sentenced to Sing Sing in late 1919 for the murder of his wife. Despite his sentence, Chapin maintained ties with many influential contacts on the outside who eventually provided funding and materials for his gardening activities at Sing Sing.

In 1921, Chapin requested permission to care for a plot of lawn in the prison's recreation yard. Lawes granted the request partially due to his long-standing concerns over Chapin's health. Chapin had spent his first year at the prison listless and depressed and Lawes was eager to find an activity that would occupy him physically and mentally. Chapin continued to request plants, tools, and additional areas for gardening which



Figure 5. Chapin's birdhouse (Lawes 1932).

Lawes approved. Eventually he established an extensive garden close to an acre in area. The garden included beds and borders of annuals and perennials, trees, and roses as well as walks and seating used by inmates during recreation periods. Eventually Chapin and his small crew, fellow inmates who helped maintain the garden, added a massive birdhouse paid for by contributions from Chapin's wealthy friends on the outside. Chapin's mental health flourished with his gardens until 1930. In the summer of that year, contractors demolished the garden in preparation for a new drainage system. Lawes felt Chapin was 'never the same' (Lawes 1932, 234). He died in December of the same year of bronchial pneumonia. Of Chapin, Lawes wrote: Men have done heroic work within these walls but few of them have left a lasting impress on the spirit of the prison. Chapin accomplished just that (Lawes 1932, 223).



Figure 6. Regional context map for Bedford Hills, NY.

Chapin's garden came into existence largely due to his own ambitions and political connections as well as the disposition and beliefs of Warden Lawes. Lawes was a reform minded individual willing to take progressive action and his political appointment allowed him freedom in his management of Sing Sing. Further, he believed in the power of industriousness to reform. Chapin's ambition to build a garden fit well with the institutions overall social and political goals of the time. In addition, the location of Chapin's garden within the recreation yard was possible in part because of the time period in which it was built. At this time, U.S. prisons had not yet experienced major rioting by prisoners. Since Chapin's time, prison riots have changed the security concerns of custody staff and perimeter guard towers must have clear line-of-sight within all recreation yards. Finally, Chapin's contacts outside the prison provided the necessary funding and materials to build the gardens.

## Contemporary Prison Gardens

Like the garden at Sing Sing, the contemporary Children's Center Garden and Playground at Bedford Hills Correctional Facility was realized due to strong support from individuals both within and outside the facility. Bedford Hills Correctional Facility (BHCF)



is a maximum security prison located in the hamlet of Bedford Hills, Westchester County, New York about 12 miles northeast of Sing Sing and 45 miles north of New York City. The facility was originally established in 1901 as a reformatory for women who were convicted of a misdemeanor. Today, approximately 800 inmates are incarcerated at BHCF (New York State Archives).

BHCF, like other New York State facilities, has a long history that includes many experimental programs. For instance, the institution has included a nursery since its inception that continues to operate today. In the current facility, the nursery is one of seven prison-wide divisions of the Children's Center, a program initiated more than two decades ago by Sister Elaine Roulet with the support of Warden Elaine Lord (Palmer 2005). The main goal of the Children's Center is to help women preserve and strengthen relationships with their children during their incarceration. In addition to the nursery, this process is supported by a parenting center, day care center, prenatal center, and child advocacy office. The Children's Center is an agency of Catholic Charities, Diocese of Brooklyn and receives a portion of its funding through this non-profit agency (unless otherwise noted, information about Bedford Hills Correctional Facility and the Children's Center Garden was obtained during the author's visit to the facility in June 2005).

For a number of years, the Children's Center imagined transforming a courtyard adjacent to the Visitors' Room into an outdoor space for inmate mothers and their visitng children. Eventually, the project was willed seed money by a long time supporter, but the funds were insufficient to complete a full renovation through a private contractor. Toni Campoamor, then Director of the Children's Center, committed herself to renovating the space before the end of her tenure at BHCF. She recuited the help of Program Coordinator, Mary Bostwick, and Libba Claude, an outside volunteer who raised most of the required funds for the garden. In 2003, university Landscape Architecture Associate Professor Daniel Winterbottom was contacted about the possibility of involving students in the courtyard design through a university based



Figure 7. Children entering BHCF to visit their mothers. (Associated Press/K. Willens 1995).



