# Sustainability in Prisons Project SDP Fiscal Year 2019 Annual Report



Toward the end of the most productive rearing season yet, partners of the Taylor's checkerspot butterfly program visited one of the butterfly's release sites and saw native Salish lowlands prairie first-hand. Butterfly technicians and Evergreen and WA Corrections staff learned more about the prairie from the Washington State Dept. of Fish and Wildlife biologist who supports the program. Just as wonderful, they got to see adult checkerspots in flight in their native habitat! Photo by Keegan Curry.



the **evergreen** state college





## Sustainability in Prisons Project

## Fiscal Year 2019 Annual Report



The Sustainable Practices Lab at Washington State Penitentiary houses dozens of shops that reclaim materials and turn them into items of value. Photo by Bethany Shepler.

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Partners in the prairie plant seed nursery at Washington Corrections Center pose for a photo following a presentation. Photo by Erin Lynam.

## **Executive Summary: Sustainability in Prisons Project, FY19**

Fiscal year 2019 (FY19, July 1, 2018 – June 30, 2019) was another successful year for the <u>Sustainability in</u> <u>Prisons Project</u> (SPP). The SPP partnership was founded by <u>Washington Department of Corrections</u> (WA Corrections) and <u>The Evergreen State College</u> (Evergreen) in 2003, and has grown to include many collaborators. The full SPP annual report aims to acknowledge all contributing partners and describe all science, environmental education, and sustainability programs in WA prisons. This year, SPP partners reported **212 programs and 198 partner organizations** statewide. Our executive summary highlights select FY19 programs, partnerships, and developments plus goals for FY20 (July 1, 2019 – June 30, 2020).

<u>Gardening curriculum</u>: In partnership with three community organizations, corrections staff and incarcerated individuals at MCC and SCCC developed a new, peer-led gardening course. A new graduate student position, funded entirely by foundation donors, coordinated the highly collaborative endeavor.

**Butterfly program expansion**: With funding from U.S. Fish and Wildlife Service, partners constructed a second, 12' x 28' greenhouse at MCCCW. The custom-designed structure doubles capacity to breed and raise federally-endangered Taylor's checkerspot butterflies for release onto Salish lowland prairies.

<u>New science and sustainability education materials</u>: To increase science education in existing programs, SPP-Evergreen staff designed and developed new learning guides to be accessible, informative, and empowering. Guides include topics such as butterfly husbandry and scientific illustration. Staff also organized all existing SPP-Evergreen education materials to maximize access and use.

<u>Water Conservation Pilot</u>: WA Corrections piloted new domestic water valves and controllers at the Washington State Penitentiary. The result was an overall water savings of 81.5%. Projected project return on investment is only 1.52 years.

<u>WSDOT workshop series</u>: WSDOT and SPP partners presented on education and employment pathways at multiple conferences and piloted a workshop series at MCCCW and CCCC. Workshop topics included wetland ecology, restoration, stormwater careers, and competing for state employment.

**<u>Reentry pathways</u>**: SPP-Evergreen staff advocated for resources and helped secure an Education Navigator position at The Evergreen State College. WA Corrections and the <u>State Board of Community</u> <u>and Technical Colleges</u> fund the position, the first to be hosted by a four-year college.

<u>Partnership with Pacific National Laboratory and Department of Commerce</u>: WA Corrections met with legislators and stakeholders across the agency to develop WA Corrections Facilities Energy and Water Strategy.

<u>Call for writing in prison</u>: SPP partners stewarded a "call for writing" at eight WA prisons—requesting writings from incarcerated people on science in prisons—and 44 writers responded. SPP-Evergreen combined excerpts and submitted for the volume *STEM Education in US Prisons*, to be in print fall 2020.

<u>Increased seed production</u>: Partners in prairie conservation programs at WCCW and WCC are making sizable contributions to regional restoration ecology. Incarcerated technicians received education and training to support their efforts to raise seeds for rare flowering plants.

**Empowering incarcerated expertise and leadership**: Numerous incarcerated partners provided expertise, guidance, and leadership; they contributed to research projects, events, presentations, and

planning meetings. For example: co-MCing SCCC/SPP <u>Reentry event</u>, presenting MCC's compost program at an <u>international conference</u>, and co-authoring chapters for the <u>new gardening course</u>.

<u>Energy Efficiency and Solar Grants</u>: WA Corrections was awarded grant funds to assist with an energy conservation project at the Coyote Ridge Corrections Center.

**Evergreen Coalition Building**: SPP-Evergreen staff continued to support development of the Evergreen Education Coalition for Justice Involved Students, which includes faculty, students, and staff from Tacoma and Olympia campuses. SPP supported several events over the past year: first annual Coalition meeting, numerous planning meetings, the SCCC/SPP Reentry event, and conference presentations.

**Beekeeping educational materials**: SPP-Evergreen and Washington State Beekeepers Association (WASBA) formalized our partnership this year, creating a strong foundation for SPP bee programs. WASBA published upgraded educational curricula for three levels of beekeepers, which Evergreen distributes. Both partners are committed to high quality bee education and certifications statewide.

Program/Project	Partners and facility	Planned outcomes
Short film project	Formerly incarcerated SPP participants	Phase 1 of short film describing experiences in SPP programs; more interview subjects included in next phase of project
Enhanced curricula	All facilities, incarcerated students, staff sponsors and experts	Piloted gardening curriculum; drafted statewide compost curriculum; published more learning guides
Book and Article Publications	NASA, U of UT, AZ State U and incarcerated authors	Contributed to peer-reviewed journal article on astrobiology lectures; published chapter in STEM education in prisons volume
Increased operations alignment	All facilities	Shared agreements, plans, and processes adopted by WA Corrections, SPP-Evergreen, and program partners, increasing efficiency
WSDOT education, training & employment	WSDOT; all facilities	Broadened <u>partner</u> participation; increased outreach to incarcerated individuals; added education and training
Increased connection to programs in other states	Network contacts (mostly national)	Presentations at Higher Ed in Prisons Conference, Ecological Prison Programs Conference; potential collaboration on national program inventory
Certifications and academic credit	All facilities and academic partners	Award academic credit to currently incarcerated SPP certificated internship students

#### **Anticipated Programs Highlights, FY20**

### Conclusion

We are grateful to the many people who have contributed to the collective accomplishments described throughout this report. Our partnerships among incarcerated people, corrections staff, scientists, students, and program partners are impactful, innovative, challenging, and successful. We are dedicated to continuous improvement. We remain committed to addressing all stakeholders' needs, fostering a culture of mutual respect, combining resources to increase capacity, and prioritizing initiatives best aligned with SPP goals. Together we are increasing access to science and sustainability education and opportunities to participate in the environmental movement.

## **1. Background Information**

When you bring in education, dogs, gardening, and other sustainable programs you get involved in those, instead of prison life.

~ incarcerated partner Kieth Parkins

This report provides information on <u>Sustainability in Prisons Project</u> (SPP) activities during Washington State fiscal year 2019 (FY19) which includes the period from July 1, 2018 through June 30, 2019. <u>Washington Department of Corrections</u> (WA Corrections) considers all sustainability initiatives in Washington (WA) prisons to be part of the SPP partnership regardless of which partner(s) leads and operates the program. The primary objective of this document is to update all collaborators and stakeholders on SPP programs and activities. This report represents the most complete information available with current reporting mechanisms.

Scientists, incarcerated people, students, prison staff, and community partners in all 12 Washington prisons work together to change lives and make positive contributions to people and the environment. For FY19, partners reported **212 programs and 198 partner organizations.** Working lists of all SPP-WA programs (<u>Appendix 1</u>) and partners (<u>Appendix 2</u>) are included to recognize the impressive diversity and number of opportunities offered. <u>Appendix 3</u> lists common abbreviations.

#### **SPP Mission**

The Sustainability in Prisons Project (SPP) is a partnership founded by WA Corrections and <u>The</u> <u>Evergreen State College</u> (Evergreen). Our mission is to empower sustainable change by bringing nature, science, and environmental education into prisons.

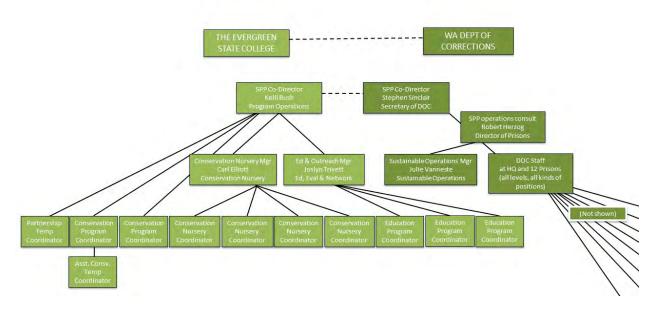
#### **SPP Vision**

In response to the dual crises of ecological degradation and mass incarceration, we aim to reduce recidivism while improving human well-being and ecosystem health. SPP brings together incarcerated individuals, scientists, corrections staff, students, and program partners to promote education, conserve biodiversity, practice sustainability, and help build healthy communities. Together, we reduce the environmental, economic, and human costs of prisons.

#### SPP Staff and Organization Chart

The organization chart in Figure 1 includes staff as of July 2019. This chart is limited to core staff at WA Corrections and Evergreen (SPP-Evergreen), only hinting at the many corrections staff involved; there are many more corrections, academic, conservation, and community organization staff contributing to program success. During this reporting period, SPP continued to be co-directed by <u>Kelli Bush</u> from Evergreen and <u>Steve Sinclair</u> from WA Corrections. Rob Herzog, Assistant Secretary for the Prisons Division, serves as an advisor to Evergreen on corrections operations. SPP leadership meets quarterly.

Program Coordinator positions are staffed by Evergreen graduate students working 20 hours per week. Student-staff are typically recruited from the Evergreen <u>Master of Environmental Studies</u> and <u>Master of</u> <u>Sustainability in Prisons Project</u> (SPP): Fiscal Year 2019 Annual Report <u>Public Administration</u> graduate programs, and work for two-year terms. Each summer several students complete their work with SPP and train new students to take over their positions. During the reporting period, 13 Program Coordinators worked for SPP: Alexandra James, Bethany Shepler, Keegan Curry, Jacob Meyers, Amanda Mintz, Erin Lynam, Jessica Brown, Marisa Pushee, Graham Klag, Anna Duron, Erica Benoit, Carly Rose and Allison Campbell.



#### Sustainability in Prisons Project Org Chart

#### **Advisory Panel**

In FY19, SPP's Advisory Panel was comprised of fourteen participants including SPP's two co-directors. Panel members represent formerly incarcerated partners, corrections staff, conservation specialists, and education professionals. The <u>Advisory Panel</u> provides expertise, creative thinking, advice, and assistance with SPP initiatives and program development. Members of the Advisory Panel in FY19 were:

- Steve Sinclair, SPP-DOC Co-Director, Secretary Washington State DOC
- Kelli Bush, SPP-Evergreen Co-Director, The Evergreen State College
- Carri LeRoy, Member of the Faculty at Evergreen, Senior Science Advisor
- Kevin Francis, Master of Environmental Studies (MES) Program Director, Member of the Faculty at The Evergreen State College (Evergreen)
- Carolina Landa, Master of Public Administration at Evergreen, Assistant to the Director for the Reentry Council, former SPP Butterfly Technician
- Jim Lynch, Biologist, Joint Base Lewis-McChord (JBLM) Fish and Wildlife
- Sadie Gilliom, MES alum, former Turtle Conservation Program Coordinator
- Fawn Harris, MES alum, former Prairie Conservation Nursery Program Coordinator

Figure 1. SPP Organizational Chart

- David McAvity, Academic Dean, Evergreen
- Bill Anglemyer, Evergreen Student and former SPP Turtle Technician
- Mike Obenland, Superintendent, Monroe Correctional Complex, Washington State DOC
- Robert Herzog, Director of Prisons, Washington State DOC
- Reed Schuler, Senior Policy Advisor for Climate and Sustainability, Governor's Office
- Liz Louie, Culinary Program Manager, Fare Start, former SPP Butterfly Technician

#### Staff Development: training, safety and security

Programs are operated in compliance with WA Corrections 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 Corrections training. Security is a topic included on every SPP-Evergreen staff meeting agenda, which are held every two weeks. SPP-Evergreen staff have maintained our commitment to be adaptable to changing security needs including information technology, research, and facility operations.



A prairie nursery technician collects seeds from the violet beds at WCCW. Photo by Jacob Meyers.

## 2. Partnerships

Partnerships and collaboration are an essential component of SPP efforts and nearly every SPP program. We continually work to identify new partners and mutually beneficial programs. A working list of SPP partnerships is included as <u>Appendix 2</u>; during FY19 more than 192 different organizations contributed to SPP programs in WA.

At the program level, the founding partners are often joined by one or more additional partners who bring vital expertise, resources, and/or skills to the program. We aim to recognize each partner for their role and the program is co-owned by all. Figure 2 offers an illustration.



Figure 2. SPP generalized program structure.

Roles played by each partner vary to fit the program focus and needs. In general, WA Corrections and partner organizations provide primary leadership for Sustainable Operations and Community Contribution programs, and Evergreen takes the lead on Environmental Education and Ecological Conservation programs. However, input and expertise from all stakeholders is critical to program success, and those communications are ever-present and ongoing.

#### **Emerging Partnerships**

In the past few years, SPP has invested in two new partnerships. Already they have delivered important programmatic impacts, and stand to be increasingly productive going forward.

#### Washington State Department of Transportation:

Over the past two years, representatives from WA State Department of Transportation (WSDOT) and SPP have identified education, training, and outreach opportunities to support post-release employment

for formerly incarcerated people. This partnership is aligned with <u>Governor's Executive Order 16-05</u>: <u>Building Safe and Strong Communities through Successful Reentry</u>, WSDOT workforce development and equity and inclusion goals, and the missions of both SPP and WA Corrections as a stand-alone agency.

Options for education and employment pathway development include a broad variety of disciplines. Based on available expertise, a sub-committee of partner organization representatives narrowed their focus on development of *environmental career pathways*. Pathways for other disciplines will be developed as resources, expertise, and capacity are identified.



WSDOT wetland biologist and former SPP staff, Amanda Mintz, provides a workshop on environmental careers at MCCCW. Photo by Allison Campbell.

To build capacity and raise

awareness of environmental career opportunities, partners engaged in multiple meetings, tours, and presentations. In winter 2019, the group prioritized development and delivery of an environmental career workshop series for two minimum security prisons. The results are detailed in <u>WSDOT Workshop</u> <u>Series</u>; in general, the workshops were well-received and environmental sub-committee members are defining next steps to advance the partnership in the new fiscal year.

#### Evergreen Education Coalition for Justice Involved Students (EECJIS) and Justice Involved Student Group (JISG)

During the reporting period, SPP-Evergreen continued to strengthen connections with Evergreen faculty, students and staff. We helped build the **Evergreen Education Coalition** for Justice Involved Students (EECJIS), a group of partners representing Evergreen's Olympia and Tacoma campuses. With SPP foundation donations, we funded the first day-long gathering of EECJIS partners. Coalition members also held several planning meetings and jointly presented at a



The Evergreen Education Coalition for Justice Involved Students heard from a panel of formerly incarcerated students at its first meeting. Photo by Keegan Curry.

conference this year. We're continuing to build the coalition to better support justice involved students, both on our campuses and in our extended campus communities.

SPP-Evergreen staff regularly attend and participate in <u>Justice Involved Student Group</u> (JISG) meetings. Our staff contribute time and resources to support currently and previously incarcerated students. Over the past year we have provided funding support for justice involved students to share their experience and expertise at various events with audiences inside and outside of prisons. For instance, JISG coorganized and led the <u>Pathways to Reentry</u> event with SPP at SCCC this past spring.

SPP-Evergreen advocated for and provided support for the newly established Evergreen Education Navigator position. This staff position provides comprehensive support for currently and previously incarcerated students pursuing education in Thurston County.

#### Legislative proposal

Over the past year SPP-Evergreen staff worked with stakeholders and allies to identify and remove barriers to granting credit during incarceration for certificated internships (more detail under Education). This is SPP's top priority. To advance efforts, SPP-Evergreen's staff have developed briefing materials, sought consultation from experts, confirmed support from stakeholders, identified relevant legal language, and coordinated and participated in numerous meetings.



Rudy Madrigal receives his Composting Specialist certificate from SPP Co-Director Kelli Bush. Photo by Erica Benoit.

Current <u>Revised Code of Washington (RCW)</u> appears to prohibit four-year, public academic institutions from granting credit for education programs without also collecting tuition for each student. Educational expenses for SPP programs are satisfied by multiple grants, contracts, donations, and associated indirect funds secured by SPP-Evergreen. In addition, incarcerated students served by these programs do not incur typical faculty or physical plant expenses associated with tuition. Given the financial support already provided to Evergreen through these non-tuition resources and the lack of typical education expenses for these students, charging full tuition for these credits is largely redundant. SPP-Evergreen is prepared to fully fund the minor administrative expenses associated with granting credit for certifications which have pre-determined credit value.

SPP aims to remove barriers to granting credit by pursuing policy or legislative changes. In the past year, we have secured support for developing a legislative proposal from leaders in the following

organizations:

- WA Corrections
- Evergreen
- Statewide Reentry Council
- University Beyond Bars
- Evergreen Justice Involved Student Group
- State Board of Community and Technical Colleges

#### SPP Alignment with WA Corrections' Mission & Vision

From WA Corrections' website:

**Mission**: To improve public safety by positively changing lives **Vision**: Working together for safer communities

The Department of Corrections is committed to operating a safe and humane corrections system and partnering with others to transform lives for a better Washington. A key value of WA Corrections is supporting people's success: understanding individuals, instilling hope, embracing change, and providing opportunities. Through the SPP partnership, WA Corrections brings science, nature, and environmental education into the state's correctional facilities. These programs create a safer and more humane correctional environment, provide opportunities for incarcerated



WA Corrections staff members Susan Biller, Sergeant La Munyon, and Officer Swan are champions of MCC's world-class composting program. Photo by Kelli Bush.

individuals to achieve academic and vocational goals, and contribute to their successful reentry to our communities.

#### SPP Alignment with Evergreen's Five Foci

Evergreen's approach to education is best illustrated by The Five Foci of Learning:

- 1. **Interdisciplinary Study:** Students learn to pull together ideas and concepts from many subject areas, which enables them to tackle real-world issues in all their complexity.
- 2. **Collaborative Learning**: Students develop knowledge and skills through shared learning, rather than learning in isolation and in competition with others.

- 3. Learning Across Significant Differences: Students learn to recognize, respect, and bridge differences—critical skills in an increasingly diverse world.
- 4. **Personal Engagement**: Students develop their capacities to judge, speak, and act on the basis of their own reasoned beliefs.
- 5. **Linking Theory with Practical Applications**: Students understand abstract theories by applying them to projects and activities and by putting them into practice in real-world situations.

SPP engages incarcerated students and technicians, enrolled Evergreen students, faculty, corrections staff, and non-profit organizations in collaborative, interdisciplinary learning across differences. Our science and sustainability education programs are aligned with the social justice, diversity, environmental stewardship, and public service elements of Evergreen's mission.

SPP's <u>Environmental Education</u> and <u>Conservation</u> programs are coordinated by Evergreen graduate students whose experiences encompass and exemplify all five foci. Since 2009, SPP-Evergreen has employed 50 Evergreen students in long-term positions and provided honoraria or internship stipends to dozens more. Through SPP, the incarcerated participants of education and conservation programs also gain access to the Evergreen learning model, thus sharing in the benefits of this innovative interdisciplinary approach. An increasing number of former SPP program participants are attending Evergreen post-release—contributing their valuable experiences, assets, and skills directly to the campus' learning community.



At the Pathways to Reentry event at SCCC, a student considers Evergreen's campus map; many event participants asked about attending Evergreen post-release. Photo by Ricky Osborne.

## 3. Budget

This section of the report addresses budget resources available via the SPP team at <u>The Evergreen State</u> <u>College</u> (SPP-Evergreen). The <u>Washington Department of Corrections</u> (WA Corrections) dedicates additional, substantial personnel time, funding, and materials support for SPP programs—those critical contributions are not detailed here. While Evergreen does not provide direct funding for SPP, they make important contributions by providing office space, payroll processing, access to students and faculty, human resource services, and budget management support.

In FY19, SPP had more than \$550,000 in funds available from 17 sources. Available funding included two contracts with WA Corrections that were spent on WA prison programs in accordance with contract requirements. Other funding sources include state and federal contracts, grants, foundation and private donations. Following a pattern of annual giving, SPP-Evergreen received another generous contribution from an anonymous donor at the <u>Seattle Foundation</u> in FY19. The donated funds have been awarded for SPP's general use initiatives and they make a significant difference in the programming, outreach, and education available. In addition, SPP received and applied donations from <u>The Herb Alpert Foundation</u> to develop a peer-led gardening course and other education materials, and from <u>Lamb Weston</u> to establish pollinator resources and native plants at <u>Coyote Ridge Corrections Center</u> (CRCC).

The percentage of funding provided by individual sources varies from month to month as sources become available or close throughout the year. SPP staff continuously seek new funding and close out existing grants and contracts. In FY19, SPP-Evergreen staff were responsible for stewarding funds from the sources described below (see Table 1).

Source	Program Area	Funding Type
JBLM Plant Production 2017/2018	Conservation Nursery	contract
JBLM Wetland Production 2017/2018	Conservation Nursery	contract
JBLM Wetland & Prairie Plant Production 2018/2019	Conservation nursery	contract
Samish Nation	Emergent Veg. Mats	contract
Center for Natural Lands Management	Conservation nursery	contract
WA Dept. Fish & Wildlife	Conservation nursery	contract
DOC General Operating 2018/2019	SPP General	contract
DOC Green Track 2018/2019	Roots & Beekeeping	contract
WA Dept. of Transportation	Ed./Reentry	contract
Blue Marble Space Grant	Astrobiology Ed.	grant
WA Dept. Fish & Wildlife Taylor's Checkerspot 2018	Butterfly Operation	contract
WA Dept. Fish & Wildlife Taylor's Checkerspot 2019	Butterfly Operation	contract
USFWS Taylor's Checkerspot	Butterfly Expansion	grant
Seattle Foundation	SPP General	donation
Herb Alpert Foundation	Gardening ed.	donation
Foundation Donations	SPP General	donation

**Table 1.** SPP FY19 Grant and Contract Funding Requests (see <u>Appendix 3</u> for abbreviations)

Lamb Weston - SPP	Native plants	donation
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The majority of SPP-WA's budget is dedicated to personnel expenses. A smaller but significant portion goes to program materials such as education supplies, small infrastructure projects, scientific equipment, printed outreach, and prison libraries.



