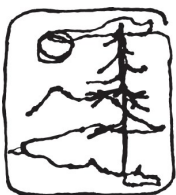


Sustainability in Prisons Project Fiscal Year 2016 Annual Report



Responding to enthusiastic interest from Washington State Department of Corrections (WA DOC) staff and inmates, beekeeping programs were a major focus this year. In this photo, visiting SPP-Evergreen staff watch beekeeping students and a Master Beekeeper at Washington State Penitentiary (WSP); the expert had just captured the queen from an unexpected swarm found on the outside of a hive box and the group was discussing where to put them. Photo by Ricky Osborne.



**the evergreen
state college**
olympia, washington





Sustainability in Prisons Project

Fiscal Year 2016 Annual Report

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In the foreground, violets grown for prairie conservation bloom at WCC's Skill Builders Unit. Photo by Ricky Osborne.

Executive Summary: Sustainability in Prisons Project, FY16

The fiscal year 2016 (FY16, July 1, 2015 – June 30, 2016) was a productive year for the [Sustainability in Prisons Project \(SPP\)](#) in Washington State. The attached report aims to acknowledge all science and sustainability programs under the umbrella of SPP, and as data are available, to demonstrate their productivity. The number of new programs, partnerships, and incarcerated individuals involved in SPP programs has increased; at the same time, reporting and data collection have improved. The summary below highlights some new programs and partnerships launched in FY16, plus initiatives in development in fiscal year 17 (July 1, 2016 – June 30, 2017). For full details, please see the attached Annual Report.

Program Highlights FY16: also see Year in Photos

[Emergent wetland vegetation mats](#): SPP established a pilot program at Stafford Creek Corrections Center (SCCC) growing native emergent wetland vegetation mats in an aquaponics system. The program provides ecological education to inmates and supports important wetland habitat research.

[Beekeeping](#): Airway Heights Corrections Center (AHCC) started a new beekeeping program and several other facilities advanced program planning. SPP-Evergreen staff began work on a beekeeping “toolkit” which will give host prisons guidance on equipment, education, safety, partnerships, and more.

[Turtles and plantain](#): Larch Corrections Center (LCC) added two SPP programs this year: 1) western pond turtle care, and 2) growing plantain plants as food for larval Taylor’s checkerspot butterflies. Both programs rely on partnerships with Oregon Zoo and other conservation organizations.

[PBS News Hour](#): PBS NewsHour created a piece on Taylor’s checkerspot butterfly recovery and the captive rearing program at Mission Creek Corrections Center (MCCCW). The story included inmate technician interviews, provided educational information, and attracted international attention.

[Certifications](#): We updated and improved certificate awards for ecological conservation and lecture series programs, and awarded 149 SPP certificates. A formerly incarcerated SPP technician was awarded 15 academic credits by Evergreen for her achievements in the butterfly program.

[Single use plastic reduction](#): WA DOC is working to reduce single use plastics in prisons across the state. Plastic bottles in visit room vending machines have been replaced with recyclable aluminum cans. In all locations, compostable or durable cutlery is replacing single use plastic.

[Community Contributions](#): Prisons made significant contributions to communities and sustainable food production including 30,200 donated items made from repurposed materials and more than 417,000 lbs. of produce grown for food banks and prison kitchens.

[Energy conservation](#): Statewide prison facilities have reduced energy consumption by 24% exceeding the executive order to reduce by 20%. This was achieved in part by replacing old perimeter lighting with LED’s on lower light poles with the additional benefit of significantly reducing regional light pollution.

[SPP Advisory Panel](#): March 2016 an eight-person advisory panel was formed including academic, corrections, conservation, and formerly incarcerated representatives.

[Reentry](#): SPP-Evergreen staff and students learned more about reentry and explored ways to provide greater support pre- and post-release. This effort included contributions from a formerly incarcerated Evergreen student and WA DOC reentry staff.

[Lectures for new audiences](#): SPP offered science and sustainability lectures in Intensive Management

Units and a Special Inmate Unit at Monroe Corrections Complex (MCC) and Washington Corrections Center (WCC). These sorely under-served audiences enthusiastically received the educational content.

Increased state-wide engagement: To offer support, strengthen partnerships, and improve knowledge of programs, SPP-Evergreen staff increased visits to prisons across the state. This year AHCC and Clallam Bay Corrections Center (CBCC) engaged in SPP action planning. Both facilities identified key development goals, and we're working together to attain them.

Social science partnerships: Beneficial new partnerships were formed with social scientists from University of Denver and University of Washington-Tacoma. Together we submitted several grant proposals and developed research methods to better understand impacts of SPP programs.

Programs Highlights FY17

SPP has plans for several exciting new programs and partnerships in FY17. We are in the process of developing the collaborations and resources needed for these initiatives. Highlights are below.

Program	Program partners and facility	Planned outcomes
Domestic sheep	WA Dept. Fish & Wildlife & WA State University at Washington State Penitentiary (WSP)	Raise certified disease-free domestic to reduce disease transmission to wild bighorn sheep populations.
Sagebrush for greater sage grouse	Institute for Applied Ecology Bureau of Land Management at WSP	Establish a new sagebrush growing program
Dog program research	University of Denver at 10 facilities	University of Denver partners collect & analyze data on dog program impacts on psychosocial wellbeing
Woodpecker nest predation research	U.S. Forest Service at Mission Creek and Cedar Creek Corrections Centers	Educate incarcerated technicians on forest health, bird & mammal identification, & train to review woodpecker nest video data for research project
Green Track	All facilities	Advance work w/green track think tank & implement green track passport system to build education & job training resumes for participants
Beekeeping	WA State Beekeeping Assoc. & local bee assoc's at all facilities	Increase number of programs & include certification education; hold a statewide beekeeping summit
Increasing education, certifications & academic credit	Evergreen academics, WA Community Colleges, Seattle Tilth, Roots of Success	Increase SPP issued certifications, identify & add educational materials for existing SPP programs, discuss ways to add academic credit

Conclusion

We are pleased with progress in FY16, and we're looking forward to initiatives of FY17. We still see ample room to expand and better SPP programs, broaden access to these opportunities, and enhance post-release benefits for incarcerated participants. We are mindful that any additional new efforts must consider limited personnel and financial resources on both sides of the SPP partnership. As SPP nears capacity with current resources, we are carefully selecting new initiatives based on a suite of factors. While our reporting primarily emphasizes SPP's accomplishments, we faced several challenges over the past year, including failed grant proposals and initiatives that we were not able to advance as quickly as hoped (green track and certificated learning). We learn from each challenge and adapt to improve. FY16 was largely a success thanks to all who contribute to this exciting, challenging, and rewarding collaboration. Together we are providing a model for transforming lives and the environment.

1. Background Information

Report Objectives

This report provides information on SPP activities during Washington State fiscal year 2016 (FY16) which includes the period from July 1st, 2015 through June 30th, 2016. Washington Department of Corrections (WA DOC) considers all sustainability initiatives in Washington prisons to be part of SPP regardless of which partner(s) operates the program. The primary objective of this document is to update all collaborators and stakeholders on SPP-Washington activities. This report represents the most complete information available with current reporting mechanisms. Working lists of all SPP-WA programs ([Appendix 1](#)) and partners ([Appendix 2](#)) are included to recognize the impressive diversity and number of opportunities offered. [Appendix 3](#) lists common abbreviations.

SPP Mission

The Sustainability in Prisons Project (SPP) is a partnership founded by the [Washington State Department of Corrections](#) (WA DOC) and [The Evergreen State College](#) (Evergreen). Our mission is to bring science, education, and nature into prisons. We conduct ecological research and conserve biodiversity by forging collaborations with scientists, incarcerated people, prison staff, students, and community partners. Equally important, we help reduce the environmental, economic, and human costs of prisons by inspiring and informing sustainable practices.

SPP Vision

This union of ideas and activities – and people inside and outside prison walls – creates a collaborative,



*Students of a drawing from nature workshop at AHCC work on their illustrations.
Photo by Ricky Osborne.*

intellectually stimulating environment in which incarcerated men and women play key roles in conservation, sustainability, and advancing scientific knowledge. We encourage teamwork, mutual respect and a stewardship ethic among individuals who typically have little or no access to nature or opportunities in science and sustainability. Our vision is to broaden access to environmental education and participation in the environmental movement by while also providing opportunities for personal

transformation, saving natural resources, and tax dollars.

SPP Essential Components

Although each endeavor and corrections institution is unique, our experiences point to five [Essential Components](#) for every SPP program:

1. Partnerships and collaborations with multiple benefits
2. Bringing nature “inside”
3. Engagement and education

4. Safe and sustainable operations
5. Evaluation, dissemination, and tracking

SPP Staff and Organization Chart

The organization chart in Figure 1 includes staff as of July 2016. This chart is limited to core staff at WA DOC and Evergreen; there are many more corrections, academic, conservation, and community organization staff contributing to program success. SPP is co-directed by Dr. Carri LeRoy from Evergreen and Mr. Steve Sinclair from WA DOC. In FY16, the SPP-Evergreen co-director, Dr. LeRoy reduced her role in SPP. As a full-time faculty member at the college, this change was necessary to make the position more sustainable. As a result of this change, staff on the Evergreen side of the partnership absorbed additional SPP-Evergreen leadership responsibilities. Meetings between co-directors and staff are held at least every other month.

Program Coordinator positions are staffed by Evergreen students working 19 hours per week. Student-staff are typically recruited from the Evergreen Master of Environmental Studies graduate program and work for two-year terms. Each summer several students complete their work with SPP and train new students to the positions. Four student-staff not named on the chart below worked for SPP during FY16: Lindsey Hamilton, Tiffany Webb, Christina Stalnaker and Zandra Jones. In addition, Daniel Cherniske worked as volunteer, student intern, and temporary employee throughout FY16. Daniel made significant contributions to the new wetland emergent vegetation mat program at SCCC.

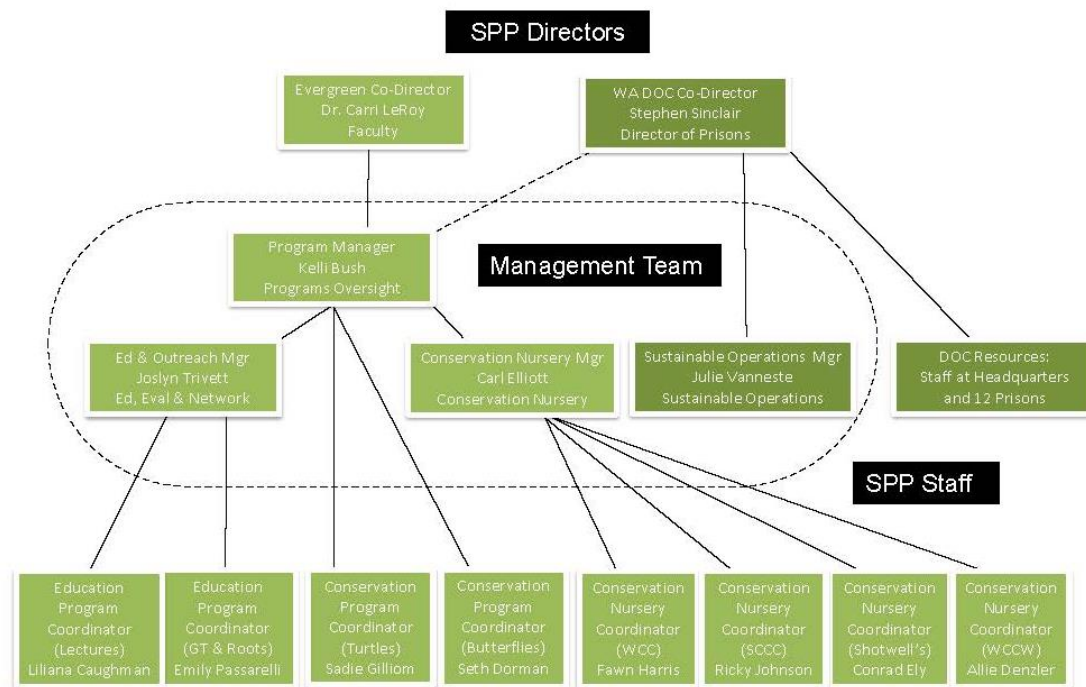


Figure 1. SPP Organizational Chart

In FY16, SPP launched a new SPP Advisory Panel comprised of eight participants including SPP's two co-directors. Panel members represent corrections, conservation, education, and formerly incarcerated partners. The Advisory Panel is available to provide expertise, creative thinking, advice and assistance with SPP initiatives and program development.

Senior Advisor WDOC- Prisons Steve Sinclair	Senior Advisor Evergreen- Science Dr. Carri LeRoy
Senior Advisor WDOC- Corrections Jody Becker-Green	Senior Advisor WDOC-Facility Perspective Margaret Gilbert
Senior Advisor Evergreen-MES Director Dr. Kevin Francis	Senior Advisor JBLM-Conservation Mr. Jim Lynch
Senior Advisor Evergreen-Inmate experience Carolina Landa	Senior Advisor Evergreen-Grants John McLain

Figure 2. SPP Advisory Panel

Partnerships

Partnerships and collaboration are an essential component of SPP work and nearly every SPP program. We continually work to identify new potential partners and mutually beneficial programs. A working list of SPP partnerships is included as [Appendix 2](#); during FY16 more than 100 different organizations contributed to SPP programs in WA.

Safety and Security

SPP programs aim to improve facility and community safety by offering programs that reduce idleness, provide education (proven means to reduce recidivism), and offer a therapeutic, stress-reducing connections with the natural environment. Programs are operated in compliance with WA DOC safety and security rules, SPP-Evergreen protocols for working in the prison environment, and partner protocols for work with plants and animals. All SPP-Evergreen staff complete required WA DOC training. Security is a topic included on every staff meeting agenda (held every two weeks).



SPP Co-Director Steve Sinclair admires a turtle cared from at LCC just before releasing it to the wild. Photo by Sadie Gilliom.

2. Budget

This section of the report addresses budget resources available on the Evergreen side of the SPP partnership. WA DOC dedicates significant resources to SPP through personnel time, sustainable operations funding, and contract support for SPP-Evergreen. While Evergreen does not provide direct funding for SPP programs they do make significant contributions by providing space, payroll, access to students and faculty, human resource services, grant, foundation, and budget support, and more.

Regular budget reports were sent to Co-Directors and SPP managers throughout the fiscal year. Reports include current funding source start and end dates, program areas supported, starting balance, current balance, notes on the status of the funding source, and payment details. A subsection of the regular report includes status information for pending grants, contracts, and awards.

In FY16, SPP had approximately \$515,000 in funds from 12 sources, including a contract with WA DOC. The percentage of funding provided by individual sources varies from month to month as sources become available or close. Funding sources include state and federal contracts, foundation donations, private donations, and a federal grant. Following a pattern of annual giving, SPP-Evergreen received another generous contribution from an anonymous donor at the [Seattle Foundation](#). These funds have been awarded for general SPP initiatives and make a significant difference in the programming, outreach, and education SPP is able to offer. SPP staff continuously seek new funding and close out existing grants and contracts. In FY16 SPP Evergreen staff were responsible for stewarding funds from 18 different sources (see Table 1).