Figure 8. Constructing the BHCF garden (courtesy BHCF): the garden.

design/build course. Although the design/build course never came to fruition, Winterbottom continued to work with the facility and the Children's Center to develop a garden design.

Warden Lord was particularly encouraging and progressive in her thinking about the garden project, a factor that helped move the approval process through custody review. In addition, higher administrators from the state DOC offi ce in Auburn, New York favored and encouraged the project. By early 2005, the BHCF administration and Children's Center approved a fi nal design.

In summer 2005, Winterbottom and a team of four volunteers, including the author, spent two weeks at Bedford constructing the courtyard structures and installing plantings. Construction was completed in June and the site opened for Children's Center activities in July 2005. The new garden includes arbors, swings, large planter boxes, play equipment, and a diverse plant palette with mature and newly established trees.

The original siting of the Women's Reformatory at Bedford Hills left a legacy of historic buildings, mature trees, and a history of reform through education and training. This established history of programming has continued into the present. While there was some resistance to the garden, the project was not considered unusual within the overall framework of the institution. In addition, strong advocacy for the project from prison leadership and outside volunteers helped the project obtain approval from upper levels of the State corrections department.

Also located in New York State, the garden at Rikers Island Jails is situated within a different context than the Bedford Hills project.

Rikers Island is located in the East River just north of La Guardia Airport in New York City and is connected to the East Elmhurst neighborhood of Queens by a bridge constructed in 1966. When the City of New York annexed the land in 1884, the island consisted of 87 acres, but now spans 415 acres. Originally used as a jail farm, the city constructed its first jail facility on the island, the Men's House of Detention, in 1935.

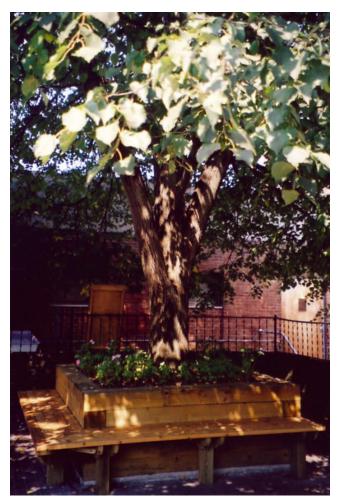


Figure 9. Completed seating areas (courtesy BHCF).



Figure 10. Completed seating areas (courtesy BHCF).

Since that time, corrections facilities on the island have grown to 10 separate jail units. The facilities include pre-trial detention centers and housing units for inmates serving sentences of 1 year or less (New York Department of Corrections). Approximately 16,000 inmates, including both men and women, live on the island (Dominguez 2005).

In 1997, the Horticulture Society of New York (HSNY) began GreenHouse, a program providing inmates at the Rikers Island jail complex horticulture training and work experience in the design, installation, and maintenance of gardens. James Jiler, an urban ecologist, runs the program for HSNY teaching 85-100 students annually.

Male and female inmates are not permitted to work in the garden simultaneously, so students work in shifts – women in the morning and men in the afternoon (CBS Morning News 2003). The garden is a little over an acre in area and is located between two jail facilities. The site is a secure area surrounded by a 10' cyclone security fence. The only individuals entering and leaving are GreenHouse students, two officers assigned to this post, and HSNY employees, including James Jiler. The site has been transformed into a series of lush beds and borders that included butterfly and bird gardens, a medieval herb garden, a vegetable garden, and a native woodland garden.

Built structures include arbors, post and rail fences, birdhouses, a gazebo adjacent to a pond and waterfall feature, a greenhouse, and a pre-existing brick and cinder block building used as an office and classroom. Walkways are constructed of gravel and brick. Several rabbits are kept near the office and Jiler has recently introduced several guinea hens to the garden (donated from a correctional officer's farm).