SPP Co-Director Steve Sinclair offers a Taylor's checkerspot butterfly to Evergreen President George Bridges. Photo by Joslyn Rose Trivett.

## 4. Environmental Education Programs

Education is an integral part of SPP's programs. SPP-Evergreen works to make the most of both formal and informal education opportunities and to offer new knowledge and new practice to incarcerated students, staff, and partners. While our goal is to provide education in every program, education and training in <u>conservation</u> and environmental education programs (described in this section) are SPP-Evergreen's *central* focus. This section also describes science and sustainability programs led and delivered by other academic organizations, such as community colleges.

#### **Academic Credit & Certifications**

This past year, pursuing the ability to grant academic credit to incarcerated participants continued to be a primary objective for SPP-Evergreen. We have a reliable mechanism for awarding up to 15 transfer credits to certificate holders who enroll at Evergreen, and in FY19, Evergreen Academic Deans reviewed SPP certifications and pre-determined their credit value—a modest but very welcome improvement.

The larger issue is that this benefit is accessible to relatively few and doesn't recognize the full potential of developing educational pathways. Certificate recipients have emphasized that credits awarded *during* incarceration would provide important benefits, including encouragement and support for pursuing additional education post-release. This shift would recognize existing, welldeveloped programming, require no funding from Evergreen, and



A butterfly technician shows off her certificate award to leadership from Evergreen and WA Corrections. Photo by Ricky Osborne.

would result in increased student enrollment at Evergreen and other academic institutions. SPP remains committed to working with all partners to identify a mechanism for awarding credit for these valuable education programs during incarceration (see <u>Legislative proposal</u> for more).

In FY19, we awarded 82 SPP certificates that warrant consideration for college credit at Evergreen. Additional "recognition" awards—not eligible for credit evaluation—are not included in this summary.

Brogram	Certificate		Academic	Vocational
Program	Certificate	FY19	hours	hours
Environmental Workshop Series	30 hours of class time	31	30	0
Conservation Nurseries	Conservation Nursery Technician	8	30	270
Conservation Nurseries	Conservation Nursery Specialist	17	60	740
Western Pond Turtle Care	Rehabilitation & Research Specialist	4	200	800
Taylor's Checkerspot Butterfly	Rearing & Research Specialist	3	540	960
Composting with "Bugs"	Vermiculture and Composting	10	200	800
Composing with Bugs	Specialist			

Table 2. SF	PP Certificate	Awards, al	I facilities.	FY19
			r raemeres,	

Roots of Success (Instructors)	Teaching Practicum	9	150	0
Total Certificates Awarded FY19		82		
Total Certificates 2016 - 2019		308		

SPP facilitates certificate awards from outside organizations in two additional programs:

- Beekeepers are certified by Washington State Beekeepers Association
- Roots of Success students are certified by the organization Roots of Success.

#### **Community College Courses**

<u>Recent legislation</u> changes afforded Washington State community colleges more flexibility in providing two-year Associate degrees to incarcerated students. Their top priorities are adult basic education and vocational education.

In FY19, CCCC, OCC, WCC, and WCCW offered vocational horticultural classes. Those students gained access to classroom instruction and hands-on work in extensive gardens. At CCCC, students receive instruction from Centralia <u>College</u>. Horticulture graduates from that program may be hired as Teaching Assistants who largely oversee the greenhouses, aquaponics program, and vegetable and fruit production areas. At WCC, students with cognitive challenges received horticulture and literacy education provided by a Centralia College instructor. They also participated in SPP's prairie conservation nursery, producing seeds of a prairie violet essential to rare and endangered butterflies in the region. This program has been discontinued. WCCW's students are provided education and training by Tacoma Community College. These students



OCC's gardens and greenhouses thrive with attention from Peninsula College's instructor and students. Photos by Bethany Shepler.

have access to diverse specialties such as flower arranging, cultivating house plants, and farming. OCC's students receive education from <u>Peninsula College</u> to gain skills and knowledge working through a variety of stations such as aquaponics, container gardens, and grafting.

OCC's Green Building and Carpentry program, also a partnership with Peninsula College, came to an end this past year.

#### **Environmental Engagement Workshop Series**

Since 2009, we have offered at least 312 lectures and workshops in nine prisons from at least 250 scientists and practitioners representing 140 agencies, businesses, and schools. We have recorded attendance from 3,107 individual incarcerated students from the three main sites: 1,484 from SCCC, 1,393 from WCCW, and 230 from WCC. Adding known students from other facilities and years, we estimate at least 4,000 incarcerated students have attended the workshop series in the past decade. Most of those students have attended multiple presentations.

Fiscal Year 2019 highlights include:

Pathways to Reentry: SCCC hosted a day-long event including *sixteen* education and workforce development organizations and open to the general population (most reentry events limit attendance to individuals close to release). The program was both inspiring and practical. Currently and formerly incarcerated individuals played key roles in presenting and



*Emerico Garcia was a Master of Ceremonies at the day-long Pathways to Reentry event at SCCC. Photo by Ricky Osborne.* 

informing the event. Evergreen's <u>Justice Involved Student Group</u> and SPP staff co-organized the symposium with SCCC's Kelly Peterson.

Seminars at SCCC: In January 2019, SCCC's workshop series expanded by adding follow-up seminars on select workshop topics. Four times in the past year, students signed up to attend a seminar to further discuss and engage in the chosen topic. About half of the workshop students opted in and appeared to appreciate and enjoy the deeper discussions with their peers. Workshop Series Coordinator Erica Benoit led the first 3 sessions, introducing students to Evergreen's seminar model and supporting formulation of a working agreement (ground rules) for seminar conduct. Incarcerated students have led the seminars since. We count seminar hours toward program certifications.

Era of Megafires Screenings: The workshop series partnered with North 40 Productions LLC to offer screenings of the film Era of Megafires, a multi-media presentation to educate the public on megafires and research from Dr. Paul Hessburg of Pacific Northwest Research Station, U.S. Forest Service. We offered film screenings at four prisons: SCCC, WCC, MCCCW, and CCCC. Attendance of



WCC had the largest attendance of all the film screenings, with 30 students and 23 staff members enjoying the film together. Photo by Erica Benoit.

both incarcerated individuals and staff members totaled 168 people.

FY19 attendance of the Workshop/Lecture Series steadily grew at WCC, remained strong at SCCC, and increased greatly at WCCW since last year. Specific attendance and topics are detailed in Table 3.

Workshop Se	ries at Stafford Creek Corrections Center	(SCCC)	
Date	Presenter(s)	Торіс	Attendance
7/19/2018	Joslyn Rose Trivett and Erin Lynam	Feedback Session	54
8/16/2018	Erin Lynam	Dogs: Predator to Companion	58
9/20/2018	Amanda Mintz, Graham Klag, and incarcerated technicians	Intro to Aquaponics	67
10/18/2018	Bethany Shepler	Importance of Education	54
11/15/2018	Chris Montero and Cindy Irwin	Wolves of Washington	69
12/20/2018	Kathayoon Khalil and Darcie Larson	Fostering Empathy for Animals	62
1/17/2019	Marley Jarvis	Early Childhood Brain Development	77
2/21/2019	Liliana Caughman	Building Climate Resilient Cities	69
4/18/2019	Forest Shomer and Howard Sprouse	Native Plant Foraging	49
5/16/2019	Joslyn Rose Trivett and Rory Brown	MCC's Composting Program	57
6/20/2019	Bethany Shepler	Loggers' Environmental Attitudes	55
Total			671
Workshop Se	ries - Seminars at Stafford Creek Correct	ions Center (SCCC)	
Date	Presenter(s)	Title/topic	Attendance
1/8/2019	Seminar: facilitated group discussion	Empathy	32

Table 3. Workshop series attendance statewide FY19	9 (see <u>Appendix 3</u> for abbreviations)
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2/28/2019	Seminar: facilitated group discussion	Resilience	34
4/29/2019	Seminar: facilitated group discussion	Wildfires/Native plants	25
6/25/2019	Seminar: facilitated group discussion	Composting/Logging	26
Total			117
Workshop Se	ries at Washington Corrections Center for W	/omen (WCCW)	
Date	Presenter(s)	Торіс	Attendance
7/3/2018	Leann Andrews	Green Infrastructure	42
8/14/2018	Bonnie Becker	Shellfish Larvae	26
9/4/2018	Joslyn Rose Trivett and Erin Lynam	Feedback Session	22
10/2/2018	Chris Montero, Wolf Haven International	Wolves of Washington	45
11/6/2018	Jeanne Dodds	Illustrating Birds	22
12/4/2018	Kiirsten Flynn	Marine Mammals	23
2/5/2019	Barb Toews	Valuing Nature	18
3/5/2019	Rachel Easton and Stena Troyer	Beach Biology	38
4/2/2019	Daniel Winterbottom and UW grad students	Landscape Design at WCCW	73
5/7/2019	Emily Grason	Marine Snails	57
6/4/2019	Renee Curtiss, WCCW Roots Instructor	Sample Roots of Success Lesson	78
Total			444
Workshop Se	ries at Washington Corrections Center (WCC		
Date	Presenter	Торіс	Attendance
7/25/2018	Alexandra James and WCC technicians	WCC Prairie Conservation	24
9/26/2018	Scott Morgan	Tiny Homes	41
10/24/2018	Bethany Shepler	Elwha Dam Removal	20
11/28/2018	Kiirsten Flynn	Marine Mammals	44
12/26/2019	Nick Bond	Climate Change and Salmon	39
1/23/2019	Erica Benoit	Film Screening of Chasing Ice	45
2/27/2019	Keegan Curry	Butterfly Conservation	46
3/27/2019	Matthew Tuller	Goats	46
5/22/2019	Ben Alexander	Restoring Puget Sound Shoreline	29
6/26/2019	Julianne Gale	Peer Support in Climate Crisis	37
Total			371
Special Event	ts		•
Date	Торіс	Location	Attendance
3/21/2019	Film Screenings of Era of Megafires	SCCC	74
3/28/2019	Film Screenings of Era of Megafires	WCC	53
4/16/2019	Pathways to Re-Entry	SCCC	81
4/24/2019	Film Screenings of Era of Megafires	сссс	24
5/29/2019	Film Screenings of Era of Megafires	MCCCW	17
Total			168
Total Attenda	nce Statewide FY19		1771 !

The series offers three levels of certification. Students are awarded recognitions for completing 7 and 15 hours of workshops—these are called Level 1 and Level 2. Thirty hours of class time garners a Level 3 certificate that is recognized as transfer credit for admitted students at Evergreen (30 hours of collegelevel study is equivalent to one college credit). Recognitions and certificates awarded since 2014 and in FY19 are detailed below.



 Table 4. Students Eligible for Lecture Series

 Certification FY19 (see Appendix 3 for abbreviations)

Students at WCCW talk with University of Washington graduate students about their landscape design proposals for the WCCW campus. Photo by Erica Benoit.

Facility	Certificate	Awarded since	Awarded FY19
		2014	
SCCC	Level 1 – 7 hours	378	54
	Level 2 – 15 hours	184	32
	Level 3 – 30 hours	80	*26
WCCW	Level 1 – 7 hours	180	24
	Level 2 – 15 hours	36	1
	Level 3 – 30 hours	12	3
WCC	Level 1 – 7 hours	33	33
	Level 2 – 15 hours	13	13
	Level 3 – 30 hours	2	2
Total		918	188

\*includes 2 DOC staff members

#### **WSDOT Workshop Series**

Building on their nascent partnership and identified needs, SPP-Evergreen, WA Corrections, and WA Dept. of Transportation (WSDOT) environmental sub-committee members developed and delivered a three-part workshop series on environmental careers at two prisons. Workshops were designed to inform participants of WSDOT as a second chance employer, provide tips for applying and competing for state employment, and describe state environmental careers and their respective education and employment pathways. Workshops were delivered at CCCC and MCCCW. Each facility houses incarcerated people serving four years or less of their remaining sentence and already hosts complementary science, sustainability, and trades education programs; they are great sites to offer workshops on <u>career pathway topics</u>.

Table 5. WSDOT Workshops offered at CCCC and MCCCW F	Y19 (see <u>Appendix 3</u> for abbreviations)
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Workshop title	Description	Presenters	Dates	Number of Attendees
		Alvina Mao Robyn Lovely	5/10, 5/20	CCCC: 35

Competing for	Tips for writing resumes and cover letters,			MCCCW: 50
State Agency	interviewing, and pursing career opportunities within			
Employment	state agencies			
Wetland and	Introduction to Washington wetland and restoration	Tony Bush	6/7,	CCCC: 20
Restoration	ecology; three presenters/workshop; WSDOT	Erika Redzinak	6/10	
Ecology	wetland and restoration work and related training and career opportunities	Amanda Mintz Kristen Andrews		MCCCW: 45
		Jamie Butler		
Stormwater	Introduction to stormwater management, including	Jeannie McCully	6/17,	CCCC: 35
Management	causes, impacts, and prevention strategies. Overview	Mindi English	6/21	
and Impacts	of stormwater careers and training opportunities			MCCCW: 20

#### **Roots of Success**

Roots of Success is an environmental curriculum developed by Dr. Raquel Pinderhughes, Professor of Urban Studies & Planning at San Francisco State University (more at <u>rootsofsuccess.org</u>). WA Corrections began offering the program in July 2013 and content has been well-received.

Certified incarcerated instructors deliver the program, a model we have found effective and satisfying among students, instructors, and staff sponsors. We have five incarcerated Roots of Success Master Trainer instructors certified by Dr. Pinderhughes to train and award certification to other program instructors. Highlights and challenges from the previous year:

**Instructor trainings**: The year-long drought ended with three instructor trainings this year. SPP-Evergreen staff will continue to promote further trainings sufficient to meet program needs.

**Multimedia content quality**: This year we heard multiple concerns from programs about visual and audio video quality. In response, Roots of Success has updated videos. However, receiving the new content will require purchase of new instructor and student workbooks. As a result, some programs will not receive improved content until they are able to invest in updated curriculum workbooks.

**Partner agreement**: While Roots has been offered in WA Corrections facilities since 2013, we have not had a clear agreement among WA Corrections, SPP-Evergreen and Roots of Success partners for operating the program. With the aim of adding clarity, SPP-Evergreen drafted a three-party Memorandum of Understanding. Agreement review is in process.

During the reporting period, we coordinated 8 full-curriculum Roots of Success programs: AHCC, CBCC, CRCC, LCC, MCC-WSRU, SCCC, WCC, WCCW, and WSP. Currently there are no active condensed curriculum program for incarcerated individuals involved with CI. **Since the start of the program in 2013, 1411 students have received certification for all ten modules of the curriculum**, and 176 CI students have been certified for the condensed curriculum. Details for FY19 are shown in the following tables and highlights. **Table 6.** Summary of Roots of Success Graduates of full curriculum FY19. (see <u>Appendix 3</u> for abbreviations)

Prison	Number of cohorts	Graduates	Status at end of FY19	Highlights	
AHCC	1	12	Active	Liaison described current class as "best class yet."	
CBCC	0	0	Active	Class in session and interest in the program continues	
CRCC	1	6	Active	Trained new instructors in December 2018 and planning on training 3-4 more	
LCC	3	13	Active	Trained 3 instructors in August 2018 and graduated 2 classes this quarter.	
MCC- WSRU	2	9	Active	Graduated fifth class on April 2 <sup>nd</sup> , 2019 with 5 students	
MCCCW	1	9	Inactive	Graduated second Roots class in January 2019 and have continued interest; need new instructors	
SCCC	3	36	Active	Graduated 23 <sup>rd</sup> class on May 17 <sup>th</sup> , 2019; hosted Dr. Pinderhughes for a visit June 12-14; held instructor training in November 2018; working on training minimum security level eligible graduates as instructors; working on offering curriculum in IMU.	
WCC	1	8	Active	Graduated 3 <sup>rd</sup> class on April 15 <sup>th</sup> , 2019 and hosted Dr. Pinderhughes in June.	
WCCW	0	0	Active	After several years working to re-start Roots program, classes stared in April, then cancelled; working on new plan	
WSP- BAR	1	12	Inactive?	Graduated first class on October 16 <sup>th</sup> , 2018 with 12 students	
WSP- SPL	1	23	Program stalled; determining how to purchase new workbooks	Graduated 23 <sup>rd</sup> class on August 15 <sup>th</sup> , 2018	

#### **New Educational Programming**

With the increased focus on SPP certification, SPP partners have invested in enhancing existing curricula and creating new ones. This past year, SPP-Evergreen made this work an even greater priority. New funding from foundation donors was pivotal; the increased resources supported a new graduate student position whose sole focus is developing and publishing educational materials.

#### **Gardening Curriculum**

For as long as SPP-Evergreen has visited gardens in Washington State prisons, we have heard incarcerated gardeners ask for more gardening education and a gardening certification. A few WA facilities boast excellent horticulture instruction from <u>Centralia</u>, <u>Peninsula</u>, or <u>Tacoma Community</u>

<u>College</u>, and/or volunteers from <u>Master Gardeners</u> or other non-profit organizations. Still, the demand far exceeds the supply, and we have long wanted to address this need.

Throughout the reporting period SPP-Evergreen worked closely with an array of partners to develop a gardening curriculum titled Foundations in Gardening. This effort was catalyzed by an agreement with Oregon Food Bank that allows SPP-Evergreen to adapt their Seed to Supper curricula for learning and application within corrections environments. Additional interest and inputs came from Institute for Applied Ecology, many WA Corrections staff, expert gardeners from Stafford Creek **Corrections Center and Monroe Correctional Complex** – Washington



Gardening course writers and reviewers take a group photo at SCCC. Photo by Kelly Peterson.

State Reformatory Unit, and University Beyond Bars.

Authors have created or contributed to modules on "Advanced Topics", which covers concepts beyond Seed to Supper content. Some of these additional chapters include Naming and Classifying Plants, Mathematics for Horticulture, Vermicomposting & Bokashi Composting, Soil Science, the Soil Food Web, Planting and Harvesting Vegetables in Prison, Seed Saving, Aquaponics, and more. Many of the authors are incarcerated gardeners with specialty knowledge about their topic. Some authors have helped review and adapt Seed to Supper to better fit a corrections environment.

The gardening curriculum will be a classroom-based, peer-led, certificated program. Students will have the opportunity to earn academic recognition and credit hours applicable to a degree at <u>The Evergreen</u> <u>State College</u>. The first draft of this curricula will be finished by December 2019. SPP plans to partner with at least two Washington State facilities to pilot this program. Longer term, SPP intends for the curricula to be made applicable and available to all U.S. correctional facilities.

#### **Educational Library and New Materials**

To increase science education in existing programs, SPP-Evergreen staff developed several new learning guides. The guides are designed to be highly accessible and informative, empowering incarcerated technicians' and students' knowledge on a range of topics such as the Endangered Species Act, butterfly husbandry, and scientific illustration. Primary distribution has been to ecological conservation programs, where we have requested review and improvements by program technicians. Many more guides are in development and will be similarly wide ranging; examples include climate change, presentation preparation and delivery, collecting and analyzing data, and developing program ground rules.

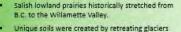
At the same time, we have organized and indexed the team's existing library of education materials. Some of the best resources have been made available in an online folder for DOC staff to peruse and download for program use. These more formal and handy libraries will be an enormous asset to current and future program coordinators and liaisons as they deliver and empower education.



#### ing prairie & Mt. Rainer. Photo by Jaal Mann

Scatter Creek Wildlife Area, WA Mima Mounds Natural Area Preserve, WA

Protected South Sound Prairies



History of Salish lowland prairies

- 15,000 years ago.
- Prairies were sustained by indigenous tribes for the harvest of wildflowers and bulbs. "Salish" in Salish lowland refers to the common language of Pacific Northwest tribes that traditionally live in the lowland prairie area
- Today, only 3% of the native prairies remain.
- Impacts affecting prairie habitats include: altered fire regimes; invasive species; land use conversion; management conflicts; fragmentation; loss of habitat structure; human disturbance; climate change; loss of wildlife.

Sustainability in Prisons Project (SPP) empowers sustainable change by bringing nature, science, and environmental education into prisons.

IO SPP 10/30/2019, 2700 Evergreen Parkway NW, Olympia, WA 98505, www.sustainabilityinprisons.org

A sample SPP Learning Guide (additional content on backside).



Glacial landforms of the Puget Lowland. This image was constructed using lidar-based mapping to show glacial landforms in the Puget Sound region:. Source: WA Department of Natural Resources

## **5.** Conservation Programs

SPP's conservation programs encompass a huge range of activities and topics but share three things in common.

- 1. The program focus is conservation and associated education and training: preserving and protecting something valuable, such as a species, landscape, and/or other natural resources.
- 2. These programs depend on strong collaborations with expert partners; incarcerated people, corrections staff, students, SPP staff, scientists, and community partners sharing their knowledge, resources, and enthusiasms.
- 3. Incarcerated program partners are both students and technicians; they receive formal education and training plus hands-on experience. **These are college-level internships**, and technicians are awarded <u>SPP certificates</u> as they complete certification requirements.

Conservation program success is dependent on each partner contributing their expertise and time. Programs are designed to maximize benefits to each collaborator.