Table 1. SPP FY16 Grant and Contract Funding Requests (see [Appendix 3](#) for abbreviations)

Source	Program Area	Funded	Timeline
Burt's Bees Foundation	Beekeeping	no	1/1/16
CNLM/ACUB Plants/Seeds 2015	Conservation Nursery	yes	12/1/14 to
CNLM/ACUB Plants/Seeds 2016	Conservation Nursery	yes	11/1/15 to
WA DOC FY16	SPP General	yes	7/1/15 to 6/30/16
Foundation Donations	SPP General	yes	until spent
JBLM Plants 2014/2015	Conservation Nursery	yes	9/1/14 to 8/31/15
JBLM Plants 2015/2016	Conservation Nursery	yes	9/1/15 to 8/31/16
JBLM Seeds 2014/2015	Conservation Nursery	yes	9/1/14 to 8/31/15
National Institute of Justice	Evaluation/Conservation	no	10/1/15
Norcliffe Foundation	Beekeeping	no	10/1/15
NSF Coupled Human Natural	Evaluation/Conservation	no	11/1/15
NSF INCLUDES pre-proposal	Education/ Evaluation	no	4/1/16
NSF Utah Agreement	SPP Network	yes	6/1/12 to 8/31/15
WA DOC Green Track FY16	Roots and beekeeping	yes	8/1/15 to 6/30/16
SPP Operating	Conservation Nursery &	yes	on-going
USFWS	Veg Mats	yes	2/1/16
WDFW 2015	Butterflies	yes	1/1/15 to 12/31/15
WDFW 2016	Butterflies	yes	1/1/16 to 12/31/16

*proposals highlighted in green were successfully funded

SPP-Evergreen spent the entire amount provided in the two WA DOC FY16 contracts awarded. Funds were spent to operate and improve SPP programs in Washington State in accordance with contract requirements. May 2016, WA DOC offered SPP unexpected funding support to purchase materials for the development of the [emergent pre-vegetated mat program](#) at Stafford Creek Corrections Center (SCCC). SCCC staff received the funds directly and worked with SPP-Evergreen staff to identify items and swiftly make purchases. These funds were a critical boost to this innovative pilot program.



Program partners in the Emergent Pre-Vegetated Mat (EVM) program at SCCC meet the northern red-legged frog that has taken up residence in the nursery-grown habitat. Photo by Daniel Cherniske.

3. Sustainability Job Programs

SPP jobs provide inmates opportunities to contribute to communities and ecosystems while gaining job training, education, and sustainable living skills. The list included in Table 2 shows all sustainability job program placements during FY16 (data provided by WA DOC staff; OMNI system).

The SPP job programs listed in Table 2 encompass all jobs involving sustainability of resources, science, and contact with non-human nature as documented and reported by WA DOC staff. It does not capture some sustainability jobs that have been coded in a non-sustainability category; for example, technicians working on composting and aquaponics at SCCC are not represented, and neither are electricians who install energy efficient fixtures. These job programs represent an enormous variety of activities, many of which were initiated and run with little-to-no input from Evergreen partners. SPP-Evergreen aims to promote and support the educational enrichment of every program, and will continue to build partnerships and capacity with this goal in mind.

The approximately 3,660 inmates in sustainability jobs are approximately 19% of the 19,000 men and women currently incarcerated in Washington State.

Table 2. FY16 SPP Jobs in WA Prisons: all jobs involving science, sustainability of resources, and/or contact with living things.

Sustainability Job Program (does <i>not</i> include students)	Number of participants during FY16
Agricultural Engineer	8
American Boarding Kennel Assc	2
Aquaponics	2
Basic Obedience - ABKA	1
Basic Pet Care - ABKA	27
Bee Conservation Tech	11
Bicycle Repair	28
Bike & Wheelchair Repair	28
Bio Waste Custodian	28
Book Repair	1
Butterfly Rearing Tech	6
Cat Handler	70
Clerk Sustainable	5
Community Work Crews	745
Computer Refurbishing	12
Cultural Crafts Program	17
Diversity Garden	3
Dog Handler Mentor	6
Dog Obedience Handler	247
Dog Service Handler	29
Dog Srvcs/Obed Secondary	44
Dog Walker	22
Fire Wood Stacker	6

Food Svcs Waste Recycler	99
Forestry I Worker	790
Forestry Ii Worker	35
Frog Rearing	3
Groundskeeper I	399
Groundskeeper II	52
Horticulture I Worker	149
Horticulture Worker II	39
Horticulture-Therapeutic Com	16
Inside Groundskeeper	11
Kennel Worker ABKA	18
Prairie Plant Conservation	72
Recycling Worker	402
Re-Use Fabric-Sustainable	67
Root Of Success Trainer	34
Roots Of Success Practice Lab	5
Sawyer	27
Teddy Bear Creations	39
Turtle Technician	3
Waste Treatment Helper	4
Waste Treatment Operator Ii	10
Waste Trt 1 Operator	22
Worm Farm Worker	22
	3666



A bicycle repair technician at WSP's Sustainable Practice Lab works on a bike frame. Photo by Ricky Osborne.

4. Sustainable Operations

Mission: To reduce the economic, environmental and human costs of prisons.

Sustainable Operations Background

The Washington State Department of Corrections (WA DOC) is the third largest agency in Washington State. They are responsible for managing all 12 adult prison facilities in the state and supervising adult inmates residing in our communities. WA DOC staff leads all SPP sustainable operations programs. Through these programs they are reducing energy consumption, solid waste creation, and water usage for facilities across the state while also maintaining overarching statutory responsibility for reducing inmate idleness, and providing self-improvement opportunities. Innovative partnerships such as SPP help the Department fulfill both fiscal responsibility and the statutorily-mandated rehabilitation for adults in their custody.

Prison facilities are required to provide health and dental care, chemical dependency treatment programs, educational and employment training programs, as well as housing, laundry and nutritional services. These facilities range in age and design from the 126 year-old Washington State Penitentiary in Walla Walla to the nation's first LEED Gold prison campus, the Coyote Ridge Corrections Center in central Washington.

WA DOC's goals for sustainable operations programs are to reduce the economic, environmental, and human cost of prisons by creating and fostering a culture of sustainability and managing facility operations in ways that align with those values. Values include:

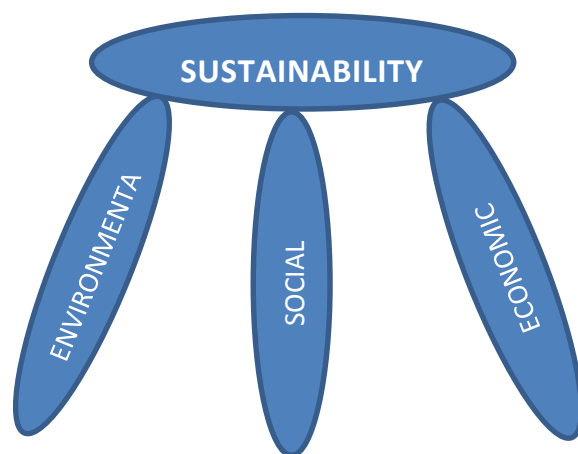
- Reducing waste
- Reducing consumption
- Engaging in training and educational opportunities as part of their involvement in sustainable operations
- Providing opportunities for inmates to contribute to the community

A Map for Success: Setting Goals, Providing Strategies, Initiating Activity

Three major strategies employed to affect sustainable operations in the Department are to:

1. Improve Practice and Process
2. Improve Communication and Enhance Partnerships
3. Enhance Sustainability Education and Training

THE **THREE PILLARS OF SUSTAINABILITY** GUIDES OUR APPROACH



Outcomes at a Glance

All three major strategies reinforce the three pillars approach to sustainable operations:

Cost Avoidance (fiscal responsibility)

- The agency has documented significant cost avoidance related to energy and waste.

Environmental Benefits (environmental responsibility)

- The agency has reduced facility greenhouse gas emissions by over 15 percent.

Effect on Incarcerated Individuals Behavior and Well-Being (social responsibility)

- Early data shows evidence of positive and lasting effects of sustainability-related programs on inmate behavior.

What is being measured?

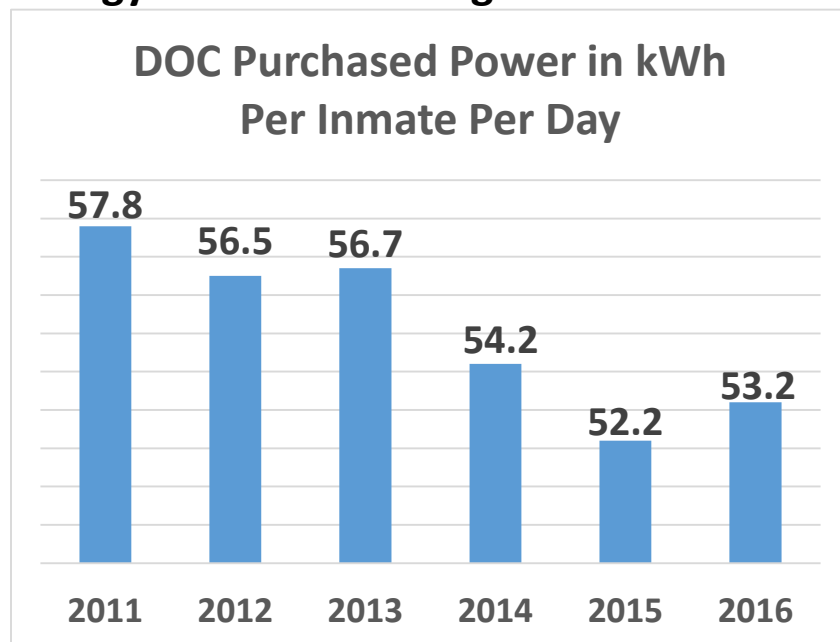
- Prison resource consumption and waste generation
- Engagement in meaningful activity
- Opportunities for environmental education



Pet partnership program participant at Monroe Corrections Center Special Offenders Unit. Local animal shelter, *Perfect Partners*, engages the incarcerated population to assist with animal rescue and rehabilitation.

Measures and Progress

Energy use is decreasing



Analysis

Target goal: 54.2 kWh/inmate/day

Data: The data represents power demands to operate the facilities conditioned spaces, perimeter lighting, food service, laundry, health care, and industrial operations. Sources of power include; electricity, natural gas, propane, and fuel oil. The consumption records for each facility from each power source are converted to equivalent kWh hours and divided by the number of inmates served.

Activities and initiatives that got us there

Lighting retrofits: Operational funds made available for LED lighting projects resulted in significant energy savings.

Preventative maintenance: Robust preventative maintenance programs and budgets are directly correlated to building performance – energy consumption. Deferred maintenance results in higher energy use and premature equipment failure.

Energy audits: ESCO's and utility incentives utilize a guaranteed project performance and funding mechanism to facilitate energy projects.

Paying for Energy Conservation

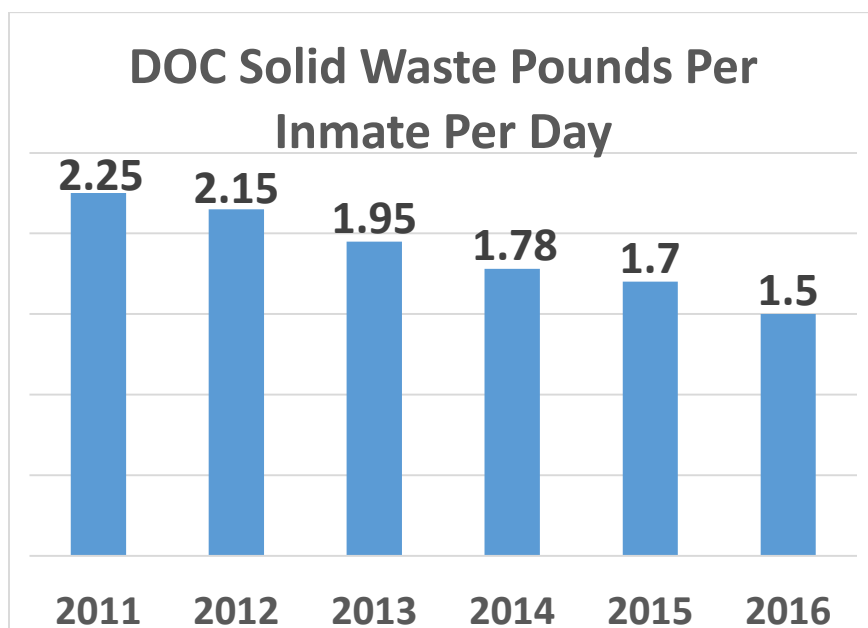
ESCO projects provide a cost effective and convenient process to design and complete energy upgrades in aging buildings and a means to use utility savings generated from the project to pay for the project costs. These projects are usually large dollar, multi-measure projects.

Smaller scale energy conservation projects are completed by working directly with the facility's utility providers and optimizing available incentives coupled with in-house labor and training programs, such as the Electricians Apprentice program. This combination helps both fund and complete the projects. Between 2012 and 2016, the Department received over one million dollars in utility incentives for completing energy projects.



Photo by Benj Drummond.

Solid Waste: Waste generation declines



Analysis

Target goal: 1.5 lbs./inmate/day

Data: The data represents the amount of waste generated by the facility that was not diverted to better solutions, but taken to the municipal landfill or incinerator. Wastes diverted from these totals include food waste diverted to composting operations, any recyclable materials diverted, and hazardous and universal wastes, such as electronics and light tubes, which are captured and managed specially.

Activities and initiatives that got us there

Upstream Waste Diversion Program: There is the expectation that every person will responsibly manage their own personal waste and waste generated in their operational area, and that there will be opportunities and appropriate receptacles conveniently located to facilitate this culture.

Food waste composting and recycling: All facilities are expected to have recycling and composting programs.

Sustainable purchasing: A major initiative over the past year was to reduce the WA DOC's consumption of single use plastics. Prisons eliminated plastic bottles from vending machines, disposable cutlery which was replaced with durable sporks or paper spoons and continues toward elimination of plastic trash liners.

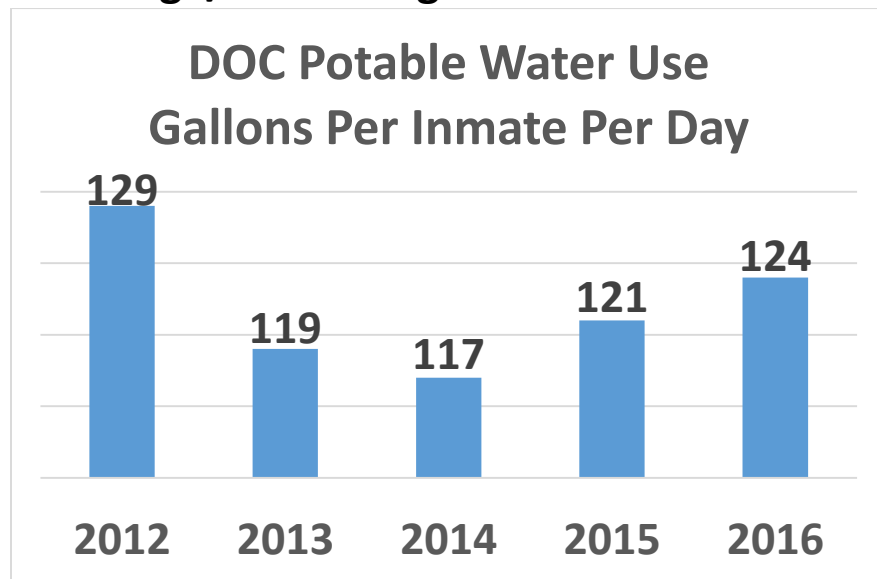
Vermicomposting

Monroe Correctional Complex boasts a very unique program to help manage its food waste using worms. For the past several years, a program has been diverting food waste to be processed by worms. This effectively eliminates waste while creating valuable soil amendments and fertilizers donated to the community.

The program is now experimenting with black soldier fly (*Hermetia illucens*) larva to increase the capacity of the program and expand the type of waste the program can process to include fats and oils. As a bonus, surplus fly larva are donated to the Woodland Park Zoo to supplement the diet of birds and reptiles.



Potable Water: Continuing Challenge/Conflicting Interests



Analysis

Target goal: 120 gallons/inmate /day

Data: The data represents the amount of potable water consumed by all prison facilities. It does not include consumption of water from rainwater catchment systems, reclaimed water, or agricultural well water sources which some of the facilities use to reduce their demand on potable water.

Challenges

Attention: This goal has gotten relatively little attention in past years in part because of the perception that water conservation projects were too expensive to pursue. Setting a new target goal this past year has revealed new opportunities and generated staff interest.

Activities and initiatives underway

Plumbing retrofits: Investing in new valves and controllers with a projected water savings of 65% (toilets & lavatories) and a projected project payback of under two years. If successful, retrofits will be expanded where applicable.

Metering and facility water use assessments: Five of our facilities have completed metering of their entire campuses and will use this equipment to monitor and reconcile water use to reduce consumption and detect and repair leaks. Cost benefit analysis of this project may support further metering of other campuses.