Like the BHCF garden, the Rikers Island garden has a strong programming component. Horticulture classes are primarily taught in the winter months when conditions become inhospitable for garden activities. During this time, the greenhouse is transformed into a carpentry shop where inmates construct birdhouses, kestrel and bat boxes, planters, and other wood features for the Rikers garden and city-wide schools and parks (Kate Chura, HSNY Vice President, personal communication with the author, June 2005). In addition to maintaining and expanding the Rikers Garden, GreenHouse students grow plants for schools and other public entities including libraries in low-income neighborhoods. Vegetables grown on Rikers are donated to cooking classes offered at the Rikers jails and also to area homeless shelters. Much of this work is done through partnerships with other HSNY programs including, Apple Seed, GreenBranches, and GreenTeam (Dominguez 2005). Graduates of GreenHouse receive a certificate of completion and are eligible to participant in HSNY's post-release program, GreenTeam. Participants work with the GreenTeam while actively pursuing other job possibilities.

The complexity of prison gardens both in terms of plantings and features is partially determined by the location of the garden within the facility. The site location of both the Bedford and Rikers garden has a significant impact on what activities and design elements can occur there. Both gardens are located in secured spaces that are only accessible to selected members of the inmate population such as participants of the parenting program at BHCF and horticulture students at Rikers Island. These are small groups that can be screened for contraband upon entering and leaving the area. In addition, both groups are considered non-violent offenders. From a custody viewpoint, these garden locations pose fewer security risks. These factors allow both of these gardens to have features that would not be favored in other areas of the facility including heavily planted areas, mature trees, and built structures including arbors and swings. Although these elements strengthen



Figure 11. Regional context map for Rikers Island.

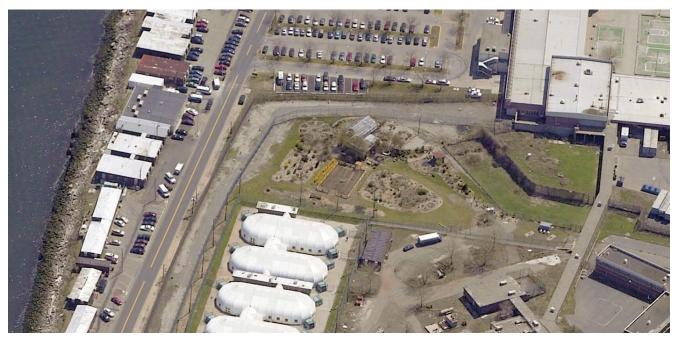


Figure 12. GreenHouse garden site context (Courtesy intl.live.local.com).

the therapeutic opportunities available in the garden, they also limit the number of inmates who are able to experience them.

Custody staff may view various locations within the same institution quite differently in terms of security. For instance, institutions that house inmates with different custody levels can have significant variations in their security requirements for different courtyards within the same facility. Therefore, decisions regarding activities and design elements within a garden will be made according to the level of security risk perceived by staff. Yet, while some security requirements are straightforward, such as barring poisonous plants, others depend on the shifting attitudes and perceptions of the custody staff in charge of site planning for the garden.

In addition, changes in custody leadership can lead to changing perspectives regarding the security risks of a given garden site. Custody staff, including officers, sergeants, captains, and superintendents or wardens, want to be considered strict adherents of prison protocol by their colleagues and superiors. Gardens are often viewed as a privilege that lessens the punishment given to inmates by the court system. Superintendents that allow gardens at their facility risk being viewed as lenient on inmates. The author experienced this aspect of working with corrections during the final stages of a garden design for a correctional facility in Monroe, Washington. After working with the facility for over a year to develop designs for a 2-acre courtyard garden within the mental health unit, several changes in custody leadership significantly altered the garden design. As with most prison garden projects, custody leadership includine a new superintendent has a key role in the selection of the site. The mental health unit director, a strong supporter of the project and its therapeutic goals, had selected the garden site. Originally, the garden was intended as a location for small counseling



Figure 13. GreenHouse gazebo and naturalistic plantings.