# Biological Science Programs at LCC and CCCC: Western Pond Turtles, Woodpecker Nest Monitoring, and Aquaponics

During the past year, SPP-Evergreen focused on expanding educational opportunities for incarcerated students at LCC and CCCC. SPP piloted a workshop series at LCC, bolstering educational opportunities for incarcerated individuals. This workshop series included five site visits and was delivered by current and former SPP-Evergreen Program Coordinators on a range of topics from "Amazing Amphibians" to scientific illustration. Unfortunately the workshops were not successful and as a result they have been discontinued. Additionally, SPP expanded educational programming at CCCC through assigned readings, writing workshops, and seminars. These efforts have been well-received and are continuing in the new fiscal year.

Education and training for each program are described below. Participants completing program requirements are eligible for a certificate worth college credit at Evergreen post-release. Since the program started, 17 certificates have been awarded to technicians (Table 9), seven graduate students have provided program coordination, and eight corrections staff have served as liaisons.



Turtle technician Taylour Eldridge was recognized by SPP as a Western Pond Turtle Rehabilitation and Research Specialist. Photo by Jessica Brown.

#### Western Pond Turtle Program

The western pond turtle (*Actinemys marmorata*) is a state-listed endangered species and federal species of concern. Led by Washington Department of Fish and Wildlife (WDFW), partners have been working toward species recovery since the late 1990s. At the start of recovery efforts, approximately 150 turtles remained in the wild in Washington.

In 2013, SPP joined the effort specifically to assist with the rehabilitation of turtles afflicted with a "shell disease." Partners for these programs include WDFW, PAWS Wildlife Rehabilitation Center, Woodland Park Zoo (WPZ), and Oregon Zoo (OR Zoo). Affected turtles require a period of acute care provided by

veterinarians. After receiving veterinary care, some turtles from the Salish lowland population are moved to Cedar Creek Corrections Center (CCCC, 2013) and some turtles from the Columbia Gorge population are moved to Larch Corrections Center (LCC, 2015). Turtles at CCCC and LCC receive extended care provided by trained incarcerated technicians. As each turtle heals, they can be released back into the wild (Tables 7 & 8) where they are monitored by WDFW. Turtles at LCC unexpectedly laid eggs last season which were incubated at the Oregon Zoo. Some of those eggs hatched and will help contribute to the head start program at the zoo.



An Oregon Zoo vet technician holds an adult western pond turtle, providing a turtle checkup before release. Photo by Marisa Pushee

Year		<b>Turtles Received</b>	Turtles Released		
2013		8	2		
2014 <sup>i</sup>		28	28		
2015		8 <sup>ii</sup>	6		
2016		9 <sup>iii</sup>	5		
2017		4 <sup>iv</sup>	10		
2018		9	9		
2019		10	10		
Total		76	70 <sup>v</sup>		
	i Differ	i Differs from reported 2016 totals due to the addition of previously missing data			
ii 7 of 8 turtles were being re-treated					
Notes	iii One	iii One of these was humanely euthanized due to a neurological abnormality			
	iv 3 of 4	iv 3 of 4 turtles were being re-treated			
	v 4 turt	v 4 turtles were sent back to PAWs for exams and 1 was euthanized			

#### Table 7. Western Pond Turtle Rehabilitation at CCCC, August 2013 - September 2019

	Turtles Received	Turtles Released
Year		
2015	5	0
2016	11	9
2017	5	12
2018	11	11
2019	10	10
Total	42	42

#### Table 8. Western Pond Turtle Rehabilitation at LCC, December 2015- September 2019

#### Woodpecker Nest Monitoring Project

In 2017, SPP began a woodpecker nest monitoring project with biologists from the U.S. Forest Service at CCCC. Other participants in this project include enrolled college students at several academic institutions. The primary goal of the research program is to learn more about a keystone species of woodpecker nesting in the western U.S. The program involves monitoring video footage of activity at 85 woodpecker nesting sites. Since 2014, biologists have collected about 32,000 hours of video footage that requires review through human observation to document woodpecker nesting ecology, behavior, and potential predator activity. Information will help state and federal landowners along with researchers in Washington, Oregon, Idaho, and California to identify actions that may increase woodpecker nesting opportunities and contribute to forest health.

Biologists with the U.S. Forest Service train program technicians on video monitoring, bird and mammal identification, and forest health issues. Technicians incorporate a few hours of woodpecker nest video review into their daily routine. Their observational data has been an integral part of the woodpecker research study and provides valuable education and training.

#### **Aquaponics Program**

The aquaponics program at CCCC offers a small-scale demonstration of "closed-loop" systems by recycling water and converting nutrients from fish waste and bacterial respiration into a rich growing environment. The system was developed through partnership with Symbiotic Cycles, SPP-Evergreen, and WA Corrections. The goal of the aquaponics project is to teach technicians the value of sustainable food systems as well as provide nutrient-rich leafy greens to the CCCC kitchen. Students in the program learn about sustainable



SPP Biological Technician Lorenzo Stewart tests the aquaponics system's water nitrate levels. Photo by Marisa Pushee.

food systems, soil chemistry, the decline of vital nutrients in most industrial crops, and wasteful overuse of freshwater resources. During this reporting period SPP-Evergreen coordinated and funded several site visits for Symbiotic Cycles to deliver training for current and new technicians.

Session (30-90 minutes)	Number of	Incarcerated Attendees	WA Corrections Staff Attendees	SPP Staff Attendees
СССС	Sessions			
		Γ.		
Woodpecker Nest Monitoring Training	1	4	1	1
Science Journal Readings	24	4	1	1
Academic Writing Guide Readings	3	4	1	1
Science Article Discussions	12	4	1	1
Aquaponics Training	10	2	1	1
Western Pond Turtle Care Training	1	4	1	1
Turtle Field Work Field Trip	1	3	1	1
Academic Books Assigned	2	5	1	1
LCC				
Workshop	5	3-13	1-4	1-2
Science Journal Readings	5	3	1	1
Science Article Discussions	3	3	1	1
Turtle Field Work Field Trip	1	2	1	1
Total education sessions	68			
Certificates Awarded	Number of Recipients			
Rehabilitation and Research Specialist, over	4			
1,000 hours				

#### **Sheep Conservation Program**

Historically, bighorn sheep were widespread in western North America. By the turn of the 20th century populations had dwindled to near extinction, and recovery efforts were needed to return them from the brink. Today, the biggest threat to bighorn sheep is pneumonia triggered by a bacteria called Mycoplasma ovipneumoniae, or M. ovi for short. The bacteria are commonly carried by domestic sheep and goats. Raising M. ovi-free domestic sheep can protect wild bighorn sheep from the devastating pathogen. Currently, there are no private domestic sheep breeders that specialize in raising *M. ovi*-free animals.



A sheep technician poses with two lambs in the spring of 2019. Photo by Jarod Sumerlin.

In 2015, WDFW introduced to SPP leadership the idea of a pilot program to breed *M. ovi*-free domestic sheep. Spring 2018 was the program's inaugural season. Program partners include WDFW, local sheep husbandry experts, and SPP partners at WA Corrections and Evergreen. All animals in the flock were tested for pathogen prior to arrival and multiple times throughout each season. <u>Washington State</u> <u>University</u> provides pathogen testing and other program guidance. Program findings and protocols will be shared broadly as they are developed, including with privately-operated breeders who may join the effort.

In spring 2018, the Suffolk ewes in the program gave birth to 28 lambs; 9 females and 19 males. Spring 2019, 9 Suffolk ewes produced 18 lambs; 10 female and 8 male. Two ewes did not produce lambs. One male lamb died shortly after birth. One male and one female lamb were determined to be "bummer" lambs requiring human intervention for care and feeding which was provided by program technicians.

Throughout the year, technicians provided general care and feeding for the entire sheep flock, treated the animals with vaccines, installed ear tags, assisted ewe mothers in the birthing process and cared for lambs. Each care task has been recorded in order to document education, experience, and skills gained by program participants. In addition to hands-on learning, program participants received a "lambing basics" workshop and observed the wool shearing process.

We are still developing protocols, educational materials, program certificates, and refining practices to develop a viable source of *M. ovi*-free animals available to domestic small flock managers. All partners are playing key roles in making this collaboration a success.

#### **Prairie Conservation Nursery Programs**

Primary funding support for the Prairie Conservation Nurseries comes from <u>Joint Base Lewis-McChord</u> (JBLM), WA Dept. of Fish and

Wildlife (WDFW), <u>Center for Natural</u> <u>Lands Management</u> (CNLM), and WA Corrections. Plant materials produced by SPP's prairie conservation nurseries are used by state and federal agencies and conservation organizations including the <u>U.S. Fish and Wildlife</u> <u>Service</u> (USFW), JBLM, WDFW, <u>WA</u> <u>Dept. of Natural Resources</u> (DNR), and CNLM. Our nurseries curate and supply plant material from Oregon to southern British Columbia.



Plug production at WCCW includes growing native strawberries for prairie restoration; in this photo, technician Ashley McElhenie shows off the strawberries 'impressive runners. Photo by Jacob Meyers.

#### **Prairie Plant-Plug Production**

The SPP nursery sites have an annual combined sowing capacity of 400,000 plugs, and can produce up to 200,000 viable plant-plugs annually. Fall 2018, the nursery delivered 145,583 plant plugs of 47 species for Taylor's checkerspot butterfly recovery and lowland prairie restoration. Plug production focuses on species that do not establish well from seed when planted in Taylor's checkerspot recovery sites. The technicians have excelled at producing both Puget balsamroot and Virginia strawberry in quantities necessary to enhance the butterfly's habitat; see Table 10 for a summary of production in the past year. **Cumulatively, the nurseries have delivered more than 2.7 million plant-plugs since 2009.** 

Plant-plug production remains a vital component of the regional recovery plan for Taylor's checkerspot butterflies. However, direct seeding has become the *primary* method of habitat restoration. Starting in 2016, the majority of SPP plant-plug production was to supply seed nurseries. Because of reduced plug production, production was concentrated at the facilities with greatest educational opportunities for incarcerated technicians, WCC, SCCC and WCCW.

	# of species	Plants		
Total SCCC	34	63,822		
Total WCCW	13	81,671		
Total Delivered	47	145,583		
Total Requested	51	127,694		
Percent Delivered of				
Requested		114%		

 Table 10. Conservation Nursery Regional Plug Summary, delivered FY19 (see <u>Appendix 3</u> for abbreviations)

#### **Prairie Seed Gardens**

SPP cultivated plants for seed at WCC and WCCW. Corrections based nurseries have been successful at producing seeds for species not easily harvested via mechanical agriculture equipment. The seed production gardens at WCC produced over 8 lbs. of early blue violet (Viola adunca) seed and 2 lbs. of Viola howellii from 1,664 sq. ft. of cultivated area; their hand-collected harvest rate remains superior to other methods. WCC technicians sowed and planted out new species from wild collections. These include



*The Viola praemorsa beds at WCCW in full bloom are gorgeous! Photo by Jacob Meyers.* 

*Hieracium scouleri, Silene douglasii, Silene scouleri, Agoseris grandiflora* var. *leptophylla, Viola praemorsa*, and the state-listed threatened Puget groundsel, *Packera macounii*.

In 2018, SPP began serving a restoration efforts in new geographically region, the Oregon Coast. The nursery technicians planted 8 garden beds in 2017 and 2018 with early blue violet (*Viola adunca*) seed stock from Oregon coast. We followed improved planting protocols for an early spring plant-out, resulting in more vigorous plant establishment. WCCW had its first harvest of *Viola adunca* seed for silverspot butterfly (*Speyeria zerene hippolyta*) recovery on the Oregon coast in 2018. Harvest from this first year production topped 4 lbs. from 1,000 square feet of bed space.

The continued success of the seed gardens presents an excellent opportunity for WA Corrections to contribute to conservation. Education programming for prairie nursery technicians is detailed in the EVM description below.

#### **Emergent Pre-Vegetated Mat (EVM) Production**

The EVM program is a collaboration among CNLM, United States Fish and Wildlife Service, WDFW, and JBLM that began with the primary objective to restore habitat for the Oregon spotted frog. Key funding support was provided by JBLM, WA Corrections, and SPP-Evergreen's Foundation donations. The program is an ambitious pilot to cultivate pre-vegetated mats (blankets of coconut fiber) of wetland plant species for habitat restoration



Technician Joseph Oddo works with SPP program coordinators Graham Klag and Anna Duron. Photo by Shauna Bittle.

benefiting the Oregon spotted frog (subject of a past rearing program) and salmon species. The mats are intended to suppress weeds and enhance establishment of native vegetation.

In FY19, we delivered 36 mats to JBLM and 10,000 plugs. The pre-vegetated mats were installed alongside mats planted with plugs in the field. Monitoring for plant establishment and weed suppression will occur over a 4-year period to compare the effectiveness of the two methods. Results of the first two years of trials suggest two improvements to planning and site preparations: 1) optimizing mat placement, informed by multi-year data on water levels; 2) investing more time/resources in reducing reed canarygrass coverage prior to mat installation.

At SCCC, the EVM team includes incarcerated technicians, Stafford Creek Corrections Center maintenance staff, SPP-Evergreen program coordinators and managers. Supporting partners periodically visit the facility. All have done an amazing job meeting the challenges of the innovative program's technical demands. Education programming for the technicians is detailed below.

#### All Conservation Nurseries, Training and Education

SPP's Conservation Nursery Program Coordinators provide regular guidance and education to incarcerated technicians. They serve as the primary point of contact for all partners, including the WA Corrections staff that supervise and counsel the technicians. In FY19, the students focused on providing unique and relevant education for the programs and their efforts had superb results. Lectures and workshops offered within the conservation nursery programs are detailed in Table 11.

<b>Table 11</b> . Prairie Conservation Nursery Education and Certification FY19 (see <u>Appendix 3</u> for
abbreviations)

Sessions	Number of	
(30-90 minutes)	Sessions	Attendees
SCCC Conservation Nursery		
Workshop: Wetland Graminoids	1	9
Intro to Prairies	1	12
Viola and Silverspot	1	12
PNW Prairie Plants	1	12
Aquaponics	1	12
Water quality tests for Aquaponics	1	12
Sowing	1	12
Viola mat research	1	12
Soil Science	1	12
Germination counts	1	11
Cold Stratification	1	11
Soul of soil	1	11
Plant Evolution	1	11
Soil Sampling	1	14
Island biogeography	1	14
Soil Science	1	15
Camas and traditional foods	1	15
SPP Programs Overview	1	14
Plant propagation and germination	1	13
counts		
Plant evolution and biogeography	1	12
SCCC Prairie sub-total	20	
SCCC EVM		
PNW prairie plants	1	2
Aquaponics for food production	1	2
Water quality tests for aquaponics	1	2
Sowing	1	2

Viele met verseneb	4	
Viola mat research	1	2
Whale evolution	1	2
Germination counts	1	2
Issues with salmon aquaculture	1	2
IPM overview	1	2
Fire ecology papers	1	2
PNW geology	1	2
Island biogeography	1	2
Wetland soils and ecology	1	2
Wetland plants, traditional foods	1	2
SPP programs overview	1	2
Oregon spotted frog ecology	1	2
Plant evolution	1	2
SCCC EVM sub-total	17	
WCCW Conservation Nursery		
Silverspot butterfly and habitat		
lecture	1	3
Reentry Planning workshop	1	2
Soil workshops	5	13
Nematode lecture	1	2
Writing workshop	1	2
The power of <i>r</i> (regression) to		
convey data workshop	1	2
Plant I.D. and ecology workshops	3	8
Botany and ecology workshops	9	28
Drip Irrigation workshop	1	4
Prairie plant sowing and care	4	11
Oak woodlands seminar, workshop,		
and lecture	5	17
New Forestry paper and seminar	1	3
Harvesting seed workshops	3	11
Fungi and mycorrhizal application		
workshop and lecture	2	8
WCCW CvN sub-total	38	
WCC Prairie Seed Garden		
Weed control workshop	1	3
Soil Management Series part 4	1	8
Soil Management Series part 3	1	11
Cold-stratification hands-on	1	3
Scientific Illustrations Part 3	1	10
Soil Management Series part 2	1	10
Scientific Illustrations Part 2	1	9
Soil Management Series part 1	1	11
Scientific Illustrations Part 1	1	8
How To Give a Presentation	1	11
Library Access & Resources	1	9
,	1	1

Recording Keeping Skills	1	7
Sowing VIOPRA with C. Elliott	1	5
Nursery Bed Repair	1	11
Nursery Protocol Review	1	11
Plant Workshop VIOPRA	1	8
Plant Workshop PACMAC	1	7
Plant Workshop VIOADU	1	9
Prairie Plant ID	1	10
Totals	19	
Total education sessions	94	
Certificates Awarded	Technician 400 hrs	Specialist 800 hrs
SCCC Prairie Conservation Nursery	1	7
SCCC Emergent Vegetated Mats	0	3
WCCW Prairie Conservation Nursery	0	4
WCC Prairie Seed Garden	7	3
WCC Prairie Seeu Garden	-	



The prairie conservation nursery crew checks on the early blue violet (Viola adunca) rooting, in an experimental trial led by program coordinator Graham Klag. Photo by Shauna Bittle.

## **Animal Feed Programs**

Several prisons raise high quality feed for animals in the care of zoos and SPP programs. The most prominent of these are the Plantain Programs. Narrow leaf plantain (*Plantago lanceolata*) beds at MCCCW and at LCC provided larval food for <u>Taylor's checkerspot butterfly rearing programs</u> at OR Zoo and MCCCW. Technicians cultivate and harvest plantain leaves during the growing season. LCC shipped a total of 37,000 leaves of plantain to the OR Zoo for Taylor's checkerspot rearing in 2019. Plantain harvested at MCCCW was used for the butterfly program on site.

A summary of animal feed programs is provided below.

Food source	Facilities	Recipients
Mealworms	CCCC	Western pond turtles and koi in prison facilities
Plantain	LCC	OR Zoo's Taylor's checkerspot rearing program
Plantain & Nectar Plants	MCCCW	Taylor's checkerspot rearing program at MCCCW

Table 12, SPP programs	providing food for captive	e animals FY19 (see A	Appendix 3 for abbreviations)
	providing rood for cuptive		ion apprendix 5

## **CRCC Native and Pollinator Plants**

Sustainability in Prisons Project was granted funding from Lamb Weston's Pasco facility. The Lamb Weston staff earned a sustainability award for their work and as a result won the chance to fund the project of their choice. Lucky for us, they opted to provide support for a SPP project in central or eastern Washington. In response to the offer, Coyote Ridge swiftly developed a plan to make good use of the support. With the funding they are planting nectar plants for native pollinators and honeybees and growing



*Plants beneficial to pollinating insects glow in a garden at CRCC. Photo by Joslyn Rose Trivett.* 

drought tolerant plants for a heritage garden at the prison and for planting along the City of Connell art walk path. Funding was used to purchase seeds, soil, rock, and some container plants. To support the program, staff have provided incarcerated participants with education on topics such as seed germination. Incarcerated individuals are contributing to garden design, sowing seeds, and caring for plants.

## Pacific Northwest Monarch Butterfly Program

The BAR (Baker, Adams, Rainier) Unit Monarch Butterfly Program at <u>Washington State Penitentiary</u> (WSP) is a joint research project with <u>Washington State University</u> (WSU). Program technicians are in a social skills group in which mental health and protective custody incarcerated individuals work together to raise and care for Monarch butterflies.

Summer 2018 was the seventh season for the program. Technicians raised 580 butterflies from egg to adult. They tagged each individual with a sticker that allows scientific tracking and reporting. WSU receives report sightings from the field, usually from California overwintering sites. Offspring of these butterflies begin the migration back north in the spring.



Monarch Butterflies in the Pacific Northwest June 26 - 🔇

As I said in the last post, southern Oregon appears to be the 'hotspot' for Monarchs in the PNW this summer. More reports have come in including this one from Linda Kappen who caught this Monarch alongside the Rogue River a few days ago! Lets hope this small population is very fecund and produces a lot of caterpillars for the next generation!



Post from www.facebook.com/MonarchButterfliesInThePacificNorthwest/

## **Taylor's Checkerspot Butterfly Program**

Our flagship pollinator program is rearing and releasing Taylor's checkerspot butterflies (*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 MCCCW adds to the scope and resilience of recovery efforts and bolsters the original rearing program at the Oregon Zoo. The end of FY19 marks the completion of the program's eighth rearing season. Program partners include WDFW, USFWS, JBLM/DoD, Oregon Zoo, and CNLM.

Since 2011, program participants have reared more than 24,500 caterpillars and adult butterflies for release onto south Salish lowland prairies. More than 32 incarcerated technicians have received training, five graduate students have coordinated the program, and seven WA Corrections staff have served as liaisons. Since 2013, SPP has issued 18 certificates for incarcerated technicians completing training in the program. Rearing and breeding outcomes for this reporting period are summarized in Table 13. Percent survival by life stage is presented in Table 14.

	Cotorroillorro	Caterpillars	Caterpillars	Egg-Laying	Est. # of Eggs	Caterpillars
	Caterpillars Into Diapause	Released	<b>Retained</b> for	Butterflies	Produced	Released
	July 2018	Post-Diapause	Breeding	May/June	May/June	Pre-Diapause
	July 2018	March 2019	March 2019	2019	2019	June 2019
Wild	2,893	2,218	644	20	3,541	0
Captive- Reared	1,716	1,650	0	40	7,697	2,556

#### Table 13. Taylor's Checkerspot Rearing and Adult Breeding at MCCCW, FY19

Multi- Diapause	105	15	24	2	232	0
Unknown Origin (QC)	85	82	0	N/A	N/A	20
Totals	4,799	3,965	668	62	1,1236	2,576

<b>Table 14.</b> Number of individuals and percent survival by life stage for wild and captive-reared Taylor's
checkerspot butterflies at MCCCW FY19

Life Stage	Rearing & Breeding Totals			
	#	% Survival		
Diapause to wake-up	4727	0.985		
Wake-up to release	4638	0.981		
Breeding colony	668			
Returned to diapause	168			
Caterpillar to pupae	405	0.810		
Pupae to adults	364	0.899		
Est. # eggs	11236			
Eggs to hatch	8387	0.746		
Caterpillars released pre-diapause	2576			
Hatch to diapause	5811	0.999		

#### **Program expansion**

In FY19, partners designed, planned and constructed a second butterfly rearing greenhouse at MCCCW with grant funding from the USFWS. WA Corrections staff from SCCC, MCCCW, and Capital Planning & Development (CPD) led construction of the new custom structure. With the completion of this project, MCCCW now has double the butterfly rearing capacity. Testing and adapting to work in the new greenhouse required substantial problem solving by WA Corrections and Evergreen partners; both the typical off-season and the breeding season were unusually busy as a result. By all measures, our efforts seem to have paid off: technicians successfully reared 364 adult butterflies for breeding—a 62% increase over FY18 and double the program average. They



For a few months the original butterfly rearing greenhouse at MCCCW sat next to a construction site as a new, second facility was built. Now fully operational, the new structure doubles both the number of caterpillars the program can raise and the number of technicians able to participate in this highly successful education and training program.. Expansion was funded by USFWS and built by WA Corrections staff.

retained 5,811 caterpillars for the summer, the highest number the program has ever reared into diapause. The number of technician positions also increased.