Water sensitive landscaping: While facility kitchen garden programs depend on sufficient water use to thrive, several facilities across the state are making up for this need by replacing traditionally high water use landscape installations with more water sensitive and native plantings

GARDENS TO TABLE

Gardening at prison facilities has deep roots going back many years, but it has been just in the past several years that facility grounds have been reclaimed for various garden projects with such rapidity.

Garden space at facilities has increased significantly, claiming lawns and gravel yards. Production of vegetables has increased with more emphasis on growing produce that can be easily utilized by facility food service operations.

The water use goal will not diminish support for garden programs, but rather bring a new opportunity for innovation to the programs.



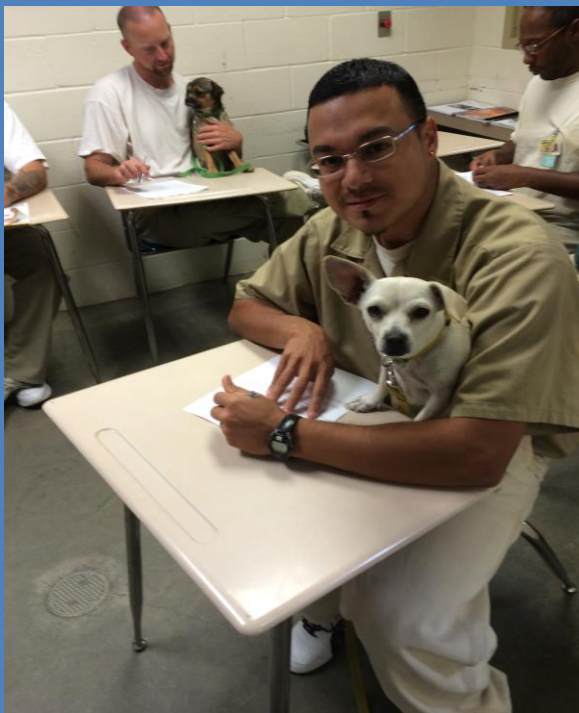
Photo by Benj Drummond

Effect on Inmate Behavior: Sustainable Operations and Low-Cost Programming

As part of the SPP partnership, WA DOC and collaborators operate numerous, overlapping, and complimentary programs. These programs are designed to humanely and positively impact the experience and outcome of a person's time in custody as well as their integration back into the community. The vision for sustainability includes social wellbeing of the community, staff and incarcerated people, and ties directly to WA DOC's core mission - public safety. Toward this end, SPP programs encourage and facilitate the emergence of numerous projects that can best be described as programs that elevate the human spirit. Because the WA DOC's sustainable operations program holds to the classic "three pillars of sustainability" ideology, the human well-being component is as important as environmental responsibility.

All projects require corrections staff and leadership support, collaboration with community partners, and dedication. These programs have another thing in common—they are initiated and operate at low or no cost to the facility or to the state.

SUCCESS:
Engaging the incarcerated population in sustainability programs is successful if it improves the mood of just one person for just one hour, ideally increasing the likelihood for further positive educational and therapeutic experiences and lessening the occurrence of behavioral problems in the facility and re-offense once released to the community.



Dog program participants at WSP Close Custody Unit

Cost Containment: Sustainable Operations Must be Economically Viable and Fiscally Responsible

- Reduced resource consumption
- Reduced waste management expenses
- Low-cost programming opportunities
- Positive contributions (opportunities for incarcerated people to contribute to community and facility operations)

As an economic component of sustainability, it is essential that programs are fiscally responsible and economically viable. As the cost of operations continues to increase with the steady rise of utility, fuel, and service costs, it is important to consider innovative solutions and partnerships built on the pillars of sustainability. This includes identifying purchasing efficiencies, committing to high efficiency building, being a champion of preventive maintenance and coupling low-cost programming with facility operations.

Resource consumption: Creating a formalized sustainable operations program and articulated goals to reduce resource consumption began in 2003, and significant cost avoidance had been realized. While the WA DOC continues to spend more each year on utility expenses, demonstrable cost avoidance of increased expenses has been achieved because consumption continues to decline.

Reduced waste management expenses: Building onsite compost facilities on the majority of facility campuses, compelling upstream waste diversion, and recycling programs contributed to the reduction of waste management expenses by 27%.

Low-cost programming opportunities: Fostering low-cost educational programs such as: gardening, waste-water treatment plant operation, durable medical equipment repair and facility composting, provides meaningful activity, skill and certification attainment for incarcerated individuals, and *real* cost benefits to the facility.

Trades training and certification programs: Providing incarcerated individuals opportunities to gain confidence, new skills, job training, and certifications can assist in successful reentry.

Reducing our levels of consumption will not be a sacrifice but a bonus if we simply redefine the meaning of the word 'success.'
– David Wann



Photo by Jody Becker-Green

New Skills: Electrician Apprenticeship program participant changing lighting ballasts at the Washington Corrections Center for Women.

5. Community Contribution Programs

Community contribution programs are those sustainability programs that directly give back to nearby communities. They train pets for adoption and donate crafts and living essentials (firewood, quilts) made from reclaimed materials. Other community contribution programs provide community services such as habitat restoration and removing hazard trees.

Typically, these programs are partnerships between corrections centers and community organizations. The partnerships help community organizations to increase capacity and provide inmates opportunities to contribute to the world outside the secure perimeter. Many of these programs are well-established and predate the formal SPP partnership. Our objective is to acknowledge and support these productive partnerships and to provide a comprehensive overview of activities taking place statewide.

SPP's conservation and sustainable operations programs also make community contributions; for example, the [Conservation Nurseries](#) provide hundreds of thousands of plants to regional restoration, and [Sustainable Operations](#) programs contribute by reducing prisons' environmental footprint and saving taxpayer dollars. See those sections of the report for details.

Dog and Cat Programs

Dog and cat programs are common in prisons across Washington State. Nearly all of Washington's prisons have formed one or more partnerships with community nonprofits to create pet programs. Inmates receive support from partner organizations to provide excellent animal care and obedience training, and—in a few cases—service and/or therapy training. We have heard from inmates and staff that pet programs are a benefit to all directly involved, and to the larger prison community as well. We have numerous testimonials on both the in-prison and post-release benefits of pet programs.



Cat handler Leon Fannon holds a cat at Larch Corrections Center, outside Vancouver, WA. Photo by Ricky Osborne.

In FY16, cat programs were added at two prisons, and 479 incarcerated men and women participated in dog or cat programs in prisons across the state. A complete list of FY16 dog and cat programs and partners is included below.

Table 3. FY16 Dog and Cat Programs (see [Appendix 3](#) for abbreviations)

Prison	Program	Program Partners	Highlights
AHCC	Pawsitive dog training	Diamonds in the Ruff and Spokanimal	Graduated 27 dogs in 4 graduation ceremonies
CBCC	Dog training & adoption	Welfare for Animals Guild (WAG!)	46 dog & 13 Puppies graduated
CBCC	Cat program	Welfare for Animals Guild (WAG!)	New program in close custody
CCCC	Training dogs for veterans	Brigadoon Service Dogs	12 dogs trained for individual veterans
CRCC	Ridge Dogs	Benton Franklin Humane, Adam County Pet Rescue	139 dogs graduated
CRCC	Kitten Program	Benton Franklin Humane, Adam County Pet Rescue	20 kittens in the program
LCC	Larch Cat Adoption Program	West Columbia Gorge HS, HS for Southwest WA	
MCC	Dog training and adoption	Summit Assistance Dogs	24 dogs graduated
MCC	Cat program: Special Inmates Unit	Purrfect Pals	17 inmates participated
MCCCW	Pawsitive Prison Project	Kitsap Humane Society	96 cats graduated
OCC	OCC Dog Program	Olympia Peninsula Humane Society	138 dogs graduated since 2010; dog handlers trained AKC Canine Good Citizen practices, meet 1xweek for group study, group training 2xweek
SCCC	Freedom Tails	Harbor Association of Volunteers for Animals (HAVA)	4 graduation ceremonies
SCCC	Service dogs for veterans	Brigadoon Service Dogs	
WCCW	Prison Pet Partnership		Graduated 24 dogs including 1 service and 1 therapy dog; first in-prison pet program in the country!
WSP	Kittens in the Klink	Blue Mountain Humane Society	
WSP	Dog training & adoption	Blue Mountain Humane Society	

Reclaim, Repurpose or Restore, and Donate Programs

Consistent with the earliest days of SPP programs, WA prisons have a mindset to “throw nothing away,” to pull from a waste stream (within or outside the prison) and transform refuse into something of value. In some cases, these programs directly meet an organization’s need, such as quilts to a homeless shelter, refurbished computers to schools, and produce to food banks. In other cases, they donate handmade or restored creations for organizational fundraising. The productivity and generosity of these programs are best illustrated in state-wide numbers, below. Transforming soil and sunlight into delicious produce also falls within this category.

Table 4. FY16 Community Contributions Programs state-wide totals (12 prisons)

Item	Statewide totals (approximations)
Garden area	15.3 acres cultivated
Produce grown	417,350 pounds to food banks & prison kitchens
Crafts made from reclaimed materials	30,200 items donated
Refurbished bicycles	459 donated
Refurbished wheelchairs	295 donated
Firewood	890 cords donated



A gardener walks through the main garden at AHCC. Photo by Ricky Osborne.

Reclaim and donate details *by prison* are in the table following.

Table 5. FY16 Community Contributions Programs to Reclaim, Repurpose, Restore, or Donate (see [Appendix 3](#) for abbreviations)

Prison	Programs	Program Partners	Highlights
AHCC	Gardens: Main	Second Harvest Food Bank, Master Gardeners, Cheney Outreach for Children, and Salvation Army	100,000 ft2 of gardens grew nearly 80,000 lbs of produce; most went to the prison kitchen; 933 pounds of pumpkins donated to partners
AHCC	Gardens: Minimum	Second Harvest Food Bank, Master Gardeners, and Gospel Mission	20,000 ft2 of gardens grew 1,400 lbs of produce
AHCC	Computers 4 Kids	School districts – OSPI, DES	Donate 4,500 refurbished computers annually; incarcerated technicians learn basic computer diagnostics and can test for certification
AHCC	Firewood donation	SNAP Spokane	Donated 660 cords of wood to low-income families; received firefighting training
CCCC	Gardens	Centralia College, Rochester Organization of Families, Thurston County Food Bank, Littlerock School District	40,000 sq. ft. of gardens, growing ~17,000 lbs/year for prison kitchens and donation to partners
CRCC	Gardens: Minimum		1,100 ft2 of gardens produced 1,645 lbs
CRCC	Pumpkin Patch		Grew 200 pumpkins for visitors and community
CRCC	Toys for Tots	Tri-Cities Toys for Tots	150 crafts donated to event
CRCC	Teddy bears from reclaimed materials	Hospitals, API events at CRCC, ARC of Tri-Cities, Franklin County Sheriff's Office	Donated 275 teddy bears to partners and benefit events
LCC	Gardens	Clark County Food Bank	
LCC	Wood craft donations		
MCC	Worm Farm	City of Monroe, Fircrest Residential Habilitation Center, Northwest Trek	Worm bins donated to partners
MCC	Black Soldier Fly pilot (food waste composting)	Woodland Park Zoo	Larvae donated to zoo and local area chicken farmer
MCC	Sustainable Practices Lab (SPL): Bike program	Snohomish County Sheriff's Office, Snohomish Boys & Girls' Club, Night Out Against Crime	145 bikes donated
MCC	SPL Wheelchair program	Wheels for the World	On track to donate first 300 wheelchairs
MCC	SPL Toy program	Developing partnership with Children's Hospital	
MCC	Craft donation	Community Aide Coalition (CAC)	Donated 111 quilts and 1000 crocheted hats and scarfs
MCCCW	Gardens		5 gardens, 250 ft2 total; grew 1000 pounds of produce for prison kitchen
OCC	Gardens	Peninsula College	24,000 ft2 of gardens, 4,000 ft2 greenhouses; produced 900 lbs for inmate kitchen, 400 lbs for local food

			banks, and 300 lbs of pumpkins to visiting children
OCC	Wood shop	Quileute High School scholarships, Cherish our Children, Forks Lions Club, CASA, Quillayute Valley School District, Relay for Life, Forks Chamber of Commerce, Timber Museum, Olympic Anglers, Calm Waters, Forks Soroptimists; wood provided by Westport Shipyard & OCC Community Crews (DNR)	Donated ~160 toys, crafts, sculptures, and pieces of furniture to charitable and nonprofit partners
OCC	Firewood	Olycap, Quillayute Valley Scholarship Auction, Lake Quinault Fire Department, OCC Community Crews (Department of Natural Resources)	120 cords for Native American ceremonies; 86 cords to elderly and handicapped clients of Olycap; 25 cords donated to scholarship auction, worth \$8,000; 237 cords donated to fire department
SCCC	Bicycle Repair	Lions Club	259 bikes repaired & donated
SCCC	Wheelchair Repair	Wheels for the World	295 wheelchairs repaired & donated
SCCC	Gardens & greenhouses		25,000ft2, nearly 9000 lbs; all goes to staff & inmate kitchens
WCC	Gardens & greenhouses	Thurston County Food Bank, The Saint's Pantry Food Bank, The City Reach Food Bank, and The Shelton Community Kitchen	Grew 30,000+ lbs, value of \$56,300; all donated to partners
WCCW	Gardens & greenhouses	WSU Extension, Pierce County	Grew 7,084 lbs of produce for inmate kitchen
WCCW	Mother Earth Farm	Mother Earth Farm, Real Food Network	Offsite crew of 7 inmates; grow food for donation to partners
WCCW	Bicycle Repair	Kiwanis Gig Harbor supplies bikes; donate to "Gear Up For School" at KP Middle School; schools in Peninsula School District; individual kids identified by Kiwanians	More than 200 bikes for middle school kids at start of the school year
WCCW	Quilts and other fabric crafts	Community members donate all items.	Donated 2,500 craft items (Christmas stockings, knitting, beds for West Sound Wildlife, quilts, etc.)
WSP	Institutional Sustainability Garden		Retail produce savings \$371,285
WSP - SPL	Sustainable Practices Lab (SPL), 18 programs incl. bikes, wood shops, aquaponics, plant starts, worm composting, teddy bears, & quilts; a few detailed below	received materials donations from partners; since 2012, donated to 438 charities	Since 2012, donated 25,342 items to nonprofits; fixed or built 8,932 items for state use; hosted 298 educational tours of the lab; and deferred \$170,000 in costs for Washington DOC
WSP - SPL	Water filtration pilot (SPL)	Project 41	Developing low-cost technology for clean drinking water w/out electricity

Community Work Crews

The minimum security prisons (LCC, OCC, MCCCW, and CCCC) and units (Minimum Security Unit="MSU") house inmates for a relatively short time preceding release. Many minimum security inmates are allowed to work "outside the fence", and join offsite crews working on forested and community sites. These crews allow positive reconnection to outside communities: providing exposure to and experience in the world outside the fence while contributing needed community services.

These crews employ more inmates than any other kind of program under the SPP umbrella: 1,662 incarcerated men and women this fiscal year. With so many inmates participating at hundreds of sites statewide, we still have much to learn about these programs, including how well each does and does not fit the SPP model. Reported details are shown in the table below.