Figure 14. GreenHouse vegetable garden.

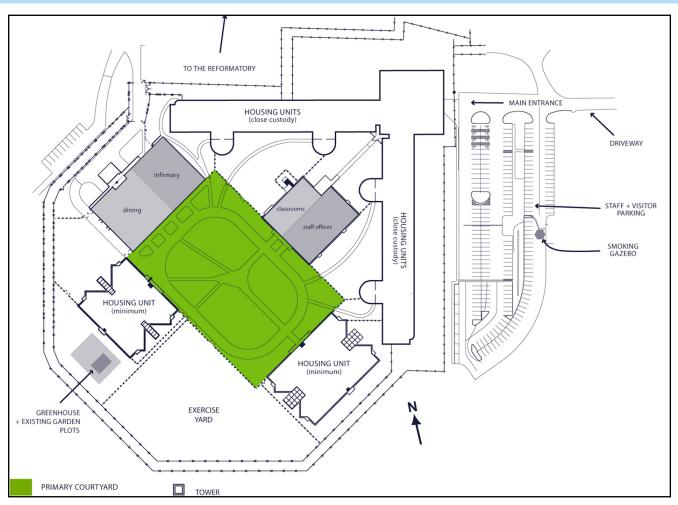


Figure 15. Facility layout for author's project site in Monroe, WA.

sessions, horticulture therapy sessions, and a space for the existing horticulture class to expand its vocational training. Further, the courtyard garden would be a visual enhancement to the unit that could be seen from nearly one hundred inmate cells and many staff posts.

Under the new superintendent's direction, inmates would not be allowed access to the garden and therefore most of the intended activities would not be possible in this location. Neither could the planting palette have the same lush, diversity of plants originally discussed. Therefore, the courtyard design was approached as a viewing garden that could serve as the first phase of the original therapeutic garden design.

Changes in leadership are not uncommon in the U.S. corrections system, particularly following an election year as political appointees are established at the State-level. Leadership may change several times

during the course of a garden project. Strong advocacy for the garden both within and outside the facility will help maintain the integrity and continuity of the project. Patience is also useful since an unreceptive atmosphere surrounding a project can turn favorable again as time passes. For instance, the political and social climate within the Monroe facility may, in the future, change and become more receptive to the original program established under the former superintendent.

### Conclusions

Prison environments can offer more to inmate and staff populations than they often do. The effect could be significant for inmates and staff and positively effect the lives of those outside the prison complex. As the



Figure 16. View of existing courtyard selected by superintendent.



Figure 17. First phase design for courtyard at Monroe facility.

garden projects at Bedford Hills Correctional Facility, the Rikers Island jail complex, and the author's site in Monroe, Washington illustrated, having advocates inside and outside the facility can increase the success of the project. Internal advocacy is particularly needed from at least one key player who is well placed within the prison organization and possesses authority. If the internal advocate for the project is respected by the



Figure 18. View from inmate's cell into courtyard at Monroe facility.

staff and perceived as mindful of custody issues, their approval of the project can help foster staff confidence in the garden.

Corrections settings offer unique opportunities for landscape architects to serve the public good in many different ways, particularly through pro bono projects. While, the work is difficult, unprofitable, and unlikely to meet high design standards, the positive changes it can provide are many and desperately needed. Some may feel that participating in the design of these facilities is akin to the perpetuation of these institutions and their psychologically damaging environments. Yet,

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these institutions exist now and will continue to persist, and probably grow, into the foreseeable future. Gardens and other thoughtfully designed outdoor spaces can provide an important counterbalance to institutional life for both staff and inmates and are worthwhile projects to pursue. Landscape architecture cannot solve the social and political issues that have caused the United States to have the highest incarceration rate in the world. However, designers can alleviate some of the damage these institutions cause in the lives of millions of Americans.

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