#### Additional FY19 program highlights include:

- 3 butterfly technicians delivered a 15-minute presentation for over 30 conservation professionals at the annual Taylor's checkerspot working group meeting in Olympia.
- MCCCW hosted a program tour for Evergreen and WA Corrections leadership including President George Bridges and Secretary Steven Sinclair.
- WDFW hosted 6 technicians and 2 WA Corrections staff at a Taylor's checkerspot release site in Thurston County; technicians were able to see adult butterflies in the field.
- Program Coordinator Keegan Curry completed



During a tour in May 2019, Butterfly Technicians talk with visitors about the program. Photo by Ricky Osborne.

his MES Thesis on Taylor's checkerspot using 10-years of egg laying data collected by technicians in the MCCCW and Oregon Zoo butterfly labs.

• MCCCW sent roughly 6,500 total caterpillars (spring + summer releases) to WDFW in 2019, an all-time annual record for the program

Table 15. Education and Certification.	Taylor's Checkerspot Butterfly Program FY19
	rayion s encenerspor buttering i regram i 125

Education Sessions		
(30-90 minutes)	Sessions	Attendees
MCCCW		
Edith's checkerspot novel host plant adaptation	1	6
Introduction to conservation	1	6
Conservation of Prairie-Oak butterflies in Oregon and Washington	1	6
Recent policy changes and their effect on conservation	1	6
Monarch butterfly conservation and ecology	1	6
The science of metamorphosis	1	6
Total education sessions	6	6
Certificates Awarded	Recipients	
Butterfly Rearing and Research Specialist, 1500 hours	3	

### Wildlife Habitat Programs

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

**Table 16**. New and ongoing efforts to provide wildlife habitat and forage FY19 (see <u>Appendix 3</u> for abbreviations)

Prison	Programs	Program Partners	Highlights		
	Dollingtor forage	Miller	Pollinator-friendly plantings throughout the main & minimum		
AHCC	Pollinator forage & habitat	_	areas: flowers, herbs, pussy willow. Large woody debris and		
	& nabitat	Homestead LLC	shrubby habitat in pond area.		
			~15,000 Pollinator Friendly Annual flowers planted around		
cccc	Pollinator forage		grounds each year; need to add more to support honeybees		
			on site		
			Several pockets of native and pollinator-specific plants. Two		
CRCC	Heritage and bee		Heritage Gardens, incarcerated designers honored the cultural		
CRCC	gardens		and natural heritage of our local area, native plants and		
			chunks of columnar basalt.		
CRCC	Plant and Animal		Bird boxes, owl box, and pollinator box in garden; built 8 bee		
CRCC	Habitat		boxes in past year		
CDCC	Land Restoration	Lamb Weston	Restoring native vegetation outside the fence; planted ~200		
CRCC			sagebrush plants and ~3 lbs of blanket flower seeds		
CRCC	Pollinator garden	Lamb Weston	4 acre garden for bees and other pollinators!		
Minimum	Polimator garden				
LCC	Bird feeders		Feeders throughout the facility; rehome baby birds that fall		
	bird reeders		from nests		
MCC-TRU	Gardens		~4000 ft2 of gardens; lots of flower and pollinator plantings		
MCC-	Bird habitat		Multiple bird houses and hummingbird feeders around		
WSRU			Education and Gate 7		
мсс	Flower gardens,		Elewer gardens to attract bees to pollinate the vegetables		
WICC	boxes, baskets		Flower gardens to attract bees to pollinate the vegetables		
MCCCW	Bird boxes		20 bird boxes, 2 bird feeders		
occ	Pollinator-friendly		All greenhouse plants selected to benefit pollinators, in past		
	plantings		year increased plantings for pollinators, including natives		
sccc	Pollinator		Pollinator plants in every garden and next to greenhouses;		
SUU	plantings		new garden adjacent to bee hives		
SCCC	Bird houses		More than 40 houses		
WCC	Bird boxes				
	Pollinator		Hanging baskets, perennial and annual flowers throughout the		
WCCW			grounds, selected to be beneficial to pollinators; other wildlife		
	plantings		also attracted, such as frogs, rabbits, and birds of prey		
WSP Green	Gardens		2019, planted 4,000 seeds of more than 100 varieties of		
Zone	Galuells		flowers for pollinators		



Flowering plants in prisons can be a rare source of pesticide-free forage for pollinators. This sunflower is WCCW. Photo by Joslyn Rose Trivett.

## **Honeybee Programs**

Honeybee programs are an ongoing priority for SPP. These programs provide meaningful education and therapeutic activities for incarcerated and WA Corrections 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.

We currently support 12 active beekeeping programs: AHCC, CCCC-McNeil Island, CBCC, CRCC, LCC, MCC-SOU, MCC-TRU, MCCCW,



*Program Coordinator Bethany Shepler took this photo of LCC's hives in the fall of 2018.* 

SCCC, WCC, WCCW, WSP. These programs partner with 8 local bee clubs. With the exception of WCCW's program, certification is overseen by Washington State Beekeepers Association (WASBA). **Since CCCC's pilot in 2015, 11 prison programs have used the WASBA curriculum to certify 86 Beginner Beekeepers, 329 Apprentice Beekeepers, and 17 Journeyman Beekeepers.** A subset of certified beekeepers serve as beekeeping technicians or instructors, and some of those are represented in <u>Sustainability Job</u> <u>Programs</u>. Highlights for the past year include:

- WASBA program support and planning are *vastly* improved. Vice President and other new board members have updated all materials and processes. The new curricula and associated materials are very high quality.
- SPP-Evergreen and WASBA signed a Memorandum of Understanding that serves well to describe each organization's roles and responsibilities.
- All program partners contributed to "How-to" documents describing administrative expectations and practices for three roles: host facilities, expert beekeepers, and program liaison (DOC staff sponsor). Prisons Division Assistant Secretary reviewed and approved the set.
- Program participants continued to show a high level of engagement. A few programs are working on their education and certification plans, but all are understandably proud and enthusiastic about their bee programs.

Details for FY19 are shown in the following tables and highlights.

Prison	Hives	Partners	Status/Highlights
		Millers Homestead,	17 incarcerated beekeepers passed Journeyman-level testing and
AHCC	8	West Plains Beekeepers	co-authored WASBA's Journeyman curriculum; AHCC incarcerated
		Association,	beekeepers club plans new initiatives with great staff support, for

 Table 17. Beekeeping Program Overview by Institution FY19 (see <u>Appendix 3</u> for abbreviations)

CCCC- McNeil Island2Correctional Industries, Department of Natural Resources, community beekeepersTeam started program in May 2018; in 2019, CCCC beekeepers visit island program 2x month; program and partnership thriving.CCCC-on site CCCC-on site0Olympia Beekeepers Association, WASBADiscontinued on-site program. Graduated two Beginner Beekeeping Classes to support the McNeil Bee Project.CBCC3North Olympic Peninsula Beekeepers Association, WASBA29 certified beekeepers so far; adding scientific education, dissecting and examining dead bees; one beekeeper wrote supplemental curriculum			Washington State Beekeepers Association (WASBA)	example: breeding queens, participating in USDA pest survey, building beekeeping equipment; certified 83 Beginner, Apprentice, and Journeyman beekeepers overall, including 11 staff members
CCCC-on site0Association, WASBAClasses to support the McNeil Bee Project.CBCC3North Olympic29 certified beekeepers so far; adding scientific education, dissecting and examining dead bees; one beekeeper wrote supplemental curriculumCRCC3Mid-ColumbiaNo bee classes in 2019; graduated 19 Beginners previously; 2 hives; former SPP program manager donated to the programCRCC4Clark County Beekeepers, WASBA3 classes, 24 Beginner beekeepers so farMCC-SOU2Northwest District BeekeepersGraduated 9 incarcerated beekeepers so far; great staff support Association, WASBAMCC-TRU4Northwest District BeekeepersGraduated 2nd Beginner course July 2019 and immediately started next class; captured two wild swarms; entered their honey at the Association, WASBAMCC-TRU2West Sound Beekeepers, WASBANo classes 2019; graduated 20 incarcerated Beginners previously; this year, harvested 39 pounds of honey; carpentry program built the covers for the hives.SCCC5Expert community 	McNeil	2	Correctional Industries, Department of Natural Resources, community	Team started program in May 2018; in 2019, CCCC beekeepers visit
CBCC3Peninsula Beekeepers Association, WASBAdissecting and examining dead bees; one beekeeper wrote supplemental curriculumCRCC3Mid- Columbia Beekeepers, WASBANo bee classes in 2019; graduated 19 Beginners previously; 2 hives; former SPP program manager donated to the programLCC4Clark County Beekeepers, WASBA3 classes, 24 Beginner beekeepers so farMCC-SOU2Northwest District Beekeepers 	CCCC-on site	0		Discontinued on-site program. Graduated two Beginner Beekeeping Classes to support the McNeil Bee Project.
CRCC3Beekeepers, WASBAformer SPP program manager donated to the programLCC4Clark County Beekeepers, WASBA3 classes, 24 Beginner beekeepers so farMCC-SOU2Northwest District Beekeepers Association, WASBAGraduated 9 incarcerated beekeepers so far; great staff supportMCC-TRU4Northwest District 	CBCC	3	Peninsula Beekeepers	dissecting and examining dead bees; one beekeeper wrote
LCC4Beekeepers, WASBA3 classes, 24 Beginner beekeepers so farMCC-SOU2Northwest DistrictBeekeepersGraduated 9 incarcerated beekeepers so far; great staff supportMCC-SOU2Northwest DistrictGraduated 2nd Beginner course July 2019 and immediately started next class; captured two wild swarms; entered their honey at the Association, WASBAMCC-TRU4Beekeepers Association, WASBAFvergreen State Fair and won first placeMCC-TRU2West Sound Beekeepers, WASBANo classes 2019; graduated 20 incarcerated Beginners previously; this year, harvested 39 pounds of honey; carpentry program built the covers for the hives.SCCC5Expert community beekeeper, WASBAGraduated two Beginner Beekeepers so far!!WCC6Olympia Beekeepers Association, WASBAGraduated 6 incarcerated and 3 staff beekeepers in last yearWSP9West Plains Beekeepers Association, CI, WASBAEducation program on holdWSP9West Plains Beekeepers Association, CI, WASBA44 Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	CRCC	3		No bee classes in 2019; graduated 19 Beginners previously; 2 hives; former SPP program manager donated to the program
MCC-SOU2Beekeepers Association, WASBAGraduated 9 incarcerated beekeepers so far; great staff support Association, WASBAMCC-TRU4Northwest District Beekeepers Association, WASBAGraduated 2nd Beginner course July 2019 and immediately started next class; captured two wild swarms; entered their honey at the Evergreen State Fair and won first placeMCC-TRU4West Sound Beekeepers, WASBANo classes 2019; graduated 20 incarcerated Beginners previously; this year, harvested 39 pounds of honey; carpentry program built the covers for the hives.MCCCW2Expert community beekeeper, WASBAGraduated two Beginner Beekeeper classes this quarter; 93 Beginner/Apprentice beekeepers so far!!WCC6Olympia Beekeepers Association, WASBAGraduated 6 incarcerated and 3 staff beekeepers in last yearWSP9West Plains Beekeepers Association, CI, WASBA44 Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	LCC	4	Clark County	3 classes, 24 Beginner beekeepers so far
MCC-TRU4Beekeepers Association, WASBAnext class; captured two wild swarms; entered their honey at the Evergreen State Fair and won first placeMCCCW2West Sound Beekeepers, WASBANo classes 2019; graduated 20 incarcerated Beginners previously; this year, harvested 39 pounds of honey; carpentry program built the covers for the hives.SCCC5Expert community beekeeper, WASBAGraduated two Beginner Beekeeper classes this quarter; 93 Beginner/Apprentice beekeepers so far!!WCC6Olympia Beekeepers Association, WASBAGraduated 6 incarcerated and 3 staff beekeepers in last yearWCCW3Mother Earth FarmEducation program on holdWSP9West Plains Beekeepers Association, CI, WASBA44 Beginner certified beekeepers so far; two classes are in session now – a Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	MCC-SOU	2	Beekeepers	Graduated 9 incarcerated beekeepers so far; great staff support
MCCCW2West Sound Beekeepers, WASBAthis year, harvested 39 pounds of honey; carpentry program built the covers for the hives.SCCC5Expert community beekeeper, WASBAGraduated two Beginner Beekeeper classes this quarter; 93 Beginner/Apprentice beekeepers so far!!WCC6Olympia Beekeepers Association, WASBAGraduated 6 incarcerated and 3 staff beekeepers in last yearWCCW3Mother Earth FarmEducation program on holdWSP9West Plains Beekeepers Association, CI, WASBA44 Beginner certified beekeepers so far; two classes are in session now – a Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	MCC-TRU	4	Beekeepers	next class; captured two wild swarms; entered their honey at the
SCCC5beekeeper, WASBABeginner/Apprentice beekeepers so far!!WCC6Olympia Beekeepers Association, WASBAGraduated 6 incarcerated and 3 staff beekeepers in last yearWCCW3Mother Earth FarmEducation program on holdWSP9West Plains Beekeepers Association, CI, WASBA44 Beginner certified beekeepers so far; two classes are in session now – a Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	MCCCW	2		this year, harvested 39 pounds of honey; carpentry program built
WCC6Association, WASBAGraduated 6 incarcerated and 3 staff beekeepers in last yearWCCW3Mother Earth FarmEducation program on holdWSP9West Plains Beekeepers Association, CI, WASBA44 Beginner certified beekeepers so far; two classes are in session now – a Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	SCCC	5		
WSP9West Plains Beekeepers Association, CI, WASBA44 Beginner certified beekeepers so far; two classes are in session now – a Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	WCC	6		Graduated 6 incarcerated and 3 staff beekeepers in last year
WSP9West Plains Beekeepers Association, CI, WASBAnow – a Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for their bees.	WCCW	3	Mother Earth Farm	Education program on hold
	WSP	9	•	now – a Beginner course with 7 incarcerated students and 2 staff members and a Journeyman course with 7 incarcerated students! Tried a new mite treatment this Spring that has worked well for
	Total	51		

The queen bee is marked by beekeepers, both so she can be found more easily, and to signify her age--different years are marked with different colors. Photo by Rachel Friederich.





Beekeepers at MCC-SOU show off their certificates. Photo by Bethany Shepler.

**Table 18.** Incarcerated Beekeeper certification issued in FY19 and total certifications awarded since 2015 (see Appendix 3 for abbreviations)

			Incarcerate	Incarcerate		Incarcerate	Incarcerate
		Incarcerate	d	d	Incarcerated	d	d
		d Beginners	Apprentice	Journeyme	Beginners	Apprentices	Journeyme
	Curricul	certified	s certified	n certified	certified	* certified	n certified
Prison	а	FY19	FY19	FY19	since 2015	since 2015	since 2015
AHCC	WASBA	20		17	20	29	17
CCCC	WASBA	18			18	57	
CBCC	WASBA					29	
CRCC	WASBA		16			32	
LCC	WASBA	12			12	12	
MCC-WSR	WASBA						
MCC-SOU	WASBA		4			4	
MCC-TRU	WASBA	8	8		8	8	
MCCCW	WASBA					21	
OCC	WASBA						
SCCC	WASBA	26	27		26	58	
WCC	WASBA		6			14	
WCCW	WMB					8	
WSP	WASBA		13			37	
Total		84	74	17	84	301*	17

\*Previous to 2019, Apprentice Certification was awarded for the class that has been renamed Beginner.

## Composting with "Bugs"

The composting program housed by the Washington State Reformatory Unit (WSRU) at <u>Monroe</u> <u>Correctional Complex</u> is like none other. The program was founded in 2010 by two incarcerated men. Nine years later, the program has grown enormously and partners with multiple non-profits and schools. The program is internationally recognized as a model and is still led and operated by incarcerated technicians and teaching assistants.

The program currently processes 20,000 lbs of food waste every month. To transform waste into valuable resources, technicians work with three kinds of "bugs":

- 1. **Worms** (also known as red wigglers and the "vermi" in *vermicomposting*): Worms consume discarded grains, vegetables, and fruits. Their droppings are called *castings*, and worm castings are highly prized as fertilizer and soil amendment.
- 2. **Bokashi**: Specialist bacteria can ferment/pre-process citrus, dairy, and meats that the worms cannot.
- 3. **Black soldier flies**: Larvae of a stingless wasp (looks like a fly) can consume all kinds of food waste; they turn it into more larvae that are prized as high-quality animal feed

These approaches to composting represent relatively new technologies. Building on earlier studies, the WSRU program has developed, tested, and improved their methods. Their current focus is multiple small-batch trials with black soldier flies – cutting edge research that stands to change how we deal with human food waste and feed domestic and ocean food stocks.

From the beginning, members of WSRU's staff have supported and championed the program. The program has provided starter kits for other residential facilities, including the sizable worm farm in Washington State Penitentiary's Sustainable Practices Lab (SPL). The program worked with incarcerated technicians and instructors,



Sergeant La Munyon and compost technicians work together at the table where they extract red wigglers from finished worm castings. Photo by Kelli Bush.

Seattle's <u>Tilth Alliance</u> and SPP-Evergreen to create a program certification. <u>University Beyond Bars</u>, has provided the vital support for peer-led course instruction and two classes have graduated so far.

Scientists, corrections specialists, professors, students, and entrepreneurs have visited and toured the facility. Technicians created a <u>virtual tour</u>, presented at the <u>International Conference on Sustainability</u> in 2019. In 2018 and '19, graduate students from <u>University of Washington</u> (UW) visited the program to conduct research on soil amendments' effects on vegetable growing; compost technicians advised on and supported those studies. For more information see section 10 <u>Research and Evaluation</u>.

## 6. Restorative Nature Programs

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 Nature Imagery in Prisons (NIPP) team, led by SPP co-founder Nalini Nadkarni, has conducted research on "vicarious" nature exposure, (in the form of nature videos) in a maximum security prison they found beneficial results for



Garden boxes are available for rent at WSP. Photo by Bethany Shepler.

incarcerated individuals and staff in the area.

Less formally, the therapeutic values of SPP's programs have been recognized widely and consistently by both incarcerated and staff partners. While all SPP programs are intended to offer positive contact with nature, the programs detailed below include enjoying nature as their *primary* function. Since SPP-Evergreen had reduced influence on nature imagery programs during the reporting period, we represent them as an informal offering here.

Table 19. Informal Restorative Nature Programs, new and ongoing, FY19 (see <u>Appendix 3</u> for
abbreviations)

Prison	Programs	Program Partners	Highlights
АНСС	Flower gardens		Flowers throughout the prison for human & wildlife well-being
АНСС	Diversity Garden		Cultural groups grow food and flowers for their special events, e.g., 4 rows for native American programs: lavender, sage and sweet grass
АНСС	Nature imagery		Individuals in maximum security area have access to nature videos
СВСС	Flower gardens		Planted 500 perennials this year; ornamental gardens in courtyard, access breezeway, MSC light yards
сссс	Flower gardens		Flower gardens throughout the grounds
CRCC	Heritage and flower gardens		Incarcerated individuals designed garden, which honors cultural and natural heritage of area, native plants minimize water needs

LCC	House plants	Only known prison that allows houseplants in residents' dorm rooms; last year were nearly 300 plants for 480 residents!	
MCC- WSRU	House plants	New houseplants propagated and potted, three large carts full, for 4th floor/hospital area; decorative wood planters for some.	
MCC- WSRU	Flower gardens	Flowers gardens to benefit human and wildlife well-being	
MCC-SOU	Flower gardens	Flowers planted by SOU staff and incarcerated residents	
MCC-TRU	Flower gardens	In 4,000 ft2 of gardens, lots of flowers	
MCCCW	House plants	All living units have houseplants and numerous staff have plants in their officers	
MCCCW	Flower gardens	New flower gardens for every living unit	
OCC	Water features	2 living units have fish ponds; the other has a fountain and basin	
occ	Flower gardens, boxes, baskets	Each living unit has several garden beds planted and maintained by residents; hanging baskets and flowering beds throughout the facility for both staff and incarcerated people	
sccc	Flower gardens	Flowers throughout the grounds for human & wildlife well-being; 2 more gardens outside the fence	
SCCC	Lifer garden	Large garden space dedicated incarcerated men not eligible for parole	
WCC	Nature Imagery	2 Nature Imagery rooms in Cedar Hall; hosted documentary film makers and 2 information nights focused on program	
wcc	House plants	Plants in all shared and staff areas, provided and maintained by Grounds Maintenance crew	
wcc	Flower gardens	Flower plantings throughout the campus	
wccw	Flower gardens	Flower plantings throughout the campus	
WSP-SPL	House plants	Propagate and care for plants for indoor spaces; also grew 100+ lavender plants for outdoor beautification and good smells	
WSP-South Complex + MSU	Rental garden boxes	48+38 raised bed garden boxes available to individual renters for personal use; all rented	
WSP-MHU	Horticulture	Five flower plots dedicated to members of mental health programming	
WSP-MSU	Flower gardens	Two flowers gardens, 10 flower boxes and 26 hanging flower baskets	

# 7. Community Contribution Programs

Community contribution programs directly provide services and/or goods to nearby communities. They train pets for adoption or service and donate crafts and products (firewood, quilts) derived from reclaimed materials. Other community contribution programs provide services such as habitat restoration and thinning trees.