Table 6. Community Work Crews FY16 (see [Appendix 3](#) for abbreviations)

Prison	Programs	Program Partners	Highlights
AHCC	COMMUNITY WORK CREWS		
AHCC	FORESTRY I WORKER		Contribute to Firewood donation program
CCCC	COMMUNITY WORK CREWS		
CCCC	FORESTRY I WORKER		
CCCC	FORESTRY II WORKER		
CCCC	PRAIRIE PLANT CONSERVATION	CNLM, DNR, JBLM, Friends of Puget Prairies, and others	Dedicated to prairie restoration in southern Thurston County
CRCC	COMMUNITY WORK CREWS		
LCC	COMMUNITY WORK CREWS		
LCC	FORESTRY I WORKER		
MCCCW	COMMUNITY CREW	Kitsap County Conservation, Hood Canal Salmon Enhancement Group, WSDOT	Beards Cove tree planting; Chico Creek restoration; Theler Trail maintenance; knot weed removal; Union River Fish Ladder maintenance; planted 4,000 trees & 2,500 shoreline spp. & removed 48 yards ³ of Scot's broom
MCC	COMMUNITY WORK CREWS		
OCC	COMMUNITY WORK CREWS	WA Department of Fish & Wildlife	OCC's Community Service Crews clipped an estimated 1 million hatchery fish, contributing to wild salmon recovery efforts.
OCC	FORESTRY I WORKER		Forestry 1 Workers complete 101.5 hours of National Wildland Fire Training
WCCW	COMMUNITY WORK CREWS	Mother Earth Farm, Real Food Network	Offsite crew of 7 inmates; grow food for donation to partners
WSP	COMMUNITY WORK CREWS		



SPP's Prairie Restoration Crew sows seeds at CNLM's Shotwell's Landing. Photo by Ricky Osborne.

5. Biophilia Programs

Biophilia was defined and popularized by Edward O. Wilson as “the urge to affiliate with other forms of life.” SPP brings nature inside prisons with the motivation to relieve the stress of prison environments. Scientific literature shows that when nature is available within institutional and urban environments, inhabitants experience many positive, therapeutic benefits. The therapeutic value of SPP’s programs has been recognized widely and consistently by both inmate and staff partners.

This year, we recognized that SPP includes several programs that don’t fit into established reporting areas. Thus, while many of these efforts have been ongoing for years, adding this new program area helps us to report on them. Again, while all SPP programs are intended to offer positive contact with nature, the programs detailed below include enjoying nature as their *primary* function. We are pleased to provide these programs a formal place within the suite of SPP programming.

Table 7. Biophilia Programs FY16

Prison	Programs	Program Partners	Highlights
AHCC	Nature Imagery		Inmates in maximum security area can watch nature videos on a computer monitor.
AHCC	Flower gardens	Miller Homestead LLC	Ornamental and pollinator-friendly plantings throughout the main and minimum areas.
AHCC	Diversity garden		Cultural groups grow food and flowers for their special events
CBCC	Flower gardens		Ornamental gardens in courtyard and access breezeway
CCCC	Flower gardens	Centralia College	Ornamental and pollinator-friendly plantings throughout the campus.
CRCC	Heritage Garden		Inmates’ designs honor the cultural and natural heritage of our area, using native plants to minimize water use.
LCC	Flower gardens		Ornamental plantings throughout the campus.
LCC	House plants		Only WA prison with house plants in inmate rooms
MCC	Houseplants		Houseplants on hospital floor.
MCC	Flower gardens, boxes, baskets		Flower gardens are grown to attract bees to pollinate the vegetables.
OCC	Water features		Two living units have fish ponds; the other has a fountain and basin
OCC	Flower gardens, boxes, baskets	Peninsula College	Pollinator-friendly plantings in the Horticulture area; each living unit has several garden beds planted and maintained by residents; hanging baskets and flowering beds throughout staff and inmate areas
OCC	Chickens		
SCCC	Flower gardens, boxes, baskets		Extensive flower and pollinator-friendly plantings throughout the campus.
WCC	Flower gardens, boxes, baskets		Flowers planted throughout the campus.

WCC	Nature Imagery	Nature Imagery in Prisons team	
WCC	House plants		In all shared and staff areas
WCCW	Flower gardens, boxes, baskets	WSU Extension, Pierce County, Tacoma Community College	Flowers and pollinator-friendly plantings throughout the campus.
WCCW	Chickens	Mother Earth Farm and Gig Harbor Food Bank	All eggs donated to partners
WSP	Rental garden boxes		62 boxes available in south and east complexes
WSP	Houseplants		Throughout SPL and staff areas



Renee Curtiss holds one of the chickens that lives at Washington Corrections Center for Women. Photo by Ricky Osborne.

6. Ecological Conservation Programs

SPP conservation programs represent ambitious collaborations among multiple partners. Each program receives crucial support from a variety of contributors including incarcerated people, corrections staff, graduate student staff from Evergreen, SPP staff, agency scientists, and community partners. Program success is dependent on each participant contributing their expertise and time. Programs are designed to maximize benefits for each collaborator by sharing workload and leveraging resources. Since 2009, SPP has steadily expanded programs rearing threatened and endangered species and producing native plants for ecological restoration. In 2009, Cedar Creek Corrections Center (CCCC) hosted the first captive rearing program to raise threatened Oregon spotted frogs and our first conservation nursery program started at Stafford Creek Corrections Center (SCCC). We now support eight ecological conservation programs involving animals and insects and five conservation nursery programs throughout the state.

Oregon Spotted Frog Program

The Oregon spotted frog (OSF; *Rana pretiosa*) is a state-listed endangered species and federally-listed threatened species; this warm water marsh species has vanished from an estimated 70% of its historic range. From 2009 to fall 2015, inmates, staff, and students partnered with scientists and conservation leaders from Washington Department of Fish and Wildlife, US Fish and Wildlife Service, and three zoos to successfully raise 879 OSF at Cedar Creek Corrections Center (CCCC; see Table 8).

The US Fish and Wildlife Service has suspended the OSF captive rearing program indefinitely. While captive rearing was very successful, frogs released into the wild don't seem to be successfully breeding at the designated release site. Partners are evaluating the program to determine if it may be reinstated in the future, and we are working with Washington Department of Fish and Wildlife partners to consider other animal rearing programs that may be operated in prisons.

Table 8. Oregon Spotted Frog Rearing at CCCC March 2009 – October 2015

Year	Eggs Received	Number Released	Overall Survival	Overwintering Received	Overwintering Released	Overall Survival	Total Released
2015	269 (201 viable)	167	83%	0	N/A	N/A	167
TOTAL 2009-2015	1172 (1050 viable)	785	77%	112	94	84%	879

Western Pond Turtle Programs

The western pond turtle (*Emys marmorata*) is a state-listed endangered species and federal species of concern. The turtles once ranged from the Puget Sound lowlands to Baja, California. Led by Washington Department of Fish and Wildlife (WDFW), partners have been working toward the recovery of western pond turtles since the late 1990s. At the start of recovery efforts, only about 150 turtles remained in the wild. Today, more than 2,150 captive-reared turtles have been released at 6 locations.

In 2013, SPP joined recovery partners to assist with the rehabilitation of western pond turtles that were afflicted with a newly discovered “shell disease.” In some individual turtles, the disease requires an initial period of intensive care provided by veterinarians. After completing intensive care treatments, some turtles are moved to correctional facilities to receive extended care provided by trained inmate technicians. The technicians provide daily maintenance care while the turtle's shells complete the healing process. As each turtle heals, it can be released back into the wild. After their release, WDFW

monitors the turtles in the wild for health and ability to reproduce. Inmate technicians receive SPP certifications for this work.

Turtles have been housed at Cedar Creek Corrections Center since 2013 and at Larch Corrections Center since December 2015. The new program at Larch began in response to the need for assistance with the Columbia Gorge turtle population and is modeled on the program at Cedar Creek. In addition to caring for the turtles, the technicians raise mealworms as a sustainable food source to feed the turtles. Since the program started, five certificates have been awarded to technicians, two graduate students have provided program coordination, and three corrections staff have served as liaisons. Community partners for these programs include Washington Department of Fish and Wildlife, PAWS Wildlife Rehabilitation Center, Woodland Park Zoo and Oregon Zoo. Results of these recovery efforts are in the tables below:

Table 9. Western Pond Turtle Rehabilitation at CCCC August 2013 - August 2016

Year	Turtles Received	Turtles Released
2013	8	2
2014	14	17
2015	8 ⁱ	6
2016	2 ⁱⁱ	4 ⁱⁱⁱ
Total	25	25^{iv}

Notes: ⁱ5 of 8 being re-treated. As knowledge of the disease advances and treatment procedures further develop, veterinarians have learned that minor lesions may go deeper into the shell requiring further treatment.

ⁱⁱ These turtles have a neurological issue and were held back for observation. One was humanely euthanized for research purposes and the other is still currently housed at Cedar Creek. Six additional turtles are expected to arrive for treatment in late September.

ⁱⁱⁱ All 4 turtles were those that had been re-treated

^{iv} Does not include re-treated turtles

Table 10. Western Pond Turtle Rehabilitation at LCC December 2015 - August 2016

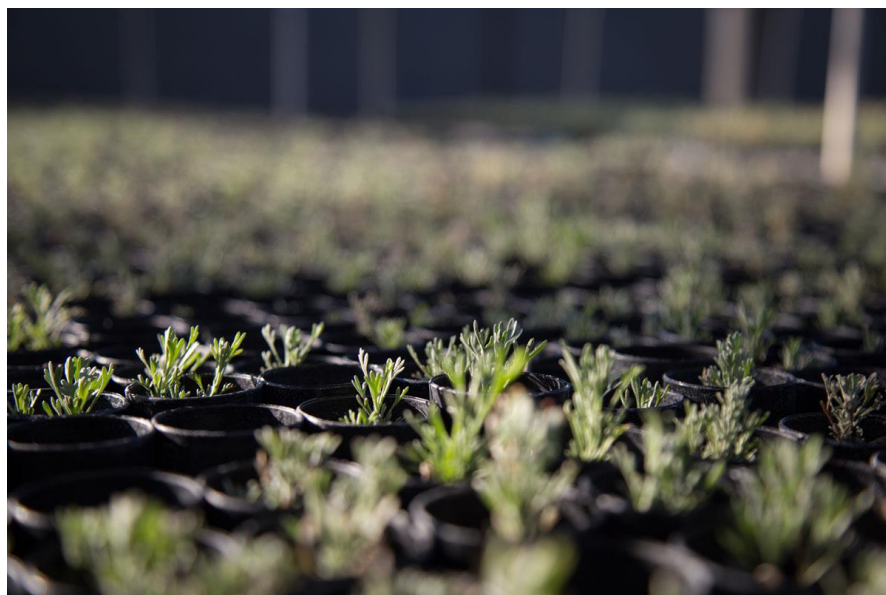
Year	Turtles Received	Turtles Released
2015	5	0
2016	4	9
Total	9	9

Table 11. SPP Certificates awarded to Turtle Technicians (see [Appendix 3](#) for abbreviations)

Prison	Number of Technicians Certified	Criteria
CCCC	4	Completed at least 150 hrs of academic studies, at least 600 hrs of animal husbandry, at least 50 hrs of public speaking and at least 10 hrs of laboratory and/or field work totaling 1,000 hrs
LCC	2	

Sagebrush Conservation Nursery

Fall 2015, approximately 20,000 sagebrush were planted to help restore habitat for the greater sage-grouse. The majority of the plants were installed on a sagebrush steppe site in the Wenatchee area previously burned by wildfire. This planting marked the end of a successful first season for the program. Incarcerated participants and corrections staff play a critical roles in program operation. This program



Morning sun shines on sagebrush seedlings at CRCC's conservation nursery. Photo by Ricky Osborne.

also receives support from a local contract employee with Institute for Applied Ecology (IAE) supporting program coordination and education elements.

Early spring 2016, 40,000 Wyoming big sagebrush (*Artemisia tridentate*) and three-tip sagebrush (*Artemisia tripartite*) were sown at CRCC. Plants will be delivered and planted on Bureau of Land Management (BLM) and U.S. Fish and Wildlife Service refuge sites October 2016.

At the end of the first season of this program (October 2015) five inmate technicians had participated and each received certifications. In FY16, educational workshops were provided for program technicians on six different nursery topics and two lectures were held for the broader population on topics such as sagebrush and greater sage-grouse and shrub-steppe song birds.

Program funding is provided primarily by partners with the IAE and the BLM. The CRCC program is part of a multi-state effort led by IAE to restore habitat for the greater sage-grouse. Sagebrush prison programs are currently operating in Oregon, Idaho, Nevada, Utah, and Washington prisons. In FY17 we are expanding sagebrush growing to a second WA prison site at WSP.

Table 12. SPP Certificates awarded to Sagebrush Technicians

Prison	Number of Technicians Certified	Criteria
CRCC	5	Completed a full season of work in the sagebrush conservation nursery.

Prairie Conservation Nurseries

Primary funding support for the Prairie Conservation Nurseries comes from the Center for Natural Lands Management (CNLM) and Joint Base Lewis-McChord (JBLM). Plant materials produced by SPP's prairie conservation nurseries are used by state and federal agencies and conservation organizations including the U.S. Fish and Wildlife Service, JBLM, WA Dept. of Fish and Wildlife, WA Dept. of Natural Resources, and CNLM. In close collaboration with CNLM, we will be expanding services to collaborators across the Pacific Northwest.

Prairie Plant-Plug Production

During FY16 the prairie conservation programs grew plant starts at three sites: Stafford Creek Corrections Center (SCCC), Washington Corrections Center for Women (WCCW), and Shotwell's Landing Nursery. Shotwell's Landing Nursery is supported by a Restoration Crew from Cedar Creek Corrections Center (CCCC), a crew of 10 inmate technicians dedicated to prairie restoration at multiple sites in Thurston County. Currently, the three nursery sites have an annual sowing capacity of 700,000 plugs, and this produces up to 420,000 viable plant-plugs annually. This year, the nursery delivered 421,649 plant plugs of 62 species for Taylor's checkerspot recovery and lowland prairie restoration; see Table 13 for more information. Cumulatively, the nurseries have delivered nearly 1.9 million plant-plugs since 2009.

Plant-plug production remains a vital component of the regional recovery plan for Taylor's checkerspot butterflies. However, seeding will become the primary method of habitat restoration in future years. This plan will decrease local requests for the number of plant-plugs produced by SPP. Cultivating diverse plant materials for an increased number of collaborators will allow us to maintain the strength of SPP's prairie conservation nursery programs.

Table 13. Conservation Nursery Regional Plug Summary, delivered FY16

	# of species	Plants
Total Sown Winter	34	467,960
Total Sown Summer	30	297,224
Total Sown	64	765,184
Total Sown Capacity		700,000
Percent of Capacity		109%
Percent Delivered of Sown		55%
Total Requested	58	425,614
Total Delivered	62	421,649

Prairie Seed Production

SPP continues to cultivate plants for seed at WCC and WCCW. Seed production in a corrections setting has proven successful for species poorly adapted to mechanical agriculture techniques. The two seed production gardens at WCCW and WCC harvested over 14 lbs. of seed of early blue violet from 5400 sq. ft. This is more than two times the harvest rate of other regional seed nurseries including the National Resource Conservation Service.

Potential collaborators beyond the Salish lowlands have recognized the cultivation accomplishments of our seed nurseries. A number of agencies working on the recovery of the Silverspot butterfly, a federally listed group of species, have funded efforts to increase the genetic diversity of cultivated early blue violets. This will not require an increase in cultivated space, but will deliver more seed to new regions along the coast of California, Oregon, and Washington.

Training and Education

SPP's graduate student program coordinators provide frequent guidance and education to inmate technicians. The graduate students serve as the primary liaison between partners, including the WA DOC staff who supervise and counsel the inmates. Since 2010, the Conservation Nursery Program has trained nearly 200 inmate technicians, 14 graduate students have provided program coordination, and six

corrections staff have served as program supervisors. The lectures and workshops offered within the prairie conservation nursery programs are detailed in Table 14.

Table 14. Prairie Conservation Nursery Lectures and Workshops FY16 (see [Appendix 3](#) for abbreviations)

	Presented by SPP Staff	Presented by SPP students	Presented by program partner	DOC Attendees	Total
LECTURES					
SCCC	4	6	0	17	10
WCCW	4	6	1	5	11
CCCC - Shotwell's Landing	4	6	2	31	12
WCC	16	0	0	32	16
Total Lectures	28	18	3	53	33
WORKSHOPS					
SCCC	2	8	0	17	10
WCCW	2	16	1	5	19
CCCC - Shotwell's Landing	2	16	4	31	22
WCC	2	26	0	32	28
Total Workshops	8	66	5	53	79

SPP offered extra lectures at WCCW and WCC to address the intricacies of violet seed collection, seed cleaning, and the ecological significance of restoration. The program at WCC's Skill Builders Unit (SBU) required extensive preparation and contact time with inmate technicians with cognitive challenges. The time investment is necessary for the crew to be effective, and also builds trust and demonstrates an impressive work ethic. SPP staff and graduate students invested significant resources researching and presenting curricula fitting the diverse and variable learning levels of SBU inmates.