Typically, these programs are partnerships between prisons and community organizations that help organizations increase capacity and provide incarcerated individuals with opportunities to contribute to the world outside the fence. Most of these programs predate the formal SPP partnership; SPP-Evergreen's role is to acknowledge and support these productive partnerships and provide a comprehensive overview of activities taking place statewide.

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

## **Dog and Cat Programs**

Dog and cat programs are common in prisons across Washington State. Nearly all of Washington's prisons have one or more partnerships with community nonprofits for pet programs. Incarcerated individuals receive education and support from those partner organizations to provide excellent animal care and obedience training, andin a few cases—service or therapy training. We have heard from incarcerated participants and staff that pet programs are a benefit to all directly involved, and to the larger prison community as well. Sometimes, participants of these programs say that working with dogs or cats was transformational.

In FY19, more than 770 dogs and cats were cared for and trained in WA prison programs. In the past year, CRCC added a small service dog program, while WCC suspended theirs. SCCC's Freedom Tails



A social media post from the Pawsitive dog training program hosted by AHCC.

ended early in 2019, and the prison is seeking a new partner. Further details are shown in the following table.

Prison	Program	Program Partners	Highlights
			More staff and incarcerated participation this past year; ended 24th session in June with cumulative total of 175
АНСС	Pawsitive dog training	Diamonds in the Ruff, SpokAnimal, Spokane Humane Society	dog graduates; dog re-union event brings together dog, new owners, and former handlers; program is 100% self- sustainable by community donations and fundraising with art and crafts projects donated to Spokane Humane
			Society.
СВСС	Dog training and adoption	Welfare for Animals Guild (WAG!)	Since beginning of program trained more than 200 dogs and puppies, 35 in past year; 99% adoption rate! Continue to host reunions for adoptive families and incarcerated trainers
СВСС	Cat program	Welfare for Animals Guild (WAG!)	Hosted by two units in close custody; 23 cats in the program so far, 4 in past year
сссс	Training dogs for veterans	Brigadoon Service Dogs	4 dogs trained and 1 graduation ceremony in past year
CRCC	Ridge Dogs	Benton Franklin Humane, Adam County Pet Rescue	131 dogs graduated from the program in past year!
CRCC	Service dogs for veterans	Brigadoon Service Dogs	New: Set up video conferencing with Brigadoon; currently training 2 dogs
LCC	Dog Adoption Program	Humane Society for Southwest Washington	Weekly classes and one-on-one training with handlers; 42 dogs and puppies in the program in past year
LCC	Cat Adoption Program	West Columbia Gorge Humane Society, Humane Society for Southwest WA	Education and training every 2nd week; 42 kittens and cats adopted in past year
MCC- SOU	Cat program	Purrfect Pals	900 cats adopted since 2006
MCC- TRU	Dog training and adoption	Summit Assistance Dogs	9 dogs this year with 3 graduations
MCCCW	Pawsitive Prison Project	Kitsap Humane Society	22 cats in the 4th year of the program
осс	OCC Dog Program	Olympia Peninsula Humane Society	Adopted out 35-40 dogs this past year; adoption rate is 92%; 207 dogs since start of program in 2010
SCCC	Freedom Tails	Harbor Assn of Volunteers for Animals (HAVA)	7 dogs graduated, 1 graduation ceremony; this program ended early in 2019, planning restart with new partner
sccc	Service dogs for veterans	Brigadoon Service Dogs	8 dogs trained to the needs of individual veterans in past year

 Table 20. New and ongoing Dog and Cat Programs FY19 (see <u>Appendix 3</u> for abbreviations)

wccw	Prison Pet Partnership	Self-supporting	First in-prison pet program in the country! In past year, 35 dogs in training, 17 adopted as pets, 6 as service animals, 25 incarcerated employees; 2 found pet care industry employment post-release
WSP	BAR Units kitten	Blue Mountain	125 kittens and cats (mostly kittens) in the past year,
VV3P	program	Humane Society	socialized and raised for adoption
WSP-	Dog Program	Walla Walla Humane	20 incarcerated individuals served 2,632 hours as
MSU	Dog Flogram	Society	handlers and walkers



A dog handler and Koa, a "very loving St Bernard," in CRCC's Ridge Dog program. Photo from https://www.facebook.com/Ridge-Dogs-219301358080610/

## Reclaim, Repurpose or Restore, and Donate Programs

Consistent with the earliest days of SPP programs, WA prisons strive to "throw nothing away," to transform potential refuse into something of value. In some cases, these programs' creations directly meet an organization's need: donating quilts to a homeless shelter, refurbished computers for schools, and growing produce for food banks. In other cases, programs donate handmade or restored creations for organizations' fundraising events. The productivity and generosity of these programs are best illustrated by statewide numbers (below).

**Table 21**. Reported total for 12 prisons statewide, new and ongoing Community Contribution ProgramsFY19 (see Appendix 3 for abbreviations)

Item	Statewide totals reported (approximations)	Highest Impact Facility
Garden area	22.0 acres cultivated	WSP institutional garden: 10.5 acres
Produce grown	246,700+ lbs. to food banks & prison kitchens	WSP institutional garden: 110,000 lbs.
Crafts & furnishings from reclaimed materials	Nearly 24,000 items donated	WSP's Sustainable Practices Lab (SPL): 19,000
Refurbished bicycles and wheelchairs	1,144 donated	MCC-WSRU: 820 items
Refurbished computers	3,984 at-cost for School District	AHCC: All
Firewood	929 cords donated	AHCC: 739 cords



*Custom fairgrounds furniture created by WSP's Sustainable Practices Lab WA Corrections photo.* 



Loading refurbished wheelchairs for international shipment; this program is at MCC-WSRU, coordinated by Joni and Friends' Wheels for the World. WA Corrections photo

**Table 22.** New and Ongoing Community Contribution Programs to Reclaim, Repurpose, Restore, orDonate FY19 (see Appendix 3 for abbreviations)

Prison	Programs	Program Partners	Highlights
АНСС	SPL: Quilting	22 cats in the 4th year of the program	Repurposing fabric to create donation quilts; 95 quilts this year! 3 quilts went to terminally ill incarcerated individuals at AHCC. Remaining 92 quilts were split between Hope House Women's Shelter, Crosswalk (teen shelter) and Catholic Charities (homeless outreach and shelter services)
AHCC	Computers 4 Kids	Office of the Superintendent of Public Instruction, WA Department of Enterprise Services	Past year, refurbished 3,984 for schools plus 11,252 to surplus; incarcerated technicians learn basic diagnostics and can test for certification, plus learn office skills (excel, access) and shipping skills (e.g., forklift experience)
AHCC	Firewood donation	SNAP Spokane	739 cords donated July 2018 - July 2019!; DNR provides wildland fire trainings and prison staff provide firewood and chipper trainings
CBCC	Vegetable gardens	Donations to Peninsula College culinary program	~1,200 lbs. of produce grown: ~43 lbs. to culinary program, 1,075 to the kitchen, 84 lbs. to area food banks.
CBCC	Ozette potato program		Growing Ozette and Peruvian Purple seed potatoes for donation to local tribe to help replenish cultural staples
CCCC	Gardens	Centralia Community College, Littlerock School District	40,000 sq. ft. of gardens, grew ~8,500 lbs. of produce for prison kitchen in 2018; grew pumpkins for prison family events

сссс	Construction: tiny homes,	Centralia CC	Built 6 tiny homes for homeless community last year; this year working on larger "tiny cottages" to house
			families
CRCC- MSU	Gardens, Minimum		3,000 sq. ft. of gardens produced more than 5,000 lbs. in 2017
CRCC- Main	Gardens, Main		Half vegetables harvested to food bank and half to kitchen
CRCC	Toys for Tots	Tri-Cities Toys for Tots, Shriners Hospital for Children	Donated 150 toys and crafts in the in past year.
CRCC	Teddy bears from reclaimed materials	Hospitals, API events held at CRCC, ARC of Tri-Cities, Franklin County Sheriff's Office	Donated 600 teddy bears to partners and benefit events
LCC	Wood craft donations	Non-profits	Created and donated 75 picture frames, 16 jewelry boxes, 4 signs, 1 display cabinet, 1 plaque
MCC-	Gardens		Grew 213 lbs. of vegetables and herbs
SOU			
MCC- TRU	Gardens		Grew ~2700 lbs. for prison kitchen
MCC-	Community Aide	Over the Rainbow Fabrics, Dolly	Created 140 quilts and over 400 knitted hats and
TRU	Coalition: quilting, crochet, textile arts	Haakenson, clothing and textile advisors of Snohomish County donate materials; crafts donated to Interfaith Family Shelter, Westlake Shelter, Hope Crew, Swedish, Evergreen, Seattle Children's and Providence Hospitals, Rainbow Center, Evergreen Hospice, Little Bit Therapeutic Riding Center, Summit Assistance Dogs, Holy Rosary Church, Rotary First Harvest, East Count and Monroe Senior Center, +many, many more.	scarves this year;
MCC- WSRU	City of Monroe public flowers	City of Monroe donates seeds and soil	Grew 1,392 begonias for City flower beds
MCC- WSRU	Vegetable gardens	CI Food Services donated seeds	Grew 2,913 lbs. for prison kitchen, vegetables and herbs
MCC- WSRU	SPL Bicycles from Heaven	Bikes donated by Snohomish County Sheriff, Monroe PD, Marysville PD, Everett PD; donated to Snohomish County Boys & Girls Club and the City of Sultan for National Night Out	In 2018, restored 202, donated 162, recycled/scrapped 36
MCC- WSRU	SPL Wheelchair program	Wheels for the World	In 2018, restored 454 wheelchairs, donated 658 (including some walkers and sets of crutches), recycled/scrapped 54
MCC- WSRU	SPL Wood Craft 4 Charity	Scrap wood donated by Canyon Creek Cabinet Company; donate to Childrens Hospital, YWCA, Domestic Violence Services of Snohomish County, Women's Shelter of Monroe	In 2018, created and donated 300 wooden toys and crafts

MCCCW	GRACE (Gardening	Kitsap Conservation District,	Kitsap Conservation District 1/4-acre garden tended
IVICCCVV	for Restoration and	Central Kitsap Foodbank	by MCCCW crew, produced more than ~11,000 lbs. in
	Conservation		first season! 10,800 donated to 4 food banks; 200 lbs.
	Education) Project		fresh produce to the prison kitchen; mid-October,
			food bank patrons can bring their kids to pumpkin
			patch (pie and jack-o-lantern varieties)
MCCCW	Vegetable gardens	North Mason Food Bank	2018, grew 1,300 lbs. of produce for prison kitchen
			and food bank
OCC	Wood shop	Quileute High School	Every year OCC donates outdoor furniture, wood toys
		scholarships, Cherish our	and games, and other crafts to Quillayute Valley
		Children, Forks Lions Club, CASA,	School District Scholarship auction; 2019 donated 78
		Quillayute Valley School District,	items raising \$16,970 for scholarships
		Relay for Life, Forks Chamber of	
		Commerce, Timber Museum,	
		Olympic Anglers, Calm Waters	
		and Forks Soroptimists; wood	
		from Westport Shipyard and	
0.00	Circuit and	OCC Community Crews (DNR)	Cut and demoted 100 conder 5 ft in the state
OCC	Firewood	Olycap, Quillayute Valley	Cut and donated 190 cords of firewood in past year;
		Scholarship Auction, Lake	donation to Quillayute Valley Scholarship Auction
		Quinault Fire Department, OCC	raised nearly \$6,000
		Community Crews (Department of Natural Resources)	
OCC	Vegetable gardens		2018, donated 850 lbs. of vegetables, edible flowers,
000	Vegetable Bardens	Peninsula College	and herbs to daycare's summer meal program
			(students voted to choose recipient)
SCCC	Gardens and	Coastal Harvest Food Bank,	To food bank in 2018: 36,036 lbs.; Harvest Now
	greenhouses	Harvest Now	informed them they reported the most donated
	0		produce out of the 85 partner prisons nationwide.
SCCC	Food bank	Giving Tree, Coastal Community	Incarcerated individuals and staff raised and
	fundraisers	Action Senior Center,	donated~\$9,730 to non-profits listed
		Community Youth Services, Set	
		Free Christian Fellowship,	
		Coastal Harvest Food Bank,	
		Unidos Por Puerto Rico	
SCCC	Bicycle Repair	Lions Club	193 bikes repaired and donated in past year.
SCCC	Wheelchair Repair	Wheels for the World	147 wheelchairs repaired and donated in past year.
SCCC	Toy Time	Christmas for Kids, Correctional	Started by 2 incarcerated individuals 15 years ago
		Industries	and has grown to 21 people last year; materials come
			from furniture shop scraps and community
			donations; crafts donated for holiday season
WCC	Plant starts	Hoodsport Kiwanis	Grew 2,782 starts for 2019 Hood Canal Kiwanis Spring
			Plant Sale; donated 800 plants to Saints Pantry Food
			Bank; gave away 1,503 to staff and incarcerated
			individuals' families at various events
WCC	Vegetable gardens	Thurston County Food Bank, The	2018, grew 41,840 lbs.; Harvest Now donated
		Saint's Pantry Food Bank, The	vegetable seeds worth \$250; donated 23,000 to 5
		City Reach Food Bank, The	community org's to increase production for food
		Shelton Community Kitchen,	banks; 2,942 plants for WCC special events (e.g.
		Harvest Now	Mother's Day baskets)
WCC	Construction: bus	Centralia College, Hoodsport	Built and donated 3 bus stops in past year, built 9
	stops, and	Kiwanis, Hoodsport School	pantry boxes for Kitsap neighborhood food sharing
	Neighborhood	District	
	Pantries		

wcc	Shoe and clothing	CI	DOC facilities send used clothes to WCC for reuse and
	repurposing		recycling; processed 22,760 lbs. of t-shirt, boxer shorts, and socks in past year, with cost savings of ~\$165,200
WCCW	Gardens and	Tacoma CC, WSU Extension,	Summer of 2018 grew 11,620 lbs. of produce for
	greenhouses	Pierce County	prison kitchen — herbs, vegetables, and strawberries
wccw	Mother Earth Farm	Mother Earth Farm, Real Food Network, Tacoma CC	Offsite crew of 9 organic farm students grow vegetables for donation to 16 food pantries (quantities not available for 2019)
WCCW	Sisters of Charity: quilts, fabric crafts, wildlife rescue	Community members donate supplies; LIHI and multiple non- profits/charities receive donations	In past year, created and donated 3,111 items! Hats, pillowcases, quilts, stockings, pottery, dog beds (for PPP), and curtains for tiny houses
WSP	Gardens and greenhouses: Institutional Sustainability Garden	Donate to Blue Mountain Action Council and Christian Aid Center	2018 grew ~110,000 lbs. of produce, donated 2,471 lbs.; remainder to prison kitchen, saving \$175,937
WSP- SPL	Overview; since SPL holds 27 programs, only some detailed below	Receive materials donations from partners; donated to 550 charities since start of SPL 2012	27 programs in past year donated 19,000+ items to non-profits; provided 8,500+ items for State use; estimate \$200,000 savings for DOC annually; 250 tours provided; all technicians receive education and training programs
WSP- SPL	SPL: Wood Shop	Lumber Products, WSP Employees Veterans' Committee, Hard Headz, Walla Walla Foundry, Habitat for Humanity, Humane Society, Fallen Outdoors, Salmon for Soldiers, other non-profit groups	More than 250 projects in past year; built custom wood signs, special furniture items, and carvings for donations; also create and repair institutional furniture resulting in DOC cost savings
WSP- SPL	SPL: Wood Carving		Hand-carved 96 items for auctions this past year; four individuals received one-on-one training
WSP- SPL	SPL: Furniture Repair	Simpli-Home Furniture LLC.; donations to Habitat for Humanity, The Humane Society, Veterans Housing Project, Women and Children Rescue Mission, Christian Charities Mission, and Teen Aid	Sort and salvage donated materials; create "custom furniture solutions" for 40+ charities; instruction on safety and tool use.
WSP- SPL	SPL: Sign shop		Recycle materials, produce 2,000+ signs and banners, provide vocational training to 6 sign makers; this shop focuses on cost savings for taxpayers (discontinued work for outside charities)
WSP-	SPL: Aquaculture		800lbs. of lettuce for prison kitchen; new outdoor
SPL	and Aquaponics		tilapia pond and improved inside program structures; technicians train and practice in fish breeding
WSP- SPL	SPL: Parole-A-Bear		SPL's most productive shop by # of items, annually creating ~more than 15,000 stuffed bears and other items for charities; also repair for institutional clothing and created 300 holiday stockings for donation
WSP- SPL	SPL: Quilting		Using donated or cast-off fabric and thread, constructed 350+ lap quilts, quilts and blankets for charity

WSP-	SPL: Special Projects		Made 3,000+ products for DOC institutional use, such
SPL			as staff duty belt items (such as OC dispenser holsters
			(MK4 & MK9), cuff cases, radio cases, bags for special
			needs, PREA shower curtains, incarcerated
			individuals' property bags, and more
WSP-	SPL: Water	Project 41	Constructed water-filtrations systems as ordered by
SPL	treatment systems		Project 41; optimized assembly methods
WSP-	Crochet Program		Partnership with SPL, creating donation items
BAR			

## **Community Work Crews**

Many incarcerated residents of minimum security prisons (LCC, OCC, MCCCW, and CCCC) and units (Minimum Security Unit = "MSU") may join offsite crews working on public lands and community organization sites. The work can allow positive reconnection with outside communities, providing exposure to, and experience with the world outside the fence.

These crews employed 1,709 incarcerated individuals this fiscal year. With so many participants at hundreds of sites



A member of MCCCW's community crew works at a Kitsap Conservation District revegetation site. Photo by Rachel Friedrich.

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.

Prison	Programs	Program Partners	Highlights
AHCC	Forestry	Department of Natural	Forest thinning produces logs for firewood program
Ance	FOIESLIY	Resources	Porest tillinning produces logs for mewood program
CCCC	Forestry	Department of Natural	Off-site crews trained in and practice reforestation,
		Resources	wood-cutting, land clearing, and forest firefighting and
			fire prevention
CCCC	Community	Multiple agencies	Cedar Creek provides community service crews that
	work		perform thousands of hours of work each year for local,
			county, non-profit and state agencies
LCC	Forestry	Department of Natural	Off-site crews trained in and practice reforestation,
		Resources, other agencies	wood-cutting, land clearing, and forest firefighting and
			fire prevention; 120 crew members have been certified as
			Firefighter 2

LCC	Community work	Multiple agencies	Services include farming, reforestation, wood-cutting, brush and debris clearing, general landscaping, processing vegetables at food pantry, salmon habitat restoration, watershed improvement, development of parks and recreational areas, and other work to conserve natural resources
MCCCW	Conservation crews	Kitsap Conservation District, Great Peninsula Conservancy, Jefferson Land Trust, WSDOT, WDFW, Suquamish Tribe Fisheries	Planting projects, invasive weed removal, creek and estuary flood control
MCCCW	GRACE Project	Kitsap Conservation District, Central Kitsap Foodbank	Rotating crew growing vegetables for foodbank donation
OCC	Community Crew	Department of Natural Resources, other agencies	Lawn and grounds care, trail improvements, brush cutting, fire-wood cutting, weed removal, storm debris clean up, stream restoration, fence construction, green house construction, snow removal; also some painting and construction
OCC	Forestry	Department of Natural Resources, other agencies	Off-site crews trained in and practice reforestation, wood-cutting, land clearing, and forest firefighting and fire prevention; more than 100 hours of wildland fire training
WCCW	Mother Earth Farm	Mother Earth Farm, Real Food Network, Tacoma CC	Offsite crew of 9 organic farm student-workers
WSP- MSU	Community crew	City/County of Walla Walla, Veterans Administration, Port of Walla Walla, Walla Walla Fairgrounds, Walla Walla Landfill, Walla Walla County Private Properties, and local Cities and/or Counties such as Waitsburg, Dayton, College Place, Prescott	Landscaping, mowing, trimming, brush removal, cleaning out creeks, tree and shrub planting for fish and wildlife habitat, and pumpkin harvest

# 8. Sustainable Operations

Sustainable Operations programs are led by the Washington State Department of Corrections (WA Corrections). This section of the annual report is authored by WA Corrections' Sustainable Operations Manager. While other programs included in this report are also led by WA Corrections or other outside partners, Sustainable Operations programs statewide are unique as they are managed by a dedicated WA Corrections staff position; this position was created by WA Corrections to monitor and reduce the environmental, economic, and human costs of prisons. Major sustainable operations initiatives include greenhouse gas emissions, energy, waste, and potable water use reductions.

Executive order 18-01, State Efficiency and Environmental Performance (SEEP) was signed by Governor Inslee on January 16, 2018. This order further solidified the Governor's commitment to reducing greenhouse gasses and toxics in the state's products, processes and business. This demonstration of the Governors commitment and expectations further enables the Department to achieve its goals related to reduction in the use of toxics and energy and the production of waste and greenhouse gases. As an agency committed to the SEEP Executive order, the Department meets regularly with other state agencies to establish processes to identify the most cost-effective opportunities for reducing greenhouse gas emissions, sequestering carbon, and reducing exposure to toxics.

12 prison facilities are responsible for the vast majority of WA Corrections' greenhouse gas emissions, resource consumption, and waste generation. In June of 2019, these facilities occupied over 7 million square feet of conditioned space and housed a population of 16,781 incarcerated individuals. Prison age and design range from the 130-year-old first territorial prison in Walla Walla, the first US Green Building Council Leadership of Energy and Environmental Design (LEED) Gold prison campus in the world, and the Coyote Ridge Corrections Center in Connell, WA. Facilities provide health and dental care, treatment programs, educational and employment training, laundry, and food services.