From FY15 through FY16, SPP staff emphasized improvements in education supporting certifications for conservation nursery technicians. Certifications provide tangible documentation that may increase personal investment and responsibility and can help translate skills to resumes and academic credit. The retention rate and certification awards continue to increase by 10% among all the facilities.

Table 15: Conservation Nursery Certificates FY16

Location	800 hours	400 hours	Total	Total Participants	% Certified
SCCC	10	3	13	17	76%
WCCW	3	2	5	5	100%
CCCC - Shotwell's Landing	9	3	12	31	39%
WCC	2	0	2	32	6%
Total	24	8	32	53	60%

Emergent Pre-Vegetated Mat (EVM) Production

SPP embarked on an ambitious pilot project in FY16 to cultivate pre-vegetated mats of wetland plant species to assist in habitat restoration for the Oregon spotted frog and salmon species. The surplus tilapia facility at SCCC was converted to an aquaponics system with significant support and ingenuity from SCCC staff and technicians. In addition to the labor and financial investment by WA DOC, the U.S. Fish and Wildlife Service (USFWS), JBLM, SPP-Evergreen, and CNLM provided funds. The annual target production is 230 15m² mats from 390m² of growing area, with successional sowings throughout the year.

The EVM program supports a collaborative experiment. The mats produced will be installed in wetlands following weed control techniques to limit the spread of reed canary grass. The areas will be monitored for plant establishment and weed suppression success over a three-year period. The technical accomplishments of the project thus far bode well for positive results from this experiment in ecological restoration.



In the background, you can see some of the elaborate, color-coded plumbing that supports the EVM pilot. Photo by Carl Elliott.

Plantain Programs

Narrow leaf plantain (*Plantago lanceolate*) is being raised at MCCCW and LCC to support the larval food needs for Taylor's Checkerspot Butterfly programs. The plantain beds at MCCCW were first established in 2013 and have since been expanded to serve as the sole source of food for growing butterfly larvae raised in the prison's rearing program. Building on the success of these beds, we built a new plantain nursery at LCC. Inmate technicians harvest plantain leaves which are transported to the Oregon Zoo to feed larvae raised in the zoo's Taylor's Checkerspot Butterfly rearing program

Animal Feed Programs

Several prisons raise high quality feed for animals in the care of zoos and SPP programs. Providing suitable food for Taylor's checkerspot butterflies has been a priority, as partners want to ensure that the insects' food sources are free of harmful pesticides. A summary of zoo food programs is provided below.

Table 16. SPP programs providing food for captive animals (see [Appendix 3](#) for abbreviations)

Food source	Facilities	Recipients
Meal worms	LCC, CCCC, and SCCC	Western pond turtles and koi in prison facilities
Plantain	LCC	OR Zoo's Taylor's checkerspot rearing program
Nectar Plants	LCC	Developing program for OR Zoo's Taylor's checkerspot rearing program
Plantain & Nectar Plants	MCCCW	Taylor's checkerspot rearing program at MCCCW, in collaboration with OR Zoo
Soldier fly larvae	MCC	Birds and reptiles at Woodland Park Zoo
Soldier fly larvae	MCC	Western pond turtles at LCC and CCCC recovering from acute care received at OR Zoo and PAWS wildlife care facility

Honeybee Programs

Matching interest we have heard from DOC headquarters and multiple prisons, developing and improving beekeeping programs are a priority for SPP-Evergreen staff. These programs provide meaningful education and therapeutic activities for incarcerated and DOC staff beekeepers, contribute to honeybee conservation and restoration, and have the potential to create and contribute related goods (hives, honey, beeswax products) to nearby communities.

Adding to the four existing programs, AHCC initiated a beekeeping program in FY16, with educational and technical support from a Master beekeeper. Four additional prisons were planning or poised to launch programs in FY17. A detailed summary of program status as of June 30, 2015, is in Table 17.

Table 17. Beekeeping Certification Overview by Institution FY16 (see [Appendix 3](#) for abbreviations)

Prison	Hives	Partners	Certified Apprentices	Notes
CCCC	1	Olympia Beekeepers Association	21	Graduated 3 classes of inmates and staff since November '14
LCC		Bee Thinking		New program
WCCW	2	Mother Earth Farm		Certification planned Mother Earth Farm
SCCC	4	Olympia Beekeepers Association		Longtime program; planning to add education

WCC		Olympia Beekeepers Association		Very interested; need new site plan
WSP	4	West Plains Beekeepers Association		Inmate participation & education in FY17
AHCC	4	Millers Homestead	8	Staff education 1st; inmates' planned for FY17
MCC		Snohomish Beekeepers		Planning programs for TRU and WSR
CRCC		Mid- Columbia Beekeepers		Planning program
MCCCW		TBD		Unknown status
OCC		TBD		Unknown status
CBCC		North Olympic Peninsula Beekeepers Association		Planning education & program for FY17
Total	12		25	

Pacific Northwest Monarch Butterfly Program

Monarchs from the Pacific Northwest are “seriously under-represented in the monarch world” (www.facebook.com/MonarchButterfliesInThePacificNorthwest). In an effort to restore and conserve Pacific Northwest monarchs, Washington State University professor Dr. David James partners with staff and inmates at WSP. During August and September 2015, inmates from the Mental Health Unit reared, tagged and released a total of 1,487 monarchs from Walla Walla, Yakima, and Prosser, WA.

Taylor’s Checkerspot Butterfly Program

Our flagship pollinator program is rearing and releasing Taylor’s checkerspot butterfly (*Euphydryas editha taylori*), a federally-endangered species that once flourished from southern British Columbia to central Oregon. Only a few small, isolated populations of the butterfly remain. The SPP rearing facility at Mission Creek Corrections Center for Women (MCCCW) adds to the scope and resilience of recovery efforts and bolsters the original rearing program at the Oregon Zoo. The first Taylor’s checkerspot caterpillars were delivered to MCCCW February 2012. The end of FY16 marks the completion of the program’s fifth successful breeding season and four cohorts of these animals have been cared for by inmate technicians throughout their complete life cycle.



This year for the first time, incarcerated butterfly technicians were able to attend a release on a native prairie site; here, Technician Michelle Dittamore poses with caterpillars she helped rear. Photo by Seth Dorman.

As of September 2016, inmate technicians, students, corrections staff, and partners have reared and released more than 10,000 caterpillars and adult butterflies onto South Sound prairies. More than 23 inmate technicians have received animal husbandry training, three graduate students have coordinated the program, and four WA DOC staff have served as liaisons. Since fall 2013, SPP has issued nine certificates for inmate technicians completing

training in the program—FY16 details are in Table 20. In June 2016, a former technician currently attending Evergreen as an undergraduate student was awarded 15 academic transfer credits for her certificate accomplishments in the butterfly program.

In 2016, we released caterpillars at two sites within Glacial Heritage Preserve and Scatter Creek Wildlife Area. Incarcerated butterfly technicians participated in one of the releases, coinciding with media coverage by a crew from PBS NewsHour.

We retained 363 wild caterpillars to grow to adulthood for the 2016 breeding season. Rearing outcomes for this reporting period are summarized in Table 18. Percent survival by life stage is available in Table 19.

Table 18. Taylor’s Checkerspot Rearing and Adult Butterfly Breeding at MCCCW FY16

	Into Diapause July 2015	Released February 2016	Retained for Breeding March 2016	Egg Laying Females April/May 2016	Eggs Produced May/June 2016
Wild	2,186	1,776	363	7	2122
Captive-bred	637	623	0	11	1262
Second Diapause Caterpillars	49	15	33	2	N/A
Unidentifiable Caterpillars	26	92	0	N/A	N/A
Totals	2,898	2,879	363		3,374

Table 19. Number of individuals and percent survival by life stage for wild and captive-reared Taylor’s checkerspot butterflies FY16

Life stage	MCCCW Wild & Captive-bred Summary	
	#	% survival
Diapause to wake-up	2,879	99.3
Diapause to release	2,731	94.9
Breeding colony	363	---
Multi-diapause	48	---
Pupae	310	98.4
Adult	300	96.8
Eggs	4,934	---
Eggs to hatch	3,819	77.4
Hatch to diapause	3,183	83.3

Table 20. Certificates awarded to Butterfly Technicians

Prison	Number of Technicians Certified	Criteria
MCCCW	2	One season of training, practice, and hands on butterfly rearing of the Taylor's checkerspot butterfly through all life-stages represents a minimum of 200 hours of academic study and 1,300 hours of lab practicum.

Wildlife Habitat Programs

Several facilities have installed structures or plantings to benefit wildlife. A summary follows.

Table 21. Reported efforts to provide wildlife habitat and forage, FY16 (see [Appendix 3](#) for abbreviations)

Prison	Programs	Program Partners	Highlights
AHCC	Pollinator-friendly plantings	Miller Homestead LLC	Throughout the main and minimum areas.
CCCC	Pollinator-friendly plantings	Centralia College	Throughout the campus.
CRCC	Wildlife habitat		Bird boxes, owl box, and pollinator box in garden
CRCC	Nesting Platforms	Lower Columbia Basin Audubon Society	Coming FY17
MCC	Wildlife habitat		Washington State Reformatory has bird houses & hummingbird feeders; pollinator-friendly plantings
MCCCW	Wildlife habitat		20 bird boxes
OCC	Pollinator-friendly plantings		
SCCC	Pollinator-friendly plantings		Throughout the campus.
WCCW	Pollinator-friendly plantings	WSU Extension, Pierce County, Tacoma Community College	Throughout the campus.

7. Environmental Education Programs

Education is integral to SPP's programs; our aim is to make the most of formal and informal opportunities for education and to offer new knowledge and new practice to inmates, staff, and all partners. SPP programs dedicated to education as a central focus include our Science and Sustainability Lecture Series, an environmental literacy course called Roots of Success, and those community college programs related to nature and/or sustainability.

Academic Credit & Certifications

By law, Washington State taxpayers' funds may not be spent on four-year, academic college credit. SPP has sought creative ways to overcome this limitation while also maintaining low program costs, because low cost programs generally are available to more students. This year, we improved and standardized SPP-issued certificates. SPP-certificated programs track and recognize academic experience and achievements of ecological conservation technicians and lecture series students; these certificates may be recognized as transfer credit for enrolled students of some four-year colleges. We awarded 149 certificates during the fiscal year, 43 of which warrant consideration as transfer credit by Evergreen or other four-year colleges. Students who complete beekeeping apprentice classes and Roots of Success receive certificates generated by partner organizations.

Community College Courses

OCC, WCC, and WCCW offer vocational horticultural classes, and those students gain access to classroom instruction and hands-on work in those prisons' extensive gardens. At CCCC, horticulture graduates may be hired as Teaching Assistants who largely oversee the greenhouses, aquaculture program, and vegetable and fruit production areas. At WCC, students also participate in SPP's conservation nursery, producing seeds of a prairie violet essential to rare and endangered butterflies in the region. WCCW's students have access to diverse specialties such as flower arrangements, house plants, and farming. OCC's students gain skills and knowledge working through a variety of stations such as aquaponics, container gardens, and grafting. The successful horticulture program at MCC was discontinued when the instructor left the institution.

Through a partnership with Peninsula College, OCC offers Green Building and Carpentry, with an emphasis on small-footprint structures that are affordable to build and maintain. Other facilities also have vocational building programs that include green building modules.

Lecture Series

Since 2009, we have offered more than 200 lectures in six prisons from 175 scientists and practitioners representing 75 agencies, businesses, and schools. We have recorded 2,018 inmate-students from the two main sites: 1,092 from SCCC and 926 from WCCW. Adding known inmate-students from other facilities and years, we estimate at least ~2250 inmate-students have attended the lecture series. Most of those students have attended multiple lectures, translating to thousands of lecture attendees.

Overall attendance of the Lecture Series for FY16 has been strong. Particulars on lecture series attendance and topics are detailed in Table 22. Fiscal Year 2016 highlights from SPP'S Science and Sustainability Lecture Series include:

- Provided a lecture to the Special Inmate Unit (SOU) and to the Intensive Management Unit (IMU) at Monroe Correctional Complex.

- Offered four lectures at Washington Corrections Center, two for general population and two in the IMU; plans for more are in development.
- Built relationship with prison library staff and are soliciting lecture series related book and reading material donations to build resources on SPP related topics in prison libraries.
- Met high-demand for live animal lectures with three live animal presentations at SCCC and one at WCCW.
- Improved lecture series attendance and survey data tracking documents to better track candidates for and recipients of certificates (awarded certificates shown in Table 23).

Table 22. Lecture series attendance statewide, FY16

Lecture Series at Stafford Creek Corrections Center			
Date	Presenter	Topic	Attendance
7/16/2016	<i>Tiffany Webb, Evergreen & SPP</i>	Climate Justice	75
8/20/2015	<i>Daniel Cherniske, Evergreen & SPP</i>	Aquaponics at SCCC	59
9/17/2015	<i>Florian Becquereau & Zarna Joshi, Earthship Seattle</i>	Earthships and Sustainable Construction	73
10/15/2015	<i>Kevin Francis, Member of the Faculty, Evergreen</i>	History of Science	58
11/18/2015	<i>Rus Higley, MaST Center at Highline College</i>	Live Animal Presentation: Octopus (1)	71
12/17/2015	<i>Rus Higley, MaST Center at Highline College</i>	Live Animal Presentation: Octopus (2)	69
1/21/2016	<i>Tiffany Webb, Evergreen & SPP</i>	MES Thesis Presentation: Environmental Justice & Prisons	62
2/18/2016	<i>Claire Williamson, South Sound Salmon Enhancement</i>	Salmon in the Pacific Northwest	69
3/17/2016	<i>Nicolas Bond, NOAA</i>	Climate Change in the Pacific Northwest	23
4/21/2015	<i>Peter Dorman, Faculty, Evergreen</i>	Economics of Climate Change	74
5/19/2015	<i>Candace Vanderhoff, Rain Thanks</i>	Sustainable Greywater Systems	59
5/19/2015	<i>Fawn Harris, West Sound Wildlife</i>	Live Animal Presentation: Vulture & American Kestrel	44
Total			736
Lecture Series at Washington Corrections Center for Women			
Date	Presenter	Topic	Attendance
7/7/2015	<i>Florian Becquereau, Earthship Seattle</i>	Earthships and sustainable construction	35
8/4/2015	<i>Andrew Barry, Washington State University</i>	Composting and Soil Science	18
9/8/2015	<i>Zarna Joshi, Climate Activist</i>	Women of Color in Climate Change Movement	48
10/6/2015	<i>Jeff Antonelis-Lapp, Member of the Faculty, Evergreen</i>	Natural History of Mt. Rainier	42
11/3/2015	<i>Lynne Weber, West Sound Wildlife</i>	Live Animal Presentation: American Kestrel Falcon	90
12/1/2015	<i>Liliana Caughman & Emily Passarelli, Evergreen & SPP</i>	Earthquakes in the Pacific Northwest	17
1/5/2016	<i>Afrin Sopariwal, Climate & Sustainable Living Activist</i>	Indian Science of Ayurveda	76
2/2/2016	<i>Laura James, Underwater Photography</i>	Beneath the Puget Sound	70
3/1/2016	<i>Liliana Caughman, Evergreen & SPP</i>	Understanding Astrophysics, Space, & Time	55
5/3/2016	<i>Claire Williamson, Sound Puget Sound Salmon Enhancement Group</i>	Salmon in the Pacific Northwest	37

6/7/2016	<i>Lisa Crozier, NOAA Fisheries</i>	Climate Impacts on Native Salmon	42
Total			530
Lecture Series at Washington Corrections Center			
Date	Presenter	Topic	Attendance
12/9/2015	<i>Liliana Caughman & Emily Passarelli, Evergreen & SPP</i>	SPP Overview	10
12/9/2015	<i>Liliana Caughman & Emily Passarelli, Evergreen & SPP</i>	SPP Overview (IMU)	5
3/9/2016	<i>Daniel Cherniske, Evergreen & SPP</i>	Aquaponics at SCCC	18
3/9/2016	<i>Daniel Cherniske, Evergreen & SPP</i>	Aquaponics at SCCC	2
Total			35
Lecture Series at Monroe Correctional Complex			
Date	Presenter	Topic	Attendance
2/12/2016	<i>Sadie Gilliom, Evergreen & SPP</i>	Amazing World of Amphibians (SOU)	23
2/12/2016	<i>Sadie Gilliom, Evergreen & SPP</i>	Amazing World of Amphibians (IMU)	2
Total			25
Lecture Series at Coyote Ridge Corrections Center			
Date	Presenter	Title/topic	Attendance
3/24/2016	<i>Heather Wendt</i>	Soil	n/a
5/12/2016	<i>Janelle Down</i>	Endangered Ecosystem-Washington's Vanishing Shrub Steppe	
5/31/2016	<i>Gretchen Graber</i>	Sagebrush Steppe	
6/1/2016	<i>Kathy Criddle</i>	Audubon Society-Birds	
Statewide Total			1326



A lecture series student shows her enthusiasm for achieving certification in the program.