## Energy

Energy costs associated with the operations of correctional facilities are significant. Reducing energy consumption is an ongoing priority for WA Corrections. The facilities with the support of the Capital Planning & Development (CPD) division are constantly engaged in evaluating and facilitating energy reduction measures such as:

- ٠ Facility and systems maintenance
- Energy Audits and resulting upgrades
- High performance construction
- Alternative energy investments
- Promoting conservation behaviors

WA Corrections has been aggressive in reducing energy use in its prison facilities succeeding in reducing energy use by 24% since 2009. Contributing strategies include the completion of 20 energy savings performance contracts, the certification of the first LEED Gold prison campus in the world, and management of more LEED-certified square footage than any other prison facility in the United States. Sustainability in Prisons Project (SPP): Fiscal Year 2019 Annual Report

Energy use/incarcerated person/day showed a slight decrease of from FY18, as illustrated in the table below.

Fiscal Year	Kwh per incarcerated resident	
	per day	
FY16	47.36	
FY17	49.19	
FY18	48.67	
FY19	47.97	

 Table 24. Energy data, 12 active prison facilities, FY16 to FY19

This data represents power demands needed to operate facility conditioned spaces, perimeter lighting, food service, laundry, health care and industrial operations. Power sources include: electricity, natural gas, propane and fuel oil. Consumption records for each facility for each power source are converted to equivalent kWh hours and divided by the number of incarcerated people.

#### Activities and initiatives

- Lighting retrofits Prison facilities continue to use operational funds and utility incentives made available for LED lighting projects, resulting in significant energy savings.
- **Training for staff** Facility managers engaged in energy conservation and building management training
- Energy project funding WA Corrections received special funding through the Department of Commerce for the Pacific Northwest National Laboratory to conduct detailed energy use studies, develop an Energy Master Plan for the department and recommend best energy conservation strategies and projects.
- **Renewable power contracting:** WA Corrections contracted to purchase 1.2 million kilowatt hours of green power annually through <u>Avista's Solar Select</u> program.

### Waste

The primary focus of WA Corrections' waste reduction strategies includes appropriate management of waste streams and environmentally preferable purchasing. Managing waste streams includes separating and shuttling waste to its next, most appropriate destination such as a recycle center, compost facility, waste to energy plant, reuse/redistribution operation, or if no better option exists, to a landfill.

WA Corrections is successfully decreasing the amount of waste generated and sent to the landfills: since 2011, landfill waste had been reduced by 20%. Much of this progress is due to the diversion of food waste to composting operations. Sorting and diverting recyclable items is the second largest contributor to landfill waste reduction.

Attention to environmentally preferable purchase choices also plays a large part in waste reduction. Replacing disposable items with durable, reusable alternatives has been a consistent strategy. Durable medical equipment repair programs refurbish equipment to make it functional for use at the facility or to be donated through community partnerships. The program is an example of saving items from the landfill and sparing facilities replacement costs. Challenges over the past year in reaching further landfill reductions include the loss of cost-effective recycling opportunities for footwear, textiles, mattresses, and plastics.



Thanks to the composting program's ongoing innovations and expansions, MCC-WSRU was able to cancel their contract with an external composter in the fall of 2019. Photo by Erica Benoit.

Waste sent to the landfill has remained fairly consistent over the last four years, as illustrated in the table below.

Fiscal Year (FY)	Lbs. of landfilled waste per incarcerated resident per day
FY16	1.2
FY17	1.3
FY18	1.2
FY19	1.2

Table 25. Waste data, 12 active prison facilities, FY16 to FY19

Data represents the amount of landfill or incinerator waste generated by facilities that was not diverted to better solutions. These rates do not include wastes diverted to composting, recycling, and hazardous and universal wastes, such as electronics and light tubes, which are captured and managed specially.

### Activities and initiatives

- **Medication waste diversion** Random waste stream reviews over the past year revealed the absence of any pharmaceutical or over-the-counter medications in the waste stream indicating that the diversion process for any unused or expired medications is effective.
- Food waste composting and recycling All facilities are expected to have recycle and food waste diversion programs.
- **Sustainable Purchasing** The Department is a member of and working closely with the SEEP Toxics Reduction and Preferable Purchasing working group to identify and implement waste reductions strategies and improve sustainable purchasing.
- Education and training for incarcerated residents: Educational signage, training in sustainability work programs, and resource conservation education in SPP programs (e.g., Roots of Success and Environmental Workshop Series)

Target of Diversion	State-wide total	Lead facility
Commodities (e.g., metals,	2.359 million pounds	SCCC: 560,000 lbs. (280 tons) to recycling in
cardboard, plastics)*	(1,179 tons)*	FY19.
Organics (e.g., food waste,	2.132 million pounds	WSP: 403,195 lbs. (201 tons) composted in
yard waste, shredded paper)	(1,066 tons)	FY19.
Finished compost produced	4.347 million tons	OCC: 108,000 lbs. (54 tons) finished compost
	(217 tons)	in FY19
Total waste diversion	4.49 million pounds	SCCC: 842,900 lbs. (422 tons) to recycling and
	(2,245 tons)	composting combined.

Table 26. Waste diversion, state-wide totals reported by 12 prisons, FY19

\*From Results WA database—more complete data— 1,177.47 tons of Recycled material diverted from landfilled waste in calendar year 2018

### Water

Prison facility managers know that conserving water can save money and be good for the environment. Reducing water use at facilities also extends beyond resource protection and potable water cost savings to savings in wastewater and energy costs.

- Potable water use has decreased from last year's consumption rate of 147 gallons/incarcerated person/day in FY18 to a rate of 133 gallons /incarcerated person/day in FY19.
- Target goal is 120 gallons/incarcerated person/day.

And a second sec	

Grounds/Nursery Services Specialist Benri Deanon describes food production and water use at WCC; since installing inline drippers throughout the gardens, they use 58% less water. Photo by Ricky Osborne.

Fiscal Year (FY)	Gallons per incarcerated resident per day
FY16	146.12
FY17	138.01
FY18	146.83
FY19	132.99

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.

In the past few years, gardening in Washington correctional facilities has increased exponentially, transforming lawns and gravel yards into beautiful, productive spaces. Programs include emphasis on

vegetable production for food banks and facility food service operations. Water reduction goals will not diminish support for garden programs, but rather will bring new opportunities for water conservation innovations.

#### Activities and initiatives underway

- **Plumbing retrofits** A pilot program in one housing unit at the Washington State Penitentiary installed efficient valves and controllers for showers, sinks and toilets. A full year after installation the water savings has proved substantial with an 81 % decrease in potable water use and a total project cost payback in 1.52 years.
- Metering and facility water use assessments Five facilities have completed metering of their entire campuses. The meters will be used to monitor and reconcile water use to reduce consumption and detect and repair leaks. Cost benefit analysis of the project may support further metering of other campuses.
- Water conservation landscaping While garden programs depend on sufficient water use to thrive, several facilities across the state are employing water conservation strategies including drought tolerant landscaping/gardens and improved irrigation practices.

CBCC	CCCC	MCCCW	OCC	SCCC	State-wide total
250 gal	45,000 gal	30,000 gal	200 gal	3,210 gal	78,660 gal

**Table 28.** Water catchment summary reported by 12 prisons FY19

# 9. Sustainability Job Programs

SPP job programs offer incarcerated participants job training, education, and sustainable living skills and ways to contribute to communities and ecosystems. The list included in Table 29 shows all sustainability job program placements in FY19 (data provided by WA Corrections staff's OMNI system; where job programs are known to be very similar, SPP-Evergreen combined those programs).

We include all jobs documented and reported by WA Corrections staff involving sustainability, science, and contact with non-human nature. This table leaves out some sustainability jobs that have been coded in a non-sustainability category; for example, technicians working on composting and aquaponics at SCCC, and electricians who install energy efficient fixtures. These job programs represent an enormous variety of activities, most of which were initiated and run with little-to-no input from SPP-Evergreen partners. SPP-Evergreen aims to promote and support the educational enrichment of every program, and will continue to build partnerships and capacity toward this goal.

Approximately 4,214 incarcerated individuals held sustainability-related jobs during FY19 which is approximately 25% of the 16,781 men and women incarcerated in WA prisons on June 30, 2019 (excludes work release and non-prison beds). Additional individuals "volunteer" in sustainability programs, and their work is not captured here; known reasons for declining the job status relate to having another work or program assignment, short duration of program duties, or limits on monthly pay.

**Table 29.** FY19 Sustainability Job Programs in WA Prisons: all job programs determined to involvescience, sustainability, and/or contact with living things are tracked in "sustainability" category.Note: Does not include "volunteers" (see above) and students (see Education).

Sustainability Job Program	Number of sites	Number of participants, FY19
American Boarding Kennel Assc (ABKA)	2	33
programs	2	
Aquaponics	2	7
Bee Conservation Tech / Class Facilitator	8	60
Bicycle Repair	2	14
Bike & Wheelchair Repair	2	52
Biowaste Custodian	1	34
Butterfly Rearing Tech	2	30
Cat Handler	4	158
Chicken Handler	1	11
Community Work Crews; includes 14 Clerks	10	965
Compost Worker / Food Waste Recycler	3	28
Computer Refurbishing	1	13
Cultural Crafts Program	1	13
Dog Handler	9	220
Dog Handler 2 (service training)	8	73

Dog Walker	3	30
Fire Wood Stacker	1	8
Forestry I Worker	4	676
Forestry II Worker	1	15
Gardening, Organic	1	60
Groundskeeper I	19	493
Groundskeeper II	4	87
Horticulture I Worker	9	186
Horticulture Worker II	2	37
Inside Groundskeeper	2	55
Plantain (grown for Oregon Zoo)	1	2
Prairie Plant Conservation	4	70
Re-Use Fabric-Sustainable / Quilting	4	86
Recycling Worker / Recycling & Reclamation	14	485
Root Of Success Trainer	9	35
Sawyer	2	49
Sheep Farming	1	13
Sustainability Clerk / Analyst	4	13
Turtle Technician	2	14
Waste Treatment Helper	1	6
Waste Treatment Operator I	3	25
Waste Treatment Operator II	1	15
Wood Working	1	2
Worm Farm Worker/Vermiculture	5	41
TOTAL		4,214



Gardeners at WCC harvest bok choi with visitors from France. Photo by Ricky Osborne.

## **10.** Research and Evaluation

In FY19, changes in <u>Washington Department of Corrections</u>' (WA Corrections') requirements for program evaluation and research continued to evolve. SPP-Evergreen and the Research and Data Analytics (RDA) staff met four times during the reporting period to discuss possible and planned projects. Overall, options and opportunities for program evaluation and research involving people in prisons (staff and incarcerated) are greatly reduced.

## **Quality Assessment Surveys for Conservation Technicians and Workshop students**

With RDA's support and participation, SPP-Evergreen gained Washington State Institutional Review Board (WSIRB)'s confirmation that two existing survey programs may continue with no additional review. Surveys for SPP's Environmental Workshop Series students and for Ecological Conservation technicians are approved by their 2011 determination. The activities were determined "exempt". They are *not* considered research; they are assessments of program quality that are used to create improvements.

## **Demographics and Recidivism for Incarcerated Participants**

With RDA support, SPP-Evergreen submitted the biennial data request to add results for FY18 and 19. WA Corrections research staff provided data on three sets of SPP participants: <u>Roots of Success</u> instructors, Roots of Success graduates (students), and Ecological Conservation technicians (for programs such as <u>Taylor's</u> <u>checkerspot butterfly rearing</u>, <u>beekeeping</u>, and <u>prairie plant</u> <u>nurseries</u>).

We requested data on these three groups for these reasons:

 SPP-Evergreen has excellent records of participation: for each individual, we maintain identifiers and program start



For the purpose of describing SPP incarcerated participants who had a meaningful experience in one or more SPP programs, we included all conservation technicians, including these beekeepers at AHCC. Photo provided by Kay Heinrich.

- identifiers and program start and end dates.
- From our observations and experiences, these programs represent a meaningful or significant experience for a typical participant. Note that we did not include people who joined a program for less time than the average participant (e.g., less than four months in a conservation nursery).

3. Pleasingly, the three groups also represent some of the variety in program participation: instructors, students, and technician/interns

All three data sets ended June 30, 2019, and started with earliest records: spring 2013 for Roots of Success, and ~2010 for first full records from a conservation program. Results help us describe incarcerated participants in SPP programs, especially as compared to WA prison residents overall (see <u>Agency Fact Card</u>; we relied on June 30, 2019 data for our comparisons). We cannot claim that any of key findings were caused by participation in our program; however, we find value in better knowing the attributes and outcomes of SPP instructors, students, and technicians.

#### **Combined Results**

RDA's report summarized characteristics for 1,754 incarcerated participants.

Looking at demographics, there were more individuals classified as <u>low and</u> <u>moderate level risk</u> as compared to the general population: 41% "low" and 14% "moderate" compared to 30% and 5% respectively. One "high" risk category was over represented compared to the general population: 26% classified as "high violent" compared to 13%.

In these SPP programs, 8% of incarcerated participants were Hispanic compared to 14% in the



At WCC, Roots of Success Master Trainer Grady Mitchell and newly certified Instructors Jayson Smith, Matthew Edens, and John Morimoto. Photo by Emily Passarelli.

overall population. Diversity of races looked fairly similar to the general population distribution, varying by only a few points above or below those averages. The split between female and male facility's participants exactly matched the general population averages: 8% and 92% respectively.

Of the 1,754 participants in the data set, only 206 could be included in the measure of <u>recidivism as</u> <u>defined</u> by WA Corrections; for those who have been released, it is a measure of criminal acts that result in a return to a WA prison within three years of the release. For these 206, 26% recidivated and 74% did not. This contrasts to 34% and 66% for the general population. To emphasize this finding: **the recidivism** (return to prison) rate for individuals who participated in SPP in a meaningful way was 26%.

Considering infractions and grievances of the combined groups, we could see no clear patterns for records before, during and after program participation—fluctuations over time are not large enough to exceed the margin of error.

For our next data ask, planned for 2021, we will ask for two sets of results for each group: continuing the cumulative report (e.g., all technicians since the start), and adding a report that only describes results for the two years previous. This should allow contrasting the most recent participants with those of previous years, and perhaps better indicate change over time.

#### **Roots of Success Instructors**

From data on 57 Roots of Success instructors, we saw the lowest participation by Hispanics: 5%. We found higher racial diversity than the general population: 54% White compared to 70% White statewide. Most non-Whites are Black, comprising 39% of this group. Only 5 of the 57 have been released for more than three years—far too few numbers to characterize a recidivism rate (the threshold for a preliminary finding is ~30).

### **Roots of Success Student Graduates**

We received data for 1,364 Roots of Success graduates of the full curriculum. Again, we see higher racial diversity than the general population: 65% White compared to 70% White statewide. The difference appeared due to increased participation by Black students: 24% of Roots graduates are Black, compared to 18% statewide. For the 140 Roots graduates released three or more years ago, 30% recidivated.

#### **Ecological Conservation Technicians**

From data on 204 conservation technicians, we found lower racial diversity than the general population: 75% White compared to 70% White statewide; that is a slight improvement compared to the 78% white found in 2017. Asian/Pacific Islanders showed a relatively high rate of participation, 8% compared to 4% statewide, and Black technicians were lower, with 11% participating compared to 18% statewide.

Since the first SPP conservation program in 2009, 61 technicians



Current turtle technicians Donald McLain, William Rathgaber, and Jeramie Inge were joined by former SPP technician and current Evergreen student Bill Anglemyer at this spring's turtle release for the CCCC program. Photo by Marisa Pushee.

released from prison three or more years ago. Of the 61, only 18% have recidivated.

## **Quality Assessment Surveys for Nature Imagery and Roots of Success Programs**

In consultation with RDA and WSIRB, we established that exit survey programs for Nature Imagery and Roots of Success are out of compliance. While these programs were originally vetted and approved by RDA, they accepted the external researchers' IRB approval in error; all WA Corrections research and quality assessment involving human subjects must have WSIRB approval—out of state IRB's are not <u>Sustainability in Prisons Project</u> (SPP): Fiscal Year 2019 Annual Report sufficient. If requested, RDA has committed staff time to supporting a WSIRB submission for these programs. In developing the submission, we would determine if data from past surveys may be salvaged or must be discarded.

## **Future Graduate Student Thesis Projects Involving Human Subjects**

RDA conveyed that they will no longer be able to consider or support graduate student investigations or thesis publications involving people in prisons (staff and incarcerated). With limited resources, RDA is primarily prioritizing large internal program research—studying impacts of programs such as *Swift and Certain* and *Thinking for a Change*.

At this time RDA is not allowing data obtained through approved survey programs to be the subject of a student thesis, as this intended use is not covered by an "exempt" determination.

## **Research with External Partners**

### Institute for Human-Animal Connection

Building on the project begun in 2017, Dr. Kevin Morris and colleagues with the Institute for Human-Animal Connection at Denver University (DU) worked with RDA to complete a data share agreement. This agreement will provide WA Corrections with information on two groups: incarcerated individuals who participate in dog programs and a similar group of individuals who haven't participated. We look forward to study completion. In the future, the partnership plans to develop and publish best-practices for prison dog programs.



This dog came back to prison for a reunion with its former handler...thanks to the owner for making this happiness possible! Photo by Brian Harmon.

### Astrobiology for the Incarcerated Program Evaluation

Throughout the year, SPP-Evergreen worked with the Astrobiology for the Incarcerated program team and research professionals working for NASA and University of Utah to synthesize survey results from the <u>Astrobiology for the Incarcerated</u> (AfI) lectures. Pre- and post-program surveys to assess knowledge and attitudes were administered for lectures in WA, Ohio, and Florida, resulting in a substantial data set. Led by Nalini Nadkarni at University of Utah, the team co-authored a paper on primary findings and submitted to a prestigious academic journal in October, 2019. We have additional submissions and papers planned.

#### **University of Washington Waste-Based Amendment Research**

MCC-WSRU's composting program is a

research site for a soil amendment research project. Scientists from the University of WA and WA State University are investigating the impact of waste-based soil amendments on soil health and yield and nutritional density of vegetables grown on amended soils. As urban agriculture grows in popularity, the quality of urban soils has become a concern. In addition, issues associated with landfilling wastes such as food scraps and municipal biosolids (solids from wastewater treatment) are generating interest in beneficial use options as an alternative to disposal.

For this study, scientists replicated field plots at three sites: the wastewater treatment plant in Tacoma, WA, City Soil Farm at the King



In early spring 2019, compost technicians Rudy Madrigal and Noel Caldellis show visitors the updated UW field plots at MCC-WSRU. Photo by Joslyn Rose Trivett.

County treatment plant, and MCC. At each site, residuals-based amendments are added to soil alongside plots where soils are amended with commercial fertilizer. A range of garden crops are grown and soil health is measured using changes in physical, chemical, and biological properties. In addition to plant yield, crops are tested for nutrient content and vitamin concentrations. Soil amendments being tested include biosolids-based topsoil, biosolids compost, vermicompost, bokashi, and compost tea. At MCC, incarcerated individuals produced amendments for the trial and have been involved in planting, tending plots, soil sampling, harvesting plant tissue, and yield measures. Data is shared with those involved add knowledge of soil and plant analysis, data analysis, and the value of the amendments they create

#### **Student Theses**

Master of Environmental Studies student Keegan Curry completed his thesis by analyzing Taylor's checkerspot butterfly data collected over the past 10 years at MCCCW and Oregon Zoo. MCCCW Butterfly Technicians have been harvesting, tracking, and reporting the number of eggs laid by female butterflies since the program began in 2012. Keegan's thesis synthesizes this data and reports trends in Taylor's checkerspot reproduction over time, revealing new patterns of oviposition for this endangered subspecies. Over 25 incarcerated technicians



Federally endangered Taylor's checkerspot butterfly eggs are counted by incarcerated Technicians at MCCCW as one of the program measures provided to partners. Data collected from MCCW and OR Zoo programs was used in SPP Coordinator, Keegan Curry's thesis.

at MCCCW provided data for this thesis by counting thousands of butterfly eggs during their time in the program and their efforts represent a significant contribution to research.

In June 2019, Master of Environmental Studies student Bethany Shepler completed her thesis titled *A critique of the New Ecological Paradigm: Stewardship and a case study of the Pacific Northwest logging industry*. Throughout the process she met with the team of thesis advisors at SCCC, four incarcerated environmental educators and SCCC's staff liaison for SPP programs. Advisors helped her choose the study population, research question, and develop and fine tune the research plan and instruments. This summer at SCCC, Bethany delivered a workshop on the thesis process and findings, presented the printed thesis to advisors, and met with advisors to debrief the process—discussing benefits and challenges of their involvement—and award certificates of recognition.



Bethany Shepler (middle) poses with two of her thesis advisors, Kelly Peterson and David Duhaime; Bethany is holding a printed copy of her thesis that she gave to them. Photo by Erica Benoit.

# **11. SPP Network**

## **SPP in Washington State**

Staff at SPP-Evergreen maintained contacts with all Washington state prisons during FY19. With the exception of OCC, every prison in WA hosts one or more program coordinated by SPP-Evergreen—such as <u>beekeeping</u>, <u>Roots of Success</u>, and ecological <u>conservation</u> programs—and program contacts are essential and routine. This connectivity boosted program recognition and increased capacity for more and better programs. Partners intend to continue aligning goals and honing communications going forward. Here is a summary of SPP-Evergreen's significant contacts within the state.

New contacts in FY19: Title/profession, organization	Interest in SPP		
Earthlab, University of Washington	Artwork for 2019 Northwest Nature and Health Symposium		
Education Navigators, 13 colleges statewide	Post-release guidance in navigating higher education		
Un-loop	Web development and reentry mentorships		
Statewide Reentry Council	Supporting reentry and legislation to improve outcomes post-release		
Ongoing contacts in FY19: Title/profession, organization	Interest in SPP		
L'Honey	Collaboration between L'Arche Farm and a local parish focused on beekeeping education and inclusion of vulnerable adults		
Doris Duke Conservation Scholars	Increasing accessibility and diversity of ecological restoration field' joined their summer symposium		
Community volunteer beekeepers	Supported their plans for beekeeping and education at McNeil Island Stewardship program		
Detention facility at Joint Base Lewis- McChord	Sharing resources and guidance for their beekeeping education program		
Professor of Landscape Architecture, University of WA	Therapeutic Master Plan Studio class studied women's prison		
Restoration Ecology class, University of WA	Presentation to restoration ecology class; potential for partnership development		

Table 30. Significant contacts in Washin	gton State, SPP-Evergreen, EY19	9. (see Appendix 3 for abbreviations)

## SPP Nationally and Internationally

SPP is recognized by other countries, states, and counties for leadership in environmental education and nature programs in prisons. Interest and involvement in SPP-model programs continues to grow. New inquiries from other states and countries come regularly. Ongoing relationships and learning exchanges are flourishing. While the "SPP Network" is less formal than in years past, the number and significance of contacts continues to expand.

In FY19, we provided information and/or shared resources with at least 50



Kaff Zanjira partners build an eco-constructed toilet; the eco-rehabilitation program provides holistic nature-based skills for incarcerated and released prisoners. Photo from <u>https://www.facebook.com/kaffzanjira/</u>

organizations and individuals. The table below provides a summary, and Figure 3 on the following page illustrates national interest in/prevalence of nature, science, and environmental education programs in corrections facilities. National interest in SPP-model programming is also summarized in Figure 3, following the table.

New and ongoing contacts in FY19: Title/profession,	Interest in SPP	State	Country (if not
organization			USA)
DOC Environmentalist, Alabama DOC	Learning about Roots of Success	Alabama	
Assistant Director, University Sustainability Practices, Arizona State University	SPP as a reference for a Sustainable Forest Initiative grant, to operate a nursery.	Arizona	
Landscape Architecture Master's students, UC Hastings	Background for a thesis project, juvenile detention center in San Mateo County	California	
Institute of Environment and Sustainability's Corporate Partners Program (CPP)	engages businesses on the topic of sustainability	California	
Undergraduate Student, UC Berkeley	Looking for information on prison gardens and farms to include in their thesis	California	
Defy Ventures	Sharing organizational awareness; invitation to visit their program	California	
Undergraduate Student, Colorado State University in Fort Collins	Provided interview on sustainability within prisons and social impacts	Colorado	
Wildlife biologist and volunteer at the women's prison in Denver	Wants to be involved in more CO programs	Colorado	
Colorado Department of Corrections' Greening of Government Leadership	Unable to create programming at this time; hope to in the future	Colorado	
Associate Research Professor, Institute for Human-Animal Connection, U of Denver	Studying impacts of pet programs in prisons; supplied funding for Phase 2	Colorado	
Florida Department of Corrections	Astrobiology in Prisons Program; environmental and science lectures	Florida	
Reentry Services Division, Georgia Dept of Community Supervision	Improving existing beekeeping programs	Georgia	
Catalyst Consulting	Creating SPP-Hawaii	Hawaii	
Community & Mentor Engagement, Indiana Department of Correction	Interested in sustainability programs in Indiana correctional facilities.	Indiana	
Occupational Therapy student	Studying SPP programs	Indiana	
Student at Earlham College	Case study for senior thesis	Indiana	
SPC in US Army	Trying to start Master gardeners program in Fort Leavenworth at Mid-West Regional Correctional Facility	Kansas	
Green Prisons	Sharing resources and mutual recognition	Kentucky	
Mental Health Therapist and Instructor, University of Louisiana at Lafayette	Looking into starting a beekeeping program in one of their local prisons	Louisiana	
Conference coordinator, Boston College	NSF funded conference at Yale, "Social and ecological infrastructure for recidivism reduction."	Massachusetts	

 Table 31. National and International contacts, SPP-Evergreen, FY19. (see <u>Appendix 3</u> for abbreviations)

Prison educator and beekeeper	Developing and implementing bee programs in MA prisons and jails	Massachusetts	
Associate Certified Entomologist, Central Michigan University	Interested in starting a similar program in Michigan	Michigan	
University of Utah, all team members	Nature imagery in prisons	national	
Education and Communications Lead, NASA Astrobiology Program	Program evaluation for astrobiology lectures nationally	national	
Writer and Documentary Filmmaker	Nature imagery nationwide	national	
Plant Conservation Program Specialists, Bureau of Land Management, NM Office	Information about conservation nurseries in prisons	New Mexico	
New Mexico Community Foundation	Start prison garden programs to grow for prison kitchens and save resources.	New Mexico	
Student, St. Lawrence University	Studying SPP programs	New York	
Energy Conservation & Sustainability Administrator, Ohio Department of Rehabilitation and Correction	Astrobiology lectures, Roots of Success and sustainability program best practices	Ohio	
Lettuce Grow - Operations Coordinator, Growing Gardens	Wants to start a network of individuals and org's who work with gardens in prisons.	Oregon	
Seed to Supper, Oregon Food Bank	Adapting course for in-prison use	Oregon	
Multiple staff members at Institute for Applied Ecology	SPP program certifications and curriculum development	Oregon	
Sustainability Programs Manager, Oregon Department of Corrections	SPP-Oregon	Oregon	
Local beekeeper from Philadelphia PA	Consult on how to get prison administrators on board with a prison bee program.	Pennsylvania	
Grad student, La Salle University	Capstone interview	Pennsylvania	
PA Department of Conservation and Natural Resources	Offering arboriculture education and training to incarcerated students	Pennsylvania	
State jail, Houston	Planning gardening program to support healthy eating	Texas	
Officer, Michael Unit, Texas Dept of Criminal Justice	Reviewing and publicizing aquaponics program and protocols, support for creating national herbs behind bars contest and presenting to national Aquaponics Association; connection to national partners	Texas	
Windham School District	Agricultural programs and education in corrections	Texas	
Alliance for Higher Education in Prison	Shared interests	Utah	
PhD student, Monash University	Interviewing formerly incarcerated SPP partners		Australia
SPP-Tasmania, Churchill Fellowship Award 2018	Awardee completed reporting; expanding programs	Tasmania	Australia
Administrative Assistant, Stony Mountain Institution, Correctional Service of Canada	Interested in started a bee program	Manitoba	Canada

Professor, Environmental Administration Program, Santo Tomas University	Sustainability indicators	Bogota	Columbia
Corrections professional and academic	Self-funded to visit/work in SPP programs for 3 weeks Sept - October	Paris	France
Kaff Zanjira https://www.facebook.com/kaffz anjira <b>/</b>	Proposing a GreenPals written correspondence between SPP incarcerated participants and sustainability professionals supporting Kaff Zanjira		India
Freelance journalist & author, consultant at Shimane Asahi Rehabilitation Program Ctr	Developing and improving restorative programs in Japan prison	International	Japan
Prison Officer, MBA Student at University of Cumbria	Research project on Sustainable Prisons involving multiple org's like Dissertations for Good (DFG) and the National Union of Students (NUS)	Cumbria	υк
Ecology Lead for the UK Ministry of Justice Estates Cluster	Sharing contacts, best practices, and success stories	England	UK



Figure 3. Prevalence of SPP-style programs nationwide.

# 12. Dissemination

#### Presentations

In FY19, SPP staff at Evergreen (SPP-<u>Evergreen</u>) 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 presentations representing the organization. Our summary of presentations for the year is in Table 32; this table excludes presentations made within established programs.

**Table 32.** SPP-Evergreen Presentations FY19; does *not* include in-program presentations (see <u>Appendix 3</u> for abbreviations)



*SPP Co-Director speaks to Evergreen leadership and butterfly program partners at MCCCW. Photo by Ricky Osborne.* 

Date	Presenter(s)	Title	Venue
7/9/18	Kelli Bush	Developing Career Pathways	Exec Leadership Team WSDOT
8/2/18	Joslyn Rose Trivett and Kelli Bush	SPP Overview and Conservation Programs	Doris Duke Conservation Scholars Program
8/7/18	Kelli Bush and Rob Herzog	SPP Brand and Role Clarity	Superintendents Meeting
8/7/18	Jacob Meyers	Butterflies	WCCW Bring Your Kids to Work Day
9/14/18	Erin	Education Initiative	Coalition Building for Justice Involved Students
9/14/18	Kelli Bush	SPP	Coalition Building for Justice Involved Students
9/18/18	Carl Elliott	EVM Location Tours	WDFW, CNLM
9/28/18	Jacob Meyers	Mulching	SCCC, Unit Gardeners
10/9/18	Kelli Bush and Carl Elliott	DOT Landscape Architects	DOT Headquarters
10/12/18	Keegan Curry	Women's Conference	MCCCW
10/17/18	Kelli Bush and former SPP technicians	SPP & WSDOT Partnership	WSDOT Environmental Conference
10/17/18	Alex James	Cultural Awareness Administration Meeting	wcc
11/16/18	Kelli Bush	SPP and Conservation	UW Restoration Ecology
11/29/18	Amanda Mintz	Thesis Presentation	The Evergreen State College
12/3/18	Kelli Bush, Brian B. and Carolina Landa	WSDOT, DOC and SPP Partnership	WSDOT Innovation and Partnership Conference
12/4/18	Keegan Curry and Butterfly Technicians	TCB Working Group Meeting	Natural Resource Conservation Building in Olympia. For the TCB Working Group
12/7/18	Bethany Shepler	SPP Overview	WSP

1/18/19	MCC Compost Program Technicians, Joslyn Rose Trivett and Erica Benoit	A Case Study for Successful, Combined Composting Methods of Post-Consumer Food Waste into Animal Feed and Soil Amendment	International Conference on Environmental, Social, Economic and Cultural Sustainability
2/26/19	Jessica Brown, Phillip Fischer and Teresa Lorenz	Engaging Incarcerated People in Wildlife Research and Recovery	Post. Wildlife Society
3/14/19	Daniel Winterbottom and students	Therapeutic Garden Designs for WCCW	WCCW Senior Leadership and SPP- Evergreen
4/3/19	Kelli Bush, Chuck Henry and Margaret Burke	Sustainability Behind Bars in WA State	BioCycle West Coast 2019
4/4/19	Joslyn Rose Trivett	MES Opportunities with SPP	MES New Student Day
4/11/19	Graham Klag	Soil Structure Influencing Abundance and Density of Viola adunca	International Association of Landscape Ecologists, Ft. Collins, CO
4/16/19	Bethany Shepler	SPP Programs	Pathways to Reentry, SCCC
5/1/19	Bethany Shepler	SPP Programs	WCCW Reentry Fair
5/9/19	Kelli Bush, Carolina Landa, Keegan Curry, Allison Campbell, Marisa Pushee, Steve Sinclair and Beth Rietema	SPP Taylor's Checkerspot Program and SPP Relevance for Evergreen Students	Evergreen Leadership Visit to MCCCW
5/11/19	Jacob Meyers, Carly Rose and Carl Elliott	SPP Prairie and Butterfly Programs	Prairie Appreciation Day Tabling
5/15/19	Joslyn Rose Trivett and Bethany Shepler	Roots of Success Statewide, Impacts of Program on SPP	Roots of Success Graduation, WCC
5/16/19	Carl Elliott, Allison Campbell and Marisa Pushee	Mutual Benefits of Working with Another Community, SPP and Pandas	Rachel Carson Forum Tabling
6/4/19	Steve Sinclair	SPP	Western Board of Governors
6/13/19	Kelli Bush	SPP Overview for BOT	BOT Meeting, Evergreen

#### **SPP Tours**

SPP staff from Evergreen and WA Corrections staff at each facility regularly host visitors interested in SPP programs. A summary of tours reported for FY19 is in Table 33; we believe this greatly underrepresents tours conducted by WA Corrections staff.

Date	Location	Visitors	Program areas	
7/12/2018	AHCC	Ben Stuckart, Spokane City Council		
		Bobi Foster-Grahler, Program		
7/23/2018	AHCC	Chair/Member of the Faculty		
		Criminal Justice / Pierce College		
7/26/2018	MCCCW	Miranda Mellis and Erik Steinhoff	All SPP Programs	
7/27/2018		Mike Steenhout, DOC HQ Budget		
7/27/2018	AHCC	Director		

 Table 33. Tours of SPP programs, FY19 (see <u>Appendix 3</u> for abbreviations)

8/14/2018	Bonnie Becker	UW Faculty	PPPP at WCCW
9/18/2018	Field Sites	WDFW, CNLM	EVM
9/20/2018	SCCC	CCBLA & Gateways	Roots
10/17/2018	SCCC	Low Income Housing Institution (LIHI)	HUB / GHC / Correctional Industries
10/26/2018	WCCW	Kelli Bush, Keegan Curry	Butterflies
1/15/2019	SCCC	Oregon Visitors	Roots
2/11/2019	AHCC	WSU Students	
4/19/2019	АНСС	Joanna Carns, Governor Ombuds	Toured kitchen and met with Bonnie Scott regarding growing food in AHCC gardens to feed incarcerated individuals.
5/9/2019	MCCCW	Evergreen Leadership and More	SPP Taylor's Checkerspot Program and SPP Relevance for Evergreen Students
5/17/2019	CCCC	Pierce College	All areas
5/24/2019	сссс	Thurston County Prosecutors Office	Horticulture, Dogs, Hydroponics, Turtles
6/10/19	MCC	Raquel Pinderhughes	Roots of Success
6/11/2019-6/12/19	SCCC	Raquel and Howard Pinderhughes	Roots, Black Prisoners Caucus
6/14/2019	sccc	Families of Incarcerated Technicians	Conservation Nursery, Beekeeping, Wheelchairs and Bikes
July 2018-June 2019	WSP-SPL	250 groups	SPL and Green Zone programs

#### Academic Publications, Projects, and Internships

#### Science in Prisons

Fall 2018, SPP-Evergreen was invited to contribute a chapter to a full-length book to be titled *STEM Education in US Prisons* (STEM stands for Science Technology Engineering and Math; SUNY Press, co-edited by academics from Princeton, and Arizona State University; in print fall, 2020). The editors' particularly requested incorporation of incarcerated "voices"; thus, we took their call for writing and adapted it for distribution in WA prisons, with a focus on "science in prison."

WA Corrections staff were very supportive of the effort and helped Evergreen steward the offer as well as the resulting writing process and submissions. Forty-four incarcerated writers from eight prisons submitted writing describing their experiences learning about and practicing science in prisons. SPP-Evergreen combined short and long excerpts into a narrative. SPP co-directors joined with WDFW program partner Mary Linders to introduce the compilation. The resulting piece is expected in print fall 2020.

#### **Academic Papers**

In FY19, we co-authored a paper describing results of the Astrobiology for the Incarcerated programming in WA, Ohio, and Florida. Additional details provided in the <u>Evaluation</u> chapter.

#### Internships

Kelli Bush supported two internships with an Evergreen Master of Environmental Studies student:

- Allison Campbell; Winter 2019; Butterfly Program Pre-Season Training and Program Expansion Support
- Allison Campbell; Spring 2019; Butterfly Program Professional Development and Communication Resources

#### **Graduate Student Theses and Capstones**

During FY19, SPP-Evergreen supported two Master of Environmental Studies graduate students in academic work to satisfy their degree:

- Keegan Curry's thesis analyzing 10 years of MCCCW and Oregon Zoo Taylor's checkerspot butterfly data.
- Bethany Shepler's thesis on environmental attitudes in the logging industry. Advisors at SCCC played a foundational role in developing the project.

See <u>Student Theses</u> for further details.

SPP-Evergreen provided informal support to numerous additional students, some of whom are described in the <u>Network</u> section.



Keegan Curry demonstrates the amount of butterfly data available for study; his arms show the expanse of binders that hold those data. Photo by Joslyn Rose Trivett.

#### Media Coverage

In FY19, SPP was featured in more than 39 stories from local, regional, and international media outlets. The table below includes all of the pieces SPP-Evergreen staff tracked during FY19. Links for each of the pieces are available on SPP's website in our press <u>archive</u>.

Date	Paper/Source	Author	Title
7/18/2018	KXLY Spokane	Caroline Flynn	Prison program pairs dogs with offenders
8/1/2018	Food Tank	Edward Brunicardi	20 Organizations Planting the Seeds for Food Justice in Prisons
8/4/2018	Spokesman- Review	Jonathan Glover	Inmates are training dogs at Airway Heights prison and helping themselves along the way
8/27/2018	Oregon Zoo		Zoo wraps up another successful butterfly season
8/29/2018	Forks Forum	David Hahn	Inmates and others help create salmon habitat
9/5/2018	Idaho Department of Corrections	LeeAnn Cochems	SBWCC helps restore sage grouse habitat
9/5/2018	Seattle Times	Bethany Jean Clement	GRACE Garden Project gives inmates a chance to grow
9/17/2018	Thurston Talk.com	Kristina Lotz	Mission Non-Profit Spotlight: Olympia Beekeepers Association
10/1/2018	Correctional Industries Newsletter		Honey Bees Thrive on McNeil Island
10/8/2018	corrections.com	Zachary Fletcher	Reducing Waste Behind Bars

#### Table 34. SPP Media FY19

Sustainability in Prisons Project (SPP): Fiscal Year 2019 Annual Report

10/14/2018	Idaho Press		Inmates help restore habitat through sagebrush	
10/11/2010			planting program	
11/9/2018	The Argus Observer	Larry Meyer	Rehab for public lands	
11/11/2018	CBS 19	Sasha Wilson	EXCLUSIVE: ETX prison unit changes lives, gains nation attention	
11/21/2018	King 5 News		Washington prison program gives neglected dogs second chance	
11/24/2018	The Tribute India	Upneet Lalli	Let prison walls be permeable to outside world	
11/30/2018	DOC News Release	Tim Kelly	Constructing a Solid Foundation	
12/1/2018	Ecology e-news	Alex James and Keegan Curry	Restoring Hope and Habitat: Prison-based collaborations for ecological conservation in the USA	
1/1/2019	UW Magazine	Catherine Arnold	Forest ecologist Nalini Nadkarni keeps nature in touch	
1/2/2019	Medium - Governor Jay Inslee	WA Corrections	Changing the world from behind bars	
1/4/2019	DOC News Release	Rachel Freiderich	Incarcerated Men Build Toys for Local Charities	
1/10/2019	Belfair Herald	Dana Kampa	Inmates set record with rare butterflies	
1/18/2019	Seattle Dog Spot		Prison Pet Partnership in Gig Harbor Expands Service Dog Training Program	
2/1/2019	Thurston Talk.com	Holly Reed	Evergreen Students Give Back to their Communities Throughout the Year	
3/21/2019	Forks Forum	Christi Baron	An amazing weekend and other news	
3/26/2019	Thurston Talk.com	Holly Reed	The Butterfly Effect: Evergreen Grad Student Explains the Ripples of Species Recovery	
3/29/2019	Oregon Zoo		With inmates' help, rare NW butterfly is homeward bound	
3/29/2019	Fox 12 Oregon		Coffee Creek inmates help raise hundreds of endangered butterflies	
4/1/2019	WASBA Newsletter	Joslyn Rose Trivett and Ellen Miller	Beekeeping is Freedom	
4/18/2019	KHQ-Q6	Stephanie Stevenson	Program lets inmates train therapy dogs in Spokane	
4/19/2019	DOC News Release	Rachel Freiderich	Volunteering Together	
4/24/2019	KTVN-2	John Potter	Saving Nevada's Sage-Grouse, with Inmate Volunteers	
5/8/2019	Lake County Examiner	S. Garrett Shaw	Warner Creek AICs reap what they 'sow'	
5/9/2019	Nisqually Valley News	Daniel Warn	Endangered Butterflies Rebound in South Sound Prairies	
5/9/2019	Atlas Obscura	Sabrina Imbler	A Butterfly Conservation Lab Takes Flight in a Women's Prison	
5/13/2019	International Network for Seed- Based Restoration	Stacy Moore	Restoring Habitat and Hope	
5/24/19	Bitterroot	Jake Bullinger	Conservation programs	
6/1/2019	Ecology e-news	Marisa Pushee	Returning Home	

6/6/2019	Medium - Governor Jay Inslee	WA Corrections	<page-header><text><text><section-header><text><text><text><text><text><text></text></text></text></text></text></text></section-header></text></text></page-header>
6/9/2019	NHK World-Japan News		The Japanese garden behind a wall
6/19/2019	DOC News Release	Rachel Freiderich	The Buzz on McNeil Island

#### Outreach

#### In-Prison

Most of SPP-Evergreen's printed outreach are intended for in-prison viewing and distribution. In FY19, we produced and provided a wide range of outreach and education materials for several prisons, including:

- Beekeeping posters for CBCC
- Roots of Success flyers for WCCW
- SPP Welcome sign for WCC (not yet installed)
- Nature imagery flyer for MCC-SOU
- SPP highlights slides for SCCC sustainability channel (68 slides of content!)

#### What is an endangered species?

A species of animal or plant that is seriously at risk of extinction (dying out completely).

Some of Washington State's endangered species:



**Roots of Success:** Which program has the most students graduate?

Stafford Creek Corrections Center: **369 graduates** from July 2013 – Dec 2018!



A few SPP highlights slides created for SCCC...and any other prison that wants them! Sustainability in Prisons Project (SPP): Fiscal Year 2019 Annual Report

#### Online

This year, updates and additions to SPP's website (<u>http://sustainabilityinprisons.org</u>) included:

- 43 posts <a href="http://sustainabilityinprisons.org/blog-galleries/blog/">http://sustainabilityinprisons.org/blog-galleries/blog/</a>
- Individual program pages for all 12 prisons in Washington, each including blog lists, photos, and highlights; see: http://sustainabilityinprisons.org/spp-programs-in-wa/
- Improved homepage http://sustainabilityinprisons.org/
- Improved curation of content by incarcerated individuals (previously called "inmate voices") • http://sustainabilityinprisons.org/about/incarcerated-partners/

SPP's main outlets for social media had been Facebook (facebook.com/sustainabilityinprisons/) and Twitter (twitter.com/SPP\_WA). In FY19 SPP posted to Instagram (instagram.com/sustainabilityinprisons/) with more frequency well.