In general, inmate-students share very positive responses to the lecture series. Workshops and lectures with an interactive component appear to generate the highest levels of student engagement.

The lecture series offers three levels of certification recognizing attendance of 5 lectures, 10 lectures, and 20 or more. Level 3 certificates recommend consideration as transfer

credit for admitted students at The Evergreen State College. Certificates awarded since 2014 and in FY16 are detailed in Table 23.

Table 23. Students Eligible for Lecture Series Certification

Facility	Certificate	Awarded since 2014	Awarded FY16
SCCC	Level 1 – 5 or more lectures	222	47
	Level 2 – 10 or more lectures	98	25
	Level 3 – 20 or more lectures	23	2
WCCW	Level 1 – 5 or more lectures	138	21
	Level 2 – 10 or more lectures	26	8
	Level 3 – 20 or more lectures	5	1
Total		512	104

Roots of Success

Roots of Success is an environmental literacy curriculum developed by Dr. Raquel Pinderhughes, Professor of Urban Studies & Planning at San Francisco State University (more at rootsofsuccess.org). WA DOC began offering the program in July 2013, and interest and availability of the program has grown steadily since. Staff and inmate responses to the program content have been very positive.

The program is delivered by inmates certified as program instructors, a model we have found effective and satisfying among students, instructors, and staff sponsors. This year was the first in which we could rely on our own Master Trainers to train new instructors, rather than bear the expense of bringing in the program creator. We have six incarcerated Roots of Success instructors certified by Dr. Pinderhughes to train and award certification to other program instructors. They provided two training events during the fiscal year—table below.

Table 24. Roots of Success Instructor details, FY16 (see [Appendix 3](#) for abbreviations)

Prison	Inmates certified as instructors since start	FY16 active inmate instructors	FY16 active certified staff
AHCC	3	3	1
CBCC	7	4	3
CCCC	2	1	1
CRCC	8	7	4
LCC	4	2	1
MCC	3	3	1
MCCCW	6	0	1
OCC	4	1	1
SCCC	4	3	1
WCC	6	1	1
WCCW	7	3	1
WSP	13	13	2
	67	41	18

New instructors certified FY16			Date of training
CRCC		2	11/30/2015
WSP		7	7/7/2016



“You see, Roots of Success didn’t only teach me how to make my environment a better place for me to live in, but it also taught me how to become a better person within my environment” ~ Robert Mayo, Roots of Success graduation speaker, July 2015

Roots of Success staff sponsor, instructors and graduates show off their certificates at Washington Corrections Center for Women. Photo by DOC staff.

Since the start of the program in 2013, 804 inmate-students have received certification for all ten modules of the curriculum, and 67 CI inmate-students have been certified for the condensed curriculum. Details for FY16 are provided in the following tables.

Table 25. Summary of Roots of Success Graduates FY16

Facility	Number of cohorts	Graduates	Instructors	Staff sponsors
AHCC	4	43	Alan Gard and Austin Tucker	Robert Mackey
CBCC	3	23	Jonathon Dunn, Douglas Gallagher, Felix Sitthivong, Raymond Williams, and Tronie Young	Mark Black
CRCC	5	87	Eugene Youngblood, Jonathan Bolden, Yoshio White, Julian Reyes	Gena Brock
LCC	3	14	Johnny Hudson, Brian Winters, and Guillermo Orthon	Shawn Piliponis
MCCCW	1	8	Melissa Jolly, Cami Graham, and Alyssa Clark	Cabrera
SCCC Total	4	180	David Duhaime, Grady Mitchell, Anthony Powers, Cyril Walrond, and William Harrison	Robert Aleksinski
WCCW	1	14	Renee Curtiss and Teresa Settle	Paula Andrew
WSP Total	4	59	Kieth Parkins, Michael Oakes, Mike Hoover, Dwayne Sanders	Robert Branscum and Chris McGill
CRCC-CI Total	4	44	Tara Proctor, Thomas Brown, Julian Reyes, and Yoshio White	Tara Proctor

MCC-CI Total	1	5	Herb Blumer	Annie Williams
Total for all facilities	30	477		
Note: all Roots graduates receive a graduation certificate from Roots of Success.				

Green Track

“Green Track” is the term conceived and coined by Washington State DOC leadership to organize and formalize the Sustainability in Prisons Project (SPP)’s programs. SPP’s initiatives are the result of grassroots efforts at every facility, and we boast an enormous diversity and number of programs; Green Track will add some higher-level structure to our efforts so that we can promote connections among programs, better identify priorities for program development, and better meet inmates’ needs.

Green Track is envisioned as linked opportunities for inmates to learn about and solve local and global environmental issues. This year, a Green Track Think Tank was formed to advance the concept. The group endorsed a scorecard approach, calling it a Green Track Passport. We created a draft passport (list of programs and activities within the Green Track and benchmarks for recognition) which we plan to refine and formalize in the coming year.



Roots of Success graduates stand with their instructors at a CRCC graduation. Photo by Ricky Osborne.

8. Evaluation

Program Evaluation

This year, we continued to collect survey data on all programs supported by an Evergreen student-staff. We are exploring means to increase our administrative capacity so that we can analyze and report on results from these surveys.

Research

We pursued three grant sources of funding for more substantial research on program impacts, and those proposals were refused. A partner on two of these proposals, Dr. Kevin Morris at the Institute for Human-Animal Connection at the Denver University (DU) secured funding as a member of the faculty for a somewhat smaller, but still significant study: the social/emotional impacts for inmates who participate in dog programs. The research will complement the 2015 study conducted by Washington State University that found positive changes in behavior in dog program participants. The study also provides a test case for the social/emotional assessment tools proposed for the larger studies involving conservation programs.

Student Theses



Conservation technicians track seed lots as participants in Conrad Ely's research on germination rates for native prairie species. Photo by Joslyn Rose Trivett.

Two students made SPP programs the subject of their thesis for the Master of Environmental Studies program at Evergreen.

Conrad Ely took on a question important to propagation protocols in SPP's prairie conservation nurseries: *How does the addition of plant-derived smoke water affect the germination of six native Poaceae species?* He involved the Restoration Crew from CCCC in seed treatments and trials and provided informal and formal education on the scientific method. As a result of their

efforts, we learned that one of the six species responded favorably to the treatment and two responded negatively to the treatment; for the remaining three species, their germination rate was unaffected.

Tiffany Webb conducted a critical assessment of SPP's programs in relation to principles of environmental justice. They found that the Science and Sustainability Lecture Series is an example of environmental "goods" made available to a population typically not afforded environmental education and training. However, they were concerned about publicity for SPP programs distracting from and "greenwashing" substantial environmental and social injustices related to prisons and prison operations. They pointed out that Washington State's over-imprisonment of Black individuals is at an even higher than the national average, incarcerating 6.4 Black people for every 1 White person. They emphasized the importance of a justice-centered, anti-racism approach to all prison programming.

9. SPP Network

SPP-WA

During FY16, we did not have sufficient resources to host a statewide event, as many requested, but maintained a high level of contact with nearly every facility in Washington State. Despite the demands of initiating and maintaining ecological conservation programs working with endangered species, we now have successful programs at LCC and CRCC, and two more in development at WSP; each has had multiple in-person visits from SPP-Evergreen staff (see [Appendix 3](#) for abbreviations). Also, we have frequently traveled to support Roots of Success programs at eight prisons and beekeeping programs at several. Overall, SPP as a cohesive, statewide movement has gained more traction.

SPP Network-International

Dedicated funding for a national and international expansion of the model ended at the start of the fiscal year; despite this, we have continued to provide limited support to new and existing contacts and lay plans for future development. SPP-WA continued to act as the primary point of contact for the SPP Network and is recognized by other countries, states, and counties for leadership in environmental education and nature programs in prisons.

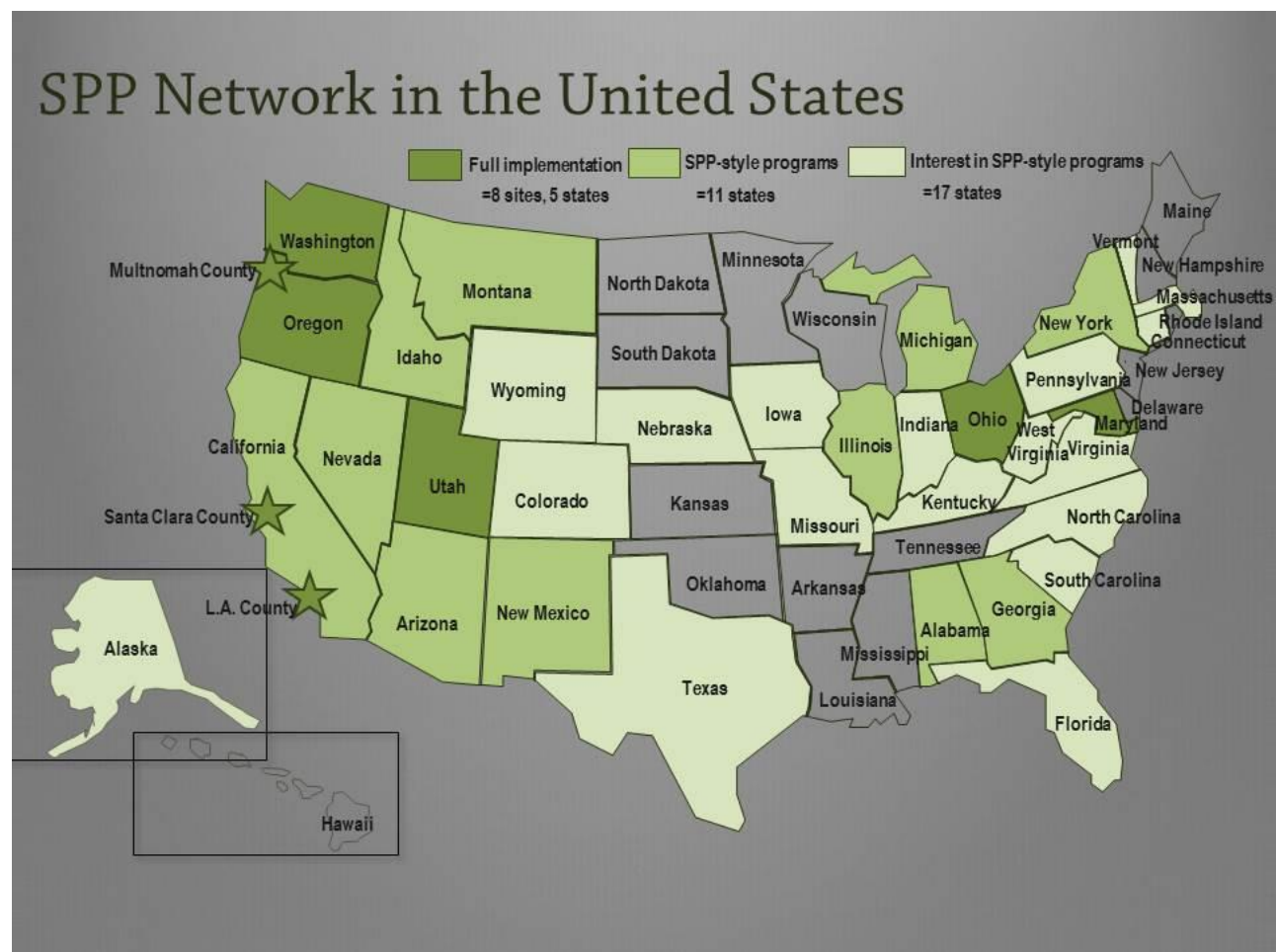


Figure 3. Implementation of and interest in SPP model programs in the United States.

Official Network sites are [OR](#), [MD](#), [UT](#), [OH](#), and [WA](#) states; [Multnomah](#), [Los Angeles](#), and [Santa Clara](#) Counties. These eight teams were primary collaborators at the national level. Many more states and

counties have or aspire to have SPP-model programs (see Figure 3). During this fiscal year, SPP-Washington's Kelli Bush and Joslyn Rose Trivett partnered with Utah's Nalini Nadkarni to propose an SPP Network Core Team to further development of the Network. The Core Team's first meeting followed the close of the fiscal year, and results will be reported in FY17.

Following major media coverage, such as the PBS NewsHour piece in May, we received an uptick in inquiries from multiple states and countries and representing corrections staff, community members, students, faculty, and scientists. Highlights include:

- Provided information about diversion rates to Recycling and Sustainability Manager for the Virginia Department of Corrections
- Consulted with San Diego County staff from Public Works & Health and Equity, interested in sustainable operations and education
- A researcher from University of Colorado was granted permission to use a research tool developed by SPP graduate student, the Life and Work Questionnaire, to study CI
- Mailed SPP information to Poland corrections where they are planning on providing lectures, environmental films, and planting projects
- Provided beekeeping protocols to and shared social media from an Albanian prison's proposal to start a bee project
- Regular media inquiries from international and national publications and producers (see Media)

Accomplishments, Products, and Publications

- Worked with web designer to re-create online website dedicated to the SPP Network (<http://network.sustainabilityinprisons.org>), and including private, professional networking forums; work nearly complete at the close of the fiscal year
- Published paper co-authored by SPP-WA and SPP-OR in the *Natural Areas Journal* (see *Formal Publications*, p. 38)
- Partnered with SPP-Oregon partners from Institute of Applied Ecology to develop and initiate a conservation nursery at Coyote Ridge Corrections Center growing native sagebrush for habitat restoration on central Washington BLM property
- Completed final check in with all active Network teams, October 2014 and disseminated summary report
- Developed and finalized Sustainable Practices Policy governing all four SPP program areas for WA DOC statewide; shared policy with Network partners to aid their policy development

10. Dissemination

Presentations and Events

In FY16, SPP-Evergreen staff presented at a variety of venues to highlight specific programs or represent SPP as a whole. In addition, we attended numerous events at which we made informal or brief presentation representing the organization; examples include tabling at Prairie Appreciation Day, Green Day at WA DOC Headquarters, and Roots of Success graduation celebrations. A summary of presentations is given in Table 26. SPP-WA DOC staff made presentations on sustainability initiatives that are not shown here.

Table 26. SPP Presentations FY16 (see [Appendix 3](#) for abbreviations)

8/6/2015	Kelli Bush	SPP and Arboriculture	Centralia College Horticulture at CCCC
8/20/2015	Emily Passarelli	SPP Virtual Tour	Roots of Success class at WCCW
10/22/2016	Joslyn Trivett, Emily Passarelli, and Laurie Pyne	SPP overview and programs at CCCC; beekeeping overview	CCCC evening program
10/26/2015	Kelli Bush, Carl Elliott, Conrad Ely, Carolina Landa, Sadie Gilliom, & Lindsey Hamilton	Sustainability in Prisons Project Conservation Programs	Cascadia Prairie Oak Partnership Conference
1/12/2016	Joslyn Trivett	SPP Overview and research opportunities	Research in Institutions class, Criminal Justice department, Dr. Barb Toews, professor at UW-Tacoma
2/21/16	Kelli Bush	SPP Overview and Evergreen's Role	Finance and Administration at Evergreen
4/20/2016	Emily Passarelli, Liliana Caughman	Just Sustainability	RAD sustainability day
May 23-27, 2016	Margaret Gilbert and Eleanor Vernell	Washington State Prisons: 12 sites for sustainability	Wardens Peer Interaction Program Houston, Texas
6/9/2016	Carri LeRoy and Kelli Bush	WA DOC Contract and SPP at Evergreen	Evergreen Board of Trustees at Evergreen
6/16/2016	Dr. Kevin Morris	Examining How Relationships with Animals Support Human Health.	LA City Hall

SPP Tours

SPP staff from Evergreen, WA DOC, and at each facility regularly host visitors who want to see SPP programs. A summary of tours reported for FY16 is in Table 27; we believe this underrepresents tours, but do not have more data available.

Table 27. SPP Tours FY16

Date	Prison	Visitors	Programs
7/30/15	CCCC	Pierce College, Mr. and Mrs. Mack	Sustainability Programs
8/4/15	WCCW	Andrew Bary, WSU	Sustainability Programs
8/11/15	CCCC	DOC HR staff	Sustainability Programs
8/19/15	CCCC	JBLM Corrections	Sustainability Programs
8/27/15	CCCC	King 5 News Reporters	Beekeeping
6/16/15	CCCC	Atsuko Otsuka, freelance reporter	Sustainability Programs
9/24/15	CCCC	Mr. Benjamin (WSP), and Mr. Fischer (WSP)	Bee Program
January/ April/May	CCCC	Pierce College	Sustainability Programs
2/2/2016	WCCW	Laura James, PBS	Sustainability Programs
2/18/2016	SCCC	Claire Williamson, South Sound Salmon Enhancement	Sustainability Programs
3/7/2016	CCCC	TESC / Greenhill (JJRA)	Gardens
5/16/2016	CCCC	TVW	SPP Education
5/19/2016	WCCW	Candace Vanderhoff, RainThanks	Sustainability Programs
5/19/2016	SCCC	Candace Vanderhoff, RainThanks	Sustainability Programs
6/3/2016	CCCC	JBLM corrections	Gardens
6/17/2016	CCCC	Legislative Tour	Sustainability Programs
6/28/2016	LCC	Ricky Osborne, Kelli Bush, Sadie Gilliom, Emily Passarelli	Cat program, house plants, Turtle program
2012-2016	WSP	298 program tours	Sustainable Practices Lab

SPP Products, Publications, and Internships

Self-Published

In FY16, we stepped up production of in-prison outreach and education materials. We created posters on resource conservation for AHCC and CBCC, beekeeping programs for AHCC, CBCC, and WSP, and SPP program overviews for CBCC and WCC. We designed a conservation nursery interpretive sign for the sagebrush nursery at CRCC. We continued to update and distribute one-pagers listing SPP programs active at each facility.

During the fiscal year, we made progress on developing an SPP orientation video to be viewed by inmates at reception centers and transferring between facilities. Slides are ready for production, and the project will move forward in FY17.

We published Summer 2015 and Winter 2016 Newsletters on schedule and distributed widely via email, website, and print.

Formal Publications

SPP publications for FY16 are summarized below; items that were in review during the last fiscal year and published since are included.

- Trivett, J.R., K. Bush, C. Elliott, J. Mann, R. Pond, E. Tharp, J. Vanneste, D.J. Pacholke, and C.J. LeRoy. Sustainability in Prisons Project (SPP) horticulture programs. In: *Sowing Seeds in the City: Volume II – Human Dimensions*. **Springer**. 2016.
- Weber, S., M. Hayes, T. Webb, and C.J. LeRoy. Environmental education in prison: A comparison of teaching methods and their influence on inmate attitudes and knowledge of environmental topics. *Interdisciplinary Environmental Review*. Summer 2015.
- Aubrey, D., M. Linders, C. Landa, L. Mullen, and C.J. LeRoy. Oviposition preference of endangered Taylor's checkerspot butterflies (*Euphydryas editha taylori*) among both native and non-native larval hosts. *Northwest Science*. (Still in review).

Internships

In FY16, SPP staff supervised two academic internships:

- Winter quarter 2016 – Daniel Cherniske completed an internship to assist with planning for the new wetland emergent vegetation mat project at SCCC.
- Spring quarter 2016 – Carolina Landa completed an under-graduate internship on reentry resources and programs; she was formerly incarcerated and had served as a butterfly technicians for three years. The internship culminated on a reentry presentation at SCCC (see Year in Photos).

Students

Formally and informally, we continue to support and work with numerous additional students, graduates, and undergraduates, from Evergreen, many other academic institutions, and internationally. Examples from the past year include:

- We supported publishing and printing of a landscape guide for in-prison projects, written by Graham Golbuff, a Master of Landscape Architecture from the University of Washington. The finished product provides excellent guidance for developing proposals, and also can serve as an educational text. See <http://sustainabilityinprisons.org/wp-content/uploads/2016/06/Golbuff-Prison-Landscape-Guide-6-28-2016-2.pdf>
- We supported logistics, design, DOC inmate and staff input, and discussion of two MES thesis involving SPP programs:
 - Connecting Environmental Justice and Prisons: A critical look at social movements, environment and mass incarceration, by Tiffany M. Webb
 - Smoking Grass: Germination responses of six native *Poaceae* species to smoke water treatments, by Conrad Ely

In FY16, we provided information to students from the University of California Hastings, Colorado State University in Fort Collins, University of Oregon, and locally from Evergreen and St. Martin's University.

Media Coverage

In FY16, SPP-WA was featured in more than 28 stories from local, regional, and international media outlets. The table below includes all of the pieces SPP-Evergreen staff tracked during FY16. Links for each of the pieces are available on SPP's website at <http://sustainabilityinprisons.org/press/press-archive/>.

Table 28. SPP Media FY16

Date	Paper/Source	Author	Title
8/3/2015	The Chronicle of Philanthropy	Heather Joslyn	Blooms Behind Bars: Making Prisons More Humane
8/16/2015	Psychology Today	Sander van der Linden Ph.D.	The Rise of Green Prison Programs: How Exposure to Nature is Reducing Crime
8/18/2015	KEPRTV.com	Nicole Fierro	Coyote Ridge prisoners nurse orphaned kittens to health
8/28/2015	King 5	Alison Morrow	Bees behind bars give prisoners a second chance
8/31/2015	Huff Post Generation Change	Cameron Keady	Prison Teaches Beekeeping, Environmentalism To Inmates And It's All The Buzz
9/1/2015	BioCycle	K. Bush, J. Vanneste, D. Pacholke, J. Trivett, S. Sinclair & E. Heinitz	Department of Corrections Walks The Walk On Sustainability
9/6/2015	AP/The Oregonian	The Associated Press	Washington prison mimicking Oregon program showing nature videos to solitary prisoners
9/9/2015	Correctional News		Prison in Washington State is Latest to Institute "Blue Room"
9/14/2015	Huffington Post	Cameron Keady	Nature Videos Could Help Inmates In Solitary Confinement Cope
10/10/2015	DOC News Release	Jeremy Barclay	Governor Inslee Appoints Dan Pacholke as Secretary of the Washington Department of Corrections
10/11/2015	Seattle Times	Gawlowski, Danny	Inmates training to raise endangered butterflies
10/23/2015	DOC News Release	Will Mader and Rachel Thomson	Video: Coyote Ridge Inmates Cultivate Sagebrush to Boost Sage Grouse Habitat Destroyed by Fire
10/25/2015	MSNBC.com	Alex Witt	Changing the Nature of Solitary Confinement
10/28/2015	WSU News	By Maegan Murray, WSU Tri-Cities	Student helps inmates restore greater sage-grouse habitat
11/10/2015	Oregon Public Broadcasting	Jule Gilfillan, Nicholas Fisher	Oregon Field Guide: Sustainable Prisons Project
11/12/2015	Sierra Magazine	Jake Abrahamson	Bugs Behind Bars
11/18/2015	The Daily Utah Chronicle	Carolyn Webber	U Program INSPIRE Strives to Introduce Science, Conservation to Prison Inmates
11/19/2015	King 5		Shelter cats in local [prison] is a 'win-win'
11/19/2015	The Christain Science Monitor	Lucy Schouten	Can kittens make everything better? Prisons inmates say yes.
11/19/2015	USA Today	Drew Mikkelsen	Sending cats to prison: A 'win-win'

12/1/2015	The Daily Evergreen	Corinna Thomson	Forest ecologist awarded by WSU for advancements in social justice
3/8/2016	The Stranger: The Morning News	Sydney Brownstone	Washington's Women Inmates Are Saving Endangered Butterflies
3/14/2016	Yes! Magazine	Marcus Harrison Green	5 Prisons Improving Life on the Inside: Prairie Conservation
4/26/2016	The Baltimore Sun	Joe Burris	UMBC initiative recruits inmates to spruce up vacant lots in West Baltimore
4/29/2016	Linked in	Dan Pacholke	Humanity, Hope and Legitimacy
5/17/2016	PBS Newshour	Cat Wise	Do call it a comeback -- how the checkerspot butterfly found salvation in a women's prison
5/23/2016	Upworthy	Erin Canty	These prison inmates are saving the Earth as they serve their time.
6/5/2016	Statesman Journal	Beth Casper	Earthwise: Department of Corrections' Central Distribution Center

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Do call it a comeback – how the checkerspot butterfly found salvation in a women’s prison

May 17, 2016 at 6:20 PM EDT



YouTube

4:14 / 8:48

You may have heard about how the honey bee's decline is threatening the world's food crops. Well they're not the only pollinators in trouble. The Taylor's checkerspot butterfly was also facing extinction in the face of its shrinking prairie habitat. But thanks to an innovative breeding program at a women's prison outside Seattle, it's making a comeback. Special correspondent Cat Wise reports.

f 1075 COMMENTS

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MORE VIDEO

- Listening in on the 'Black Hole Blues'
- Genetic sequencing unlocks DNA mutations and saves lives
- Scientist chases waterfalls in depths of vast glaciers

PBS NewsHour video on SPP's butterfly program showcases both ecological and social benefits. Click on screenshot to view [video](#).



Focus On
Correctional Facilities

All compost produced at the correctional facilities is used to improve soil in prison gardens (inmate (left) working in a garden).



In 2014, WDOC composted more than 1,900 tons of food waste. At one prison, food waste is shoveled into a pulper by an inmate and then transported by staff to a composting center.

GREEN JOB TRAINING

Department Of Corrections Walks The Walk On Sustainability

THE Sustainability in Prisons Project (SPP) is a partnership founded by the Washington State Department of Corrections (WDOC) and The Evergreen State College (Evergreen) to bring science, nature, education and sustainable operations into prisons. Through diverse collaborations, SPP reduces the environmental, economic and human costs of prisons. Its programs bridge the divide between people living and working in corrections centers, and the social and ecological communities outside the fences. Examples of SPP programs include: composting, recycling, ecological restoration and research, bicycle restoration, gardening, rearing threatened and endangered animals and plants, and environmental literacy education.

More than 17,000 adults are incarcerated in Washington State prisons, and 97 percent of these men and women will return to communities in the state. SPP programs provide opportunities to contribute — doing good while serving time. WDOC's and Evergreen's experience demonstrates that most incarcerated individuals are eager to receive education and training, and to find creative solutions to significant environmental challenges.

Started in 2003, Washington State's Sustainability In Prisons Project operates 113 programs — from energy efficiency to composting — with approximately 3,000 inmate participants from all 12 prisons across the state.

K. Bush, J. Vanneste, D. Pacholke, J. Trivett, S. Sinclair and E. Heinitz

SPP began as an informal endeavor at Cedar Creek Corrections Center in Washington State in 2003 on a small scale, with equipment and materials primarily sourced from repurposed and salvaged items. Successful establishment of composting and water catchment programs laid the foundation for

more complex science and sustainability education and training programs. SPP grew surprisingly quickly, now operating 113 programs with approximately 3,000 inmate participants from all 12 prisons across Washington State, and more than 50 partner organizations. SPP programs are defined by five Es:

SEPTEMBER 2015

BioCycle 65

Evergreen and WA DOC staff collaborated on a sustainable operation article for BioCycle magazine.



岩波現代文庫
社会 300

犬、そして猫が
生きる力をくれた

介助犬と人びとの新しい物語

大塚敦子

岩波書店

A freelance reporter from Japan, Atsuko Otsuka, published a book about interviews with participants of the Prison Pet Partnership; the title translates to "Dogs and Cats Gave Me the Strength to Live."

Website/Social Media

During the reporting period, 40 blogs were authored by SPP-Evergreen staff and student-staff, and adapted from submissions by inmates, a few prison staff members and partners; see <http://sustainabilityinprisons.org/blog-galleries/blog/>. This year, WA DOC media staff increased social media presence, including many posts on SPP programs. We cannot report on particulars of their campaigns, but welcome their contributions.

We maintained and updated nearly 100 pages to represent current programming and practices (e.g., <http://sustainabilityinprisons.org/what-we-do/spp-programs-in-washington-state-prisons/> and <http://sustainabilityinprisons.org/about/>) and maintained our video (<http://sustainabilityinprisons.org/blog-galleries/stories/>) and press libraries (<http://sustainabilityinprisons.org/press/>).

According to Google analytics, the site had 46,676 page views during the year, average time spent per page was 1 minute, 57 seconds, and an average of 2.05 pages per visit—very similar to the year previous. The huge majority of users were from the United States, followed by United Kingdom, Canada, Australia, Brazil, and India. The seven most popular pages were:

1. / (homepage): 18% of page views
2. /what-we-do/spp-programs-in-washington-state-prisons/: 5%

3. /what-we-do/: 4%
4. /blog/2015/07/02/spps-new-co-director-stephen-sinclair/: 3%
5. /about/washington-department-of-corrections-WA DOC/: 3%
6. /about/: 3%
7. /blog-galleries/blog/

SPP's main outlet for social media continues to be Facebook (www.facebook.com/sustainableprisons). During the reporting year, we posted on a wide variety of topics, and our Likes increased from 1,108 to 1,450. The posts that attracted the most attention were:

1. January 12, 2016 LCC Roots graduation speech by an inmate (blog) – 2.09 K
2. February 7, 2016 Dan Pacholke resigns as DOC Secretary (share) – 1.99 K
3. October 16, 2015 Dan Pacholke appointed Secretary of DOC (share) – 1.86 K
4. April 7, 2016 John Legend performs at WCCW (share) – 1.65 K
5. June 16, 2016 Prison labor is the new American slavery (share) – 1.65 K
6. May 3, 2016 Turtle release for LCC, Steve Sinclair lead photo (blog) – 1.63 K
7. March 30, 2016 Liliana Caughman NSF Honorable Mention (share) – 1.61 K
8. February 25, 2016 Caterpillar release, inmates attending (photo post) – 1.54 K
9. March 15, 2016 Yes! Magazine article on positive prison programs, 2 SPP (share) – 1.51 K
10. June 15, 2016 Carolina Landa reentry internship (blog) – 1.44 K
11. July 8, 2015 First SPP lecture in the IMU (blog) – 1.42 K
12. March 14, 2016 Institute for Applied Ecology 44 certificates in OR violet program (share) – 1.34 K
13. January 15, 2016 Live octopus in prison, great photos (blog) – 1.34 K
14. June 30, 2015 Royalty in prison, raptors at SCCC lecture (blog) – 1.25 K
15. July 1, 2015 New conservation nursery in Skill Builders Unit (blog) – 1.23 K

From both measures of popularity, and consistent with our outreach efforts, it appears that public interest in SPP has extended from our conservation programs to more broadly embrace all program areas.



Awards

Sustainability in Prisons Project was invited to apply, and then named a Semifinalist in the 2015 Innovations in American Government Awards Program in October 2015; see <https://www.innovations.harvard.edu/sustainability-prisons-project>. In 2010, SPP was recognized with a Bright Idea award by the same organization, Harvard Kennedy School's Ash Center for Democratic Governance and Innovation. This year's award represents a higher level of honor.

SPP's co-founder, Nalini Nadkarni, received the 2015 William Julius Wilson Award for the Advancement of Social Justice from WSU.

Appendix 1. SPP Programs in Washington State Prisons FY16

We reported on 170 SPP programs in Washington State's 12 prisons this year; see Table 29, below. Several additional programs were in development during the reporting period, and most of those are not indicated here. For links to programs, partner organizations, and highlights for each program, see <http://sustainabilityinprisons.org/what-we-do/spp-programs-in-washington-state-prisons-v2/>

Table 29. SPP-WA Programs

Airway Height Corrections Center (AHCC)

Roots of Success, environmental literacy course
Gardens: Main
Gardens: Minimum
Diversity Garden
Flower gardens
Waste sorting & recycling
Worm farm: Main
Beekeeping
Computers 4 Kids
Pawsitive dog training – prison program
Firewood donation
Nature Imagery

Cedar Creek Corrections Center (CCCC)

Water use reduction and catchment
Gardens
Flower gardens
Waste sorting & recycling
Vermicomposting
Beekeeping
Large-scale composting
Western pond turtle care
Prairie Restoration crew
Training dogs for veterans
Horticulture
Aquaponics

Clallam Bay Corrections Center (CBCC)

Roots of Success, environmental literacy course, & Redemption
Gardens
Waste sorting & recycling
Dog training and adoption
Cat program
Green Building and Carpentry

Flower gardens
Beekeeping
Water catchment
Cloth hand towels

Coyote Ridge Corrections Center (CRCC)

Roots of Success, environmental literacy course
Heritage Garden
Gardens: Minimum
Pumpkin Patch
Waste sorting & recycling
Conservation nursery, sagebrush
Ridge Dogs
Kitten Program
Toys for Tots
Teddy bears from reclaimed materials
Worm composting
Composting: Medium
Plant and Animal Habitat
CRCC Land restoration

Larch Corrections Center (LCC)

Roots of Success, environmental literacy course
Large-scale composting
Gardens
Flower gardens
Waste sorting & recycling
Waste reduction
Food waste reduction
Wood craft donations
Western pond turtles care
Beekeeping
House plants
Larch Cat Adoption Program

Mission Creek Corrections Center for Women (MCCCW)

Roots of Success, environmental literacy course
Small-scale composting
Gardens
Waste sorting & recycling
Water use reduction & catchment
Salmon habitat restoration

Taylor's checkerspot butterfly program
Project Feeder Watch
Pawsitive Prison Project
Unit gardens
Plant and animal habitat

Monroe Correctional Complex (MCC)

Roots of Success, environmental literacy course
Gardens: Twin River Unit
Gardens: Washington State Reformatory
Gardens: Special Inmates Unit
Waste sorting & recycling
Water use reduction & catchment
Worm Farm
Black Soldier Fly pilot (food waste composting)
Sustainable Practices Lab (SPL): Bike program
SPL Wheelchair program
SPL Woodshop
Waste Water Treatment Certification
Dog training and adoption
Cat program: Special Inmates Unit
Houseplants
Flower gardens, boxes, baskets
Plant and animal habitat
Craft donation

Olympic Corrections Center (OCC)

Gardens
Horticulture
Pollinator-friendly plantings
Waste sorting & recycling
Large-scale composting
Waste Water Treatment
Water catchment
Wood shop
OCC Dog Program
Green Building
Firewood
Water features
Flower gardens, boxes, baskets
Chickens

Stafford Creek Corrections Center (SCCC)

Roots of Success, environmental literacy course
Gardens and greenhouses
Lifer Garden
Science & Sustainability Lecture Series
Beekeeping
Waste sorting & recycling
Large-scale composting
Water catchment
Bicycle Repair
Wheelchair Repair
Freedom Tails
Service dogs for veterans
Prairie Conservation Nursery
Emergent Vegetation Mats Conservation Nursery
Flower gardens, boxes, baskets

Washington Corrections Center (WCC)

Gardens & greenhouses
Flower gardens, boxes, baskets
Roots of Success, environmental literacy course
Science & Sustainability Lecture Series
Waste sorting & recycling
Large-scale composting
Shoe & clothing repurposing
Nature Imagery
Prairie Conservation Nursery
Horticulture
House plants

Washington Corrections Center for Women (WCCW)

Roots of Success, environmental literacy course
Science & Sustainability Lecture Series
Prairie Conservation Nursery
Gardens & greenhouses
Horticulture
Flower gardens, boxes, baskets
Prison Pet Partnership
Beekeeping
Chickens
Farm program

Bicycle Repair
Quilts and other fabric crafts
Waste sorting & recycling
Large-scale composting
Lighting upgrades

Washington State Penitentiary (WSP)

Gardens & greenhouses
Rental garden boxes
Beekeeping
Kittens in the Klink
Dog training & adoption
Waste sorting & recycling
Sustainable Practices Lab (SPL), 18 programs including bike shop, wood shops, aquaponics, plant starts, worm composting, teddy bears, and quilts; a few detailed below
Roots of Success, environmental literacy course (SPL)
Green Zone (SPL)
Water filtration pilot (SPL)
Monarch program
Houseplants



SPP partners and visitors walk through the Washington State Reformatory campus at MCC. Photo by Ricky Osborne.

Appendix 2. SPP Programs Partners in Washington State Prisons

Complementing the efforts of founding partners WA DOC and Evergreen, program partners contribute to almost every SPP program. Most programs would not be possible without their input, enthusiasm, and resources. In FY16, we have 94 known and named partners. Considering that the Sustainable Practices Lab has donated program creations to more than 400 charitable organizations, we believe the actual number is far greater!

Table 30. SPP-WA Partners

Adam County Pet Rescue
ARC of Tri-Cities
Bee Thinking
Benton Franklin Humane
Blue Mountain Humane Society
Brigadoon Service Dogs
Bureau of Land Management
Calm Waters
Center for Natural Lands Management
Centralia College
Cheney Outreach for Children
Cherish our Children
City of Monroe
City of Steilacoom
Clark County Food Bank
Community Aide Coalition (CAC)
Correctional Industries
Diamonds in the Ruff
Walla Walla area charities: SPL has donated to 438 since 2012
Emergency Food Network
Fircrest Residential Habilitation Center
Forks Chamber of Commerce
Forks Lions Club
Forks Soroptimists
Franklin County Sheriff's Office
Friends of Puget Prairies
Gig Harbor Food Bank
Gospel Mission
Harbor Association of Volunteers for Animals (HAVA)
Hood Canal Salmon Enhancement Group
Institute for Applied Ecology
Joint Base Lewis-McChord
Kalaloch Lodge
Kitsap Humane Society
Kiwanis Gig Harbor

Kitsap Conservation District
KNS Recycling
KP Middle School
Lake Quinalt Fire Department
Lions Club
Littlerock Elementary School
Master Composters
Master Gardeners
Millers Homestead
Mother Earth Farm
National Night Out Against Crime
Nature in Prisons
North Olympic Peninsula Beekeepers Association
Northwest Trek
Office of the Superintendent of Public Instruction
Olycap
Olympia Beekeeping Association
Olympic Anglers
Olympic Peninsula Humane Society
Oregon Zoo
Pacific Rim Institute for Environmental Stewardship
PAWS
Peninsula College
Peninsula School District
Project 41
Purrfect Pals
Quileute High School
Quillayute Valley Scholarship Auction
Quillayute Valley School District
Relay for Life
Rochester Organization of Families
Roots of Success
Salvation Army
Second Harvest Food Bank
SNAP Spokane
Snohomish Boys & Girls' Club
Snohomish County Sheriff's Office
SpokAnimal
Summit Assistance Dogs
Tacoma Community College
The City Reach Food Bank
The Saint's Pantry Food Bank
The Shelton Community Kitchen

Thurston County Food Bank
Timber Museum
Tri-Cities Toys for Tots
U.S Department of Agriculture's Carl Hayden Bee Research Center
U.S. Fish and Wildlife Service
WA Department of Enterprise Services
Washington Department of Fish and Wildlife
Washington Department of Natural Resources
Washington State UniversityDepartment of Entomology
Welfare for Animals Guild (WAG!)
West Columbia Gorge Humane Society
Westport Shipyard
Wheels for the World
Whidbey-Camano Land Trust
Wolf Haven International
Woodland Park Zoo
WSU Extension, Pierce County
95 organizations + 100s of SPL charitable partners



A dog trainer at OCC shares his program notes with researchers from the University of Denver Institute for Human-Animal Connection. Photo by Ricky Osborne.

Appendix 3. Abbreviations

Table 31. Common abbreviations found in FY16 Report.

Prisons	
AHCC	Airway Heights Corrections Center, Airway Heights (near Spokane)
CCBC	Clallam Bay Corrections Center, Clallam Bay (northwest Olympic Peninsula)
CCCC	Cedar Creek Corrections Center, Littlerock
CRCC	Coyote Ridge Corrections Center, Connell (south, central Washington)
LCC	Larch Corrections Center, Yacolt (northeast of Vancouver)
MCC	Monroe Correctional Complex, Monroe (northeast of Seattle)
MCCCW	Mission Creek Corrections Center for Women, Belfair (Kitsap Peninsula)
OCC	Olympic Corrections Center, Forks
SCCC	Stafford Creek Corrections Center, Aberdeen
WCC	Washington Corrections Center, Shelton
WCCW	Washington Corrections Center for Women, Gig Harbor
WSP	Washington State Penitentiary, Walla Walla
Organizations	
WA DOC	Washington State Department of Corrections
ABKA	American Boarding Kennel Association
CI	Correctional Industries
CNLM	Center for Natural Lands Management
Evergreen	The Evergreen State College
JBLM	Joint Base Lewis-McChord
NSF	National Science Foundation
SPL	Sustainable Practices Lab
SPP	Sustainability in Prisons Project
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife



A sewing technician in WSP's SPL smiles as he tells a tour about his work. Photo by Ricky Osborne.

SPP's Year in Photos



The year began with a goodbye to the well-loved Oregon spotted frog program: SPP's first endangered animal program was hosted by Cedar Creek Corrections Center (CCCC) from 2009 to 2015. Here, partners from WA DOC and Evergreen celebrate the final release. Photo by Woodland Park Zoo.



SPP's certification for conservation technicians and lecture series students has expanded and improved. Kristina Faires, a butterfly technician at Mission Creek Corrections Center for Women, was recognized for her work in 2016. Ms. Faires' certificate could earn her transfer credit from Evergreen where she has since enrolled. Photo by SPP butterfly technician.



Leaders within WA DOC have asked for Evergreen's help making programs available to the most segregated populations in the prisons. Planning and delivering content in a maximum security environment is extra challenging, but worth the effort; we want to broaden access to nature for everyone. Photo by Emily Passarelli.



This year, western pond turtle care programs were in full swing at CCCand at Larch Corrections Center (LCC) where they tend to turtles from two different populations. Mr. Hill and Mr. Goff, technicians at LCC, were able to join a turtle release in March, 2016. They pose with Shawn Piliponis, the WA DOC staff sponsor at LCC. Photo by Sadie Gilliom.



SPP-Evergreen staff visited all the prisons in Washington this year, expanding our geographic range and capacity. This increased contact translated to building more partnerships, and developing and improving programs statewide. The photo captures the Action Planning process at Clallam Bay Corrections Center. Photo by Joslyn Rose Trivett.



SPP formed an Advisory Panel to help guide and inform our development. The panel brings together diverse expertise from academic, corrections, ecological conservation, and incarceration. Photo by Joslyn Rose Trivett.



CCCC led the way with providing beekeeping education to incarcerated beekeepers. This year, they certified their 3rd and 4th classes of inmate and staff beekeepers, and other prisons are following suit, bringing Master Beekeepers into prison to share best practices for this complex and vital practice. Photo by Sadie Gilliom.



PBS NewsHour reporters visited MCCCW's butterfly program for a caterpillar release in February, and again in May to see work with adult butterflies. The technicians spoke eloquently and beautifully about the program, and the resulting video has drawn international attention to SPP. Photo by Kelli Bush.



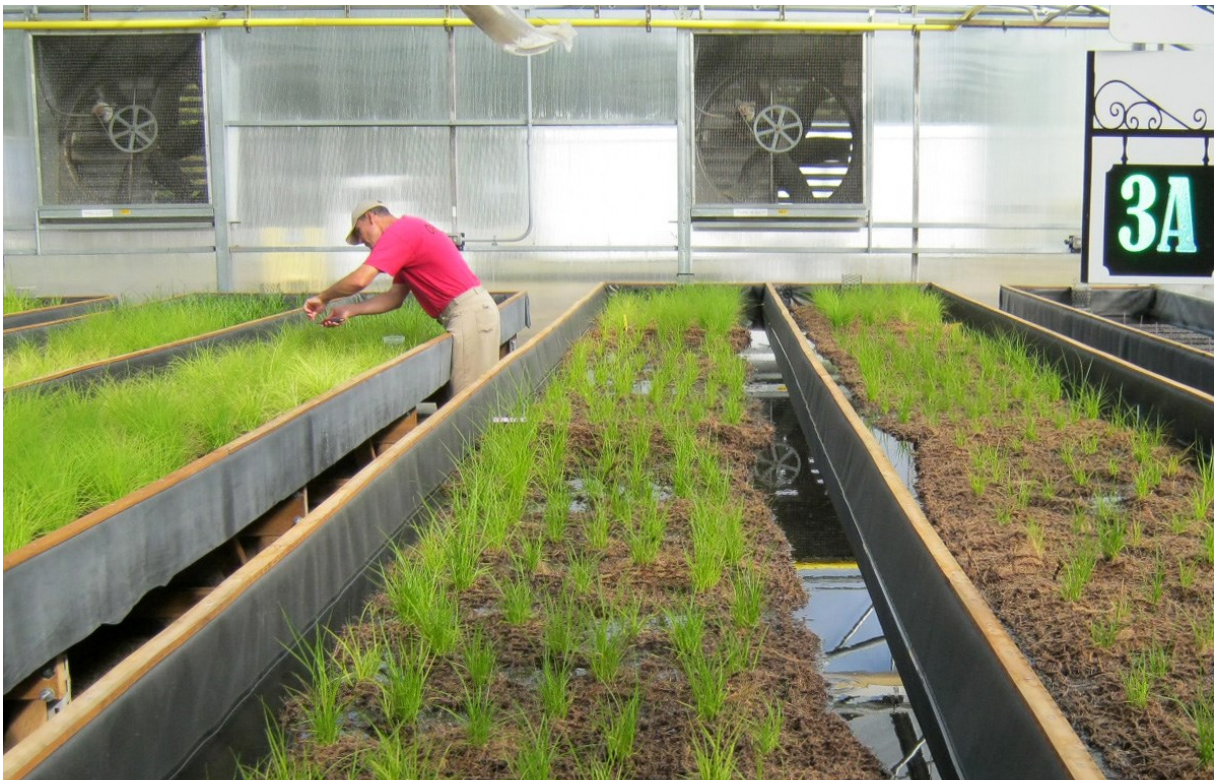
A new program category describes efforts that have long been part of SPP: *Biophilia*. These programs bring nature inside primarily for its therapeutic benefits. Ornamental flowers and houseplants relieve starkness of institutional settings, and have been shown to benefit people in that environment. Photo of Airway Heights Corrections Center by Joslyn Rose Trivett.



Prison staff and inmates demonstrate incredible resourcefulness and talent for turning discarded materials into items of utility and beauty. With improved reporting, this year we know that prisons donated at least 30,200 items to community organizations outside the fence. Photo by Ricky Osborne.



SPP-Evergreen staff investigated how to increase program benefits to participants reentering outside communities. A formerly incarcerated Evergreen student gathered reentry input and experience during spring quarter, culminating in a special presentation at Stafford Creek Corrections Center (SCCC). Photo by Ricky Osborne.



The partnership embarked on an innovative and ambitious pilot program at SCCC growing native emergent wetland vegetation mats in an aquaponics system. The vegetated mats will be used in scientific trials restoring habitat for Oregon spotted frogs. Photo by Jim Snider.