On Facebook, our Page Likes jumped over 2,000 going from 1,925 to 2,026. We made 135 posts on Facebook last year; the most popular posts are summarized below.

Honeybees at WCCWSPP-EvergreenWolf Haven presents at SPP's Workshop SeriesSPP-EvergreenCoffee creek inmates raise hundreds of endangered butterfliesRepostWestern pond turtle release by former technician Bill AnglemyerSPP-EvergreenTiny homes being built at CCCC are helping the homelessness communityWA CorrectionsGardens at SCCC donate produce to local pantries through Coastal HarvestSPP-EvergreenJaci Gadneberger presents on WA DOC dog programsSPP-EvergreenUndergrad at Duke University writes about SPP and incarcerationSPP-EvergreenTexas prison growing tons of greens insideRepostJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of Success class in 4 upage1SPP-Evergreen	2,700 2,600 2,500 2,000 1,800 1,500 1,300 1,000	82         128         187         118         237         92         46	August 14, 2018 November 27, 2018 April 2, 2019 June 28, 2019 December 5, 2018 August 30, 2018 April 25, 2019
SeriesRepostCoffee creek inmates raise hundreds of endangered butterfliesRepostWestern pond turtle release by former technician Bill AnglemyerSPP-EvergreenTiny homes being built at CCCC are helping the homelessness communityWA CorrectionsGardens at SCCC donate produce to local pantries through Coastal HarvestSPP-EvergreenJaci Gadneberger presents on WA DOC dog programsSPP-EvergreenUndergrad at Duke University writes about SPP and incarcerationSPP-EvergreenBeekeepers at AHCC are an inspiration risideSPP-EvergreenJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	2,500 2,000 1,800 1,500 1,300	187         118         237         92	April 2, 2019 June 28, 2019 December 5, 2018 August 30, 2018
endangered butterfliesSPP-EvergreenWestern pond turtle release by former technician Bill AnglemyerSPP-EvergreenTiny homes being built at CCCC are helping the homelessness communityWA CorrectionsGardens at SCCC donate produce to local pantries through Coastal HarvestSPP-EvergreenJaci Gadneberger presents on WA DOC dog programsSPP-EvergreenUndergrad at Duke University writes about SPP and incarcerationSPP-EvergreenBeekeepers at AHCC are an inspirationSPP-EvergreenTexas prison growing tons of greens insideRepostJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	2,000 1,800 1,500 1,300	118 <b>237</b> 92	June 28, 2019 December 5, 2018 August 30, 2018
technician Bill AnglemyerWA CorrectionsTiny homes being built at CCCC are helping the homelessness communityWA CorrectionsGardens at SCCC donate produce to local pantries through Coastal HarvestSPP-EvergreenJaci Gadneberger presents on WA DOC dog programsSPP-EvergreenUndergrad at Duke University writes about SPP and incarcerationSPP-EvergreenBeekeepers at AHCC are an inspiration rexas prison growing tons of greens insideSPP-EvergreenJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	1,800 1,500 1,300	<b>237</b> 92	December 5, 2018 August 30, 2018
Tiny homes being built at CCCC are helping the homelessness communityWA CorrectionsGardens at SCCC donate produce to local pantries through Coastal HarvestSPP-EvergreenJaci Gadneberger presents on WA DOC dog programsSPP-EvergreenUndergrad at Duke University writes about SPP and incarcerationSPP-EvergreenBeekeepers at AHCC are an inspiration insideSPP-EvergreenJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	1,500 1,300	92	August 30, 2018
pantries through Coastal HarvestJaci Gadneberger presents on WA DOCSPP-Evergreendog programsSPP-Evergreenundergrad at Duke University writesSPP-Evergreenabout SPP and incarcerationSPP-EvergreenBeekeepers at AHCC are an inspirationSPP-EvergreenTexas prison growing tons of greensRepostinsideImage: SPP-EvergreenJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	1,300		
dog programsSPP-EvergreenUndergrad at Duke University writes about SPP and incarcerationSPP-EvergreenBeekeepers at AHCC are an inspirationSPP-EvergreenTexas prison growing tons of greens insideRepostJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen		46	April 25, 2019
about SPP and incarcerationSPP-EvergreenBeekeepers at AHCC are an inspirationSPP-EvergreenTexas prison growing tons of greens insideRepostJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	1 000		
Texas prison growing tons of greens insideRepostJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	1,000	156	June 10, 2019
insideRepostJames Jackson recognized for helping others after incarcerationRepostNew innovative partnership with WA Department of TransportationSPP-EvergreenMCCCW graduates first Roots of SuccessSPP-Evergreen	950	58	April 12, 2019
others after incarcerationSPP-EvergreenNew innovative partnership with WASPP-EvergreenDepartment of TransportationMCCCW graduates first Roots of SuccessSPP-Evergreen	930	30	November 13, 2018
Department of TransportationMCCCW graduates first Roots of SuccessSPP-Evergreen	920	47	April 26, 2019
	870	118	December 18, 2018
class in 4 years!	860	80	February 26, 2019
Yes to reducing plastic! Repost	860	18	December 10, 2018
New Taylor's Checkerspot butterfly SPP-Evergreen greenhouse taking shape at MCCCW	840	89	November 6, 2018
Two former SPP technicians speak at SPP-Evergreen WSDOT Environmental Services Conference	820	96	November 2, 2018
PBS documents how incarcerate people Repost remain vulnerable to climate change	820	32	January 7, 2019

Table 35. Most popular Facebook posts FY19.

CRCC's Ridge Dogs program	Repost	820	47	November 28, 2018
Learning about gentleness from	SPP-Evergreen	810	40	April 23, 2019
honeybees				
Susan Christopher reflects on her	SPP-Evergreen	710	60	November 13, 2018
experience raising butterflies in prison				

On Twitter, we increased our followers by 58 in FY19, and in the last five months of FY19 had 1,275 people visit our page. More highlights:

- SPP tweeted 136 times and made over 171,000 impressions almost double the number from FY18 (91,000 impressions)
- We gained an additional 58 followers
- 55 tweets made over 1,000 impressions
- 17 tweets made over 2,000 impression
- 6 tweets made over 5,000 impressions
- 1 tweet (highlighted below) made over 10,000 impressions!
- Our tweets that attracted the most attention:

#### **Table 36.** Most popular Twitter posts FY19.

Subject	# of Impressions	# of Interactions/	Date
		Engagements	
SPP loves Evergreen MES graduates!	13,100	56	June 18, 2019
Wolf Haven presents at Workshop	9,800	44	November 27, 2018
Series			
New and innovative partnership with	8,400	23	December 18, 2018
WSDOT			
Astrobiology for the incarcerated	6,900	18	August 28, 2018
SCCC partners with Coastal Harvest to	6,200	8	August 30, 2018
donate produce			
So much beekeeping in WA	5,800	19	November 5, 2018
Corrections!			
SPP presents on the value of	4,500	20	December 17, 2018
education at Workshop Series			
Kitsap County's GRACE Project helps	4,400	38	September 17, 2018
transform lives			

On Instagram, after going more than a year without posting, we got our "Insta groove back"! In FY19, we posted 56 times (out of 67 posts on our page). Those 56 posts generated a total of **1,947 likes**.

Subject	# of Likes	Date
Nature drawing and Sagebrush in	59	March 5, 2019
Prisons logo by incarcerated		
technician, Lawrence Jenkins		
A Taylor's Checkerspot butterfly at	56	November 15, 2018
MCCCW		
Beekeepers at McNeil Island	54	December 6, 2018
Flowers at SCCC	53	August 28, 2018
Sowing prairie plants at SCCC	49	February 7, 2019
Black-backed woodpecker	47	December 18, 2018
MCCCW beekeeping program	47	December 10, 2018

#### Table 37. Most liked Instagram posts FY19.



The three most popular images on Instagram this year.

#### Awards

For FY19, three prisons were recognized for excellence; these awards are shown in the table below.

#### Table 38. Awards FY19.

Date	Awarding body	Recipient: person and/or program	Award Name
August 2018	WA Department of Ecology	CCCC Waste Water Treatment	2018 Outstanding Wastewater
		Plant	Treatment Plant Award
August 2018	WA Department of Ecology	OCC Waste Water Treatment	2018 Outstanding Wastewater
		Plant	Treatment Plant Award
August 2018	WA Department of Ecology	CBCC Waste Water Treatment	2018 Outstanding Wastewater
		Plant	Treatment Plant Award



OCC's award-winning waste water treatment plant. Photo by Bethany Shepler.

## Appendix 1. SPP Programs in Washington State Prisons FY19

We reported on 212 SPP programs in Washington State's 12 prisons this year; see Table 39, 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 <u>http://sustainabilityinprisons.org/spp-programs-in-wa/</u>.

Table 39. SPP Programs reported by all 12 WA prisons.

#### Airway Heights Corrections Center (AHCC)

Roots of Success, environmental course Beekeeping Gardens: Main Gardens: Minimum **Diversity Garden** Flower gardens Pollinator forage and habitat Sustainable Business Solutions Large-scale composting Waste sorting & recycling Worm farm: Minimum SPL: Quilting **Computers 4 Kids** Pawsitive dog training – prison program **Firewood donation** Nature Imagery

#### **Clallam Bay Corrections Center (CBCC)**

Roots of Success, environmental course Beekeeping Vegetable gardens Flower gardens Ozette potato program Waste sorting & recycling Dog training and adoption Cat program Water catchment Waste water treatment

#### Cedar Creek Corrections Center (CCCC)

Beekeeping: CCCC Beekeeping: McNeil Island Western pond turtle care Woodpecker nest predation study Aquaponics Vegetable gardens Flower gardens Waste sorting & recycling Large-scale composting Training dogs for veterans Community College Horticulture Construction: tiny homes Water use reduction and catchment Waste water treatment Forestry Community work Special Events

#### Coyote Ridge Corrections Center (CRCC)

Roots of Success, environmental course Beekeeping Plant and Animal Habitat Land restoration Heritage and bee gardens Garden: Main, maintenance area Waste sorting & recycling Toys for Tots Teddy bears from reclaimed materials Ridge Dogs Service dogs for veterans Gardens: Minimum Pollinator garden: Minimum Composting: Minimum

#### Larch Corrections Center (LCC)

Roots of Success, environmental course Western pond turtles care Beekeeping Plantain, food source for Taylor's checkerspot butterflies House plants Bird feeders Wood craft donations Larch Dog Adoption Program Larch Cat Adoption Program Waste reduction Waste sorting & recycling Large-scale composting Waste Water Treatment Forestry Community work

#### Mission Creek Corrections Center for Women (MCCCW)

Roots of Success <u>Sustainability in Prisons Project</u> (SPP): Fiscal Year 2019 Annual Report Taylor's checkerspot butterfly program Beekeeping Environmental careers workshops GRACE (Gardening for Restoration and Conservation Education) Project Vegetable gardens Flower gardens Conservation crews Small-scale composting Waste sorting & recycling Waste sorting & recycling Water use reduction & catchment Pawsitive Prison Project Plant and animal habitat House plants Special Events

#### Monroe Correctional Complex (MCC)

#### WSRU

Composting with Bugs: Worm Farm, Black Soldier Flies, Bokashi City of Monroe public flowers Gardening curriculum development SPL Roots of Success SPL Bicycles from Heaven SPL Wheelchair program SPL Wood Craft 4 Charity House plants Bird habitat Waste sorting & recycling Waste Water Treatment Certification Flower gardens Vegetable gardens SOU Beekeeping Vegetable gardens Nature Imagery Cat program TRU Beekeeping Gardens Community Aide Coalition: quilting, crochet, textile arts Dog training and adoption

#### Olympic Corrections Center (OCC)

Community College Horticulture Gardens Pollinator-friendly plantings Flower gardens, boxes, baskets Water features Waste sorting & recycling Large-scale composting Waste Water Treatment Water catchment Solar power Wood shop Dog training and adoption Green Building Firewood Community Crew Forestry

#### Stafford Creek Corrections Center (SCCC)

Roots of Success, environmental course **Environmental Workshop Series Special Events** Beekeeping Prairie Conservation Nursery **Emergent Vegetation Mats** Gardening curriculum development Gardens and greenhouses Lifer Garden Food Bank fundraisers **Pollinator plantings** Flower gardens, boxes, baskets Fruit orchard Bird houses Sustainability channel Large-scale composting Waste sorting & recycling Water catchment **Bicycle Repair** Wheelchair Repair Freedom Tails Service dogs for veterans Toy Time

#### Washington Corrections Center (WCC)

Roots of Success, environmental course Environmental Workshop Series Special Events Prairie Conservation Nursery Beekeeping, "Intensive Bee Management Unit" Gardens and greenhouses Flower gardens Horticulture

Sustainability in Prisons Project (SPP): Fiscal Year 2019 Annual Report

Potted plants and plant starts Construction: bus stops, tiny homes, Neighborhood Pantries, bird houses Nature Imagery House plants Large-scale composting Waste sorting & recycling Shoe and clothing repurposing

#### Washington Corrections Center for Women (WCCW)

Roots of Success, environmental course Environmental Workshop Series Prairie Conservation Nursery Gardens and greenhouses Beekeeping Community College Horticulture Mother Earth Farm, offsite farm crew Prison Pet Partnership Sisters of Charity: quilts, fabric crafts, wildlife rescue Waste sorting & recycling Large-scale composting Electric vehicles Lighting upgrades

#### Washington State Penitentiary (WSP)

Monarch butterfly program, restoring Pacific Northwest populations Institutional Sustainability Garden Waste sorting & recycling Composting, main **Electrical upgrades** Water conservation **BAR Units** Kitten program Roots of Success, environmental course **Crochet Program** Mental Health Unit Horticulture MSU Beekeeping Sheep conservation program Flower gardens Rental garden boxes Dog Program Community crew South Complex Rental garden boxes SPL

SPL: Learning Center SPL: Wood Shop SPL: Wood Carving SPL: Furniture Repair SPL: Sign shop SPL: Aquaculture and Aquaponics SPL: Worm Farm SPL: Art program SPL: Parole-a-bear SPL: Quilting SPL: Creative projects SPL: Bottle recycling SPL: Water treatment systems SPL: Metal ship SPL: Special projects SPL: SPL sorting and recycling SPL: Indoor plants SPL: Roots of Success, environmental course SPL: Green Zone SPL: Green Zone composting

#### 212 programs reported by 12 prisons



Bee program liaison Jonathan Fisher talks about the bee hives housed at WSP. Photo by Bethany Shepler.

Sustainability in Prisons Project (SPP): Fiscal Year 2019 Annual Report

## Appendix 2. SPP Partners and Allies in Washington State Prisons

Complementing the efforts of founding partners, WA Corrections, and Evergreen, program partners contributed to almost every SPP program. Most programs would not be possible without their input, enthusiasm, and resources. In FY19, we have 198 known (reported) partners. Considering that WSP's Sustainable Practices Lab has donated program creations to more than 400 charitable organizations, we know the actual number is far greater!

Adam County Pet Rescue		
ARC of Tri-Cities		
Benton Franklin Humane Society		
Black Prisoners Caucus		
Blue Mountain Action Council		
Blue Mountain Humane Society		
Brian Fisher Memorial		
Brigadoon Service Dogs		
Calbag Metals		
<u>Calm Waters</u>		
Canyon Creek Cabinet Company		
CASA		
Catholic Charities of Eastern Washington		
Center for Natural Lands Management		
Central Kitsap Food Bank		
Centralia College		
Cherish our Children		
Christian Aid Center		
Christian Charities Mission		
Christmas for Kids		
City of College Place		
City of Dayton		
City of Monroe		
City of Prescott		
City of Sultan		
City of Waitsburg		
City of Walla Walla		
Clark County Beekeeping Association		
Coastal Community Action Senior Center		
Coastal Harvest		
Community Beekeepers		
Community Youth Services		
Correctional Industries		
Diamonds in the Ruff		
Dolly Haakenson		
Domestic Violence Services of Snohomish County		

Table 40. SPP Partners and Allies (Partnering with WA Corrections, Evergreen, or both) FY19

Doris Duke Conservation Scholars		
Emergency Food Network		
Everett Police Department		
Evergreen Hospice		
Evergreen Education Coalition for Justice Involved Students		
Fallen Outdoors		
Family Promise of Grays Harbor		
Farm to School		
FareStart, Manager for culinary program		
Forks Chamber of Commerce		
Forks Gamers Group		
Forks Lions Club		
Forks Soroptimists		
Franklin County Sheriff's Office		
Giving Tree		
Great Peninsula Conservancy		
Green Prisons		
GRACE Project		
Habitat for Humanity		
Harbor Association of Volunteers for Animals (HAVA)		
Hard Headz		
Harvest Now		
Holy Rosary Church		
Hood Canal School District		
Hope Crew		
Humane Society for Southwest Washington		
I-CON Systems, Inc.		
Institute for Applied Ecology		
Institute for Human-Animal Connection		
Interfaith Family Shelter		
Jefferson Land Trust		
Joint Base Lewis-McChord		
Justice Involved Students Group, Evergreen		
K & S Recycling		
Kaff Zanjira		
Kalaloch Lodge		
Kitsap Conservation District		
Kitsap Humane Society		
Kiwanis Hoodsport		
Lake Quinault Fire Department		
Lamb Weston		
Lettuce Grow		
Lions Club		
Little Bit Therapeutic Riding Center Little Eorthe Farm		
Littlerock Elementary School		

Low Income Housing Institute Marysville Police Department Master Composters Master Gardeners Mid Columbia Beekeepers Midlers Homestead Monroe Community Senior Center Monroe Police Department Mother Earth Farm NASA Astrobiology Program Nature Imagery in Prisons Project North Mason Food Bank North Olympic Peninsula Beekeepers Association Northwest District Beekeepers Association		
Master Composters         Master Gardeners         Mid Columbia Beekeepers         Millers Homestead         Monroe Community Senior Center         Monroe Police Department         Mother Earth Farm         NASA Astrobiology Program         Nature Imagery in Prisons Project         North Mason Food Bank         North Olympic Peninsula Beekeepers Association		
Master Gardeners         Mid Columbia Beekeepers         Millers Homestead         Monroe Community Senior Center         Monroe Police Department         Mother Earth Farm         NASA Astrobiology Program         Nature Imagery in Prisons Project         North Mason Food Bank         North Olympic Peninsula Beekeepers Association		
Mid Columbia Beekeepers         Millers Homestead         Monroe Community Senior Center         Monroe Police Department         Mother Earth Farm         NASA Astrobiology Program         Nature Imagery in Prisons Project         North Mason Food Bank         North Olympic Peninsula Beekeepers Association		
Millers Homestead         Monroe Community Senior Center         Monroe Police Department         Mother Earth Farm         NASA Astrobiology Program         Nature Imagery in Prisons Project         North Mason Food Bank         North Olympic Peninsula Beekeepers Association		
Monroe Community Senior Center Monroe Police Department Mother Earth Farm NASA Astrobiology Program Nature Imagery in Prisons Project North Mason Food Bank North Olympic Peninsula Beekeepers Association		
Monroe Police Department Mother Earth Farm NASA Astrobiology Program Nature Imagery in Prisons Project North Mason Food Bank North Olympic Peninsula Beekeepers Association		
Mother Earth Farm         NASA Astrobiology Program         Nature Imagery in Prisons Project         North Mason Food Bank         North Olympic Peninsula Beekeepers Association		
NASA Astrobiology Program Nature Imagery in Prisons Project North Mason Food Bank North Olympic Peninsula Beekeepers Association		
Nature Imagery in Prisons Project North Mason Food Bank North Olympic Peninsula Beekeepers Association		
North Mason Food Bank North Olympic Peninsula Beekeepers Association		
North Olympic Peninsula Beekeepers Association		
Northwest District Beekeepers Association		
Ohio Department of Rehabilitation and Corrections		
<u>Olycap</u>		
Olympia Beekeepers Association		
Olympic Anglers		
Olympic Peninsula Humane Society		
Oregon Food Bank		
Oregon Department of Corrections		
Oregon State University Extension Service		
Oregon Zoo		
Over the Rainbow Fabrics		
Pacific Rim Institute for Environmental Stewardship		
Paper People		
PAWS		
Peninsula College		
Pioneer United Methodist Church		
Port of Walla Walla		
PPL Electric Utilities		
Project 41		
Providence Hospital		
Purrfect Pals		
Quileute High School		
<u>Quileute Tribe</u>		
Quillayute Valley Scholarship Auction		
Quillayute Valley School District		
Rainbow Center		
Relay for Life		
Roots of Success		
Rotary First Harvest		
Salmon for Soldiers		
Sarge's Place for Homeless Vets		
School Districts—OSPI and DES		
Seattle Children's Hospital		

Second Harvest Food Bank		
See the Bees		
Set Free Christian Fellowship		
Shriners Hospital for Children		
SimpliHome Furniture LLC		
SNAP Spokane		
South Sound Prairies		
Snohomish County Boys & Girls' Club		
Snohomish County CTA		
Snohomish County Sheriff's Office		
Spokane Humane Society		
<u>SpokAnimal</u>		
SPP Tasmania		
Summit Assistance Dogs		
Sunshine and Rainbows Child Development Center		
Suquamish Tribe Fisheries.		
Swedish Hospital		
Symbiotic Cycles		
Tacoma Community College		
Teen Aid		
Texas Department of Criminal Justice		
The City Reach Food Bank		
The Saint's Pantry Food Bank		
The Shelton Community Kitchen		
Thurston County Food Bank		
Tilth Alliance		
Timber Museum		
Tri-Cities Toys for Tots		
U.S. Fish and Wildlife Service		
U.S. Forest Service		
Unidos por Puerto Rico		
Union Gospel Mission		
University Beyond Bars		
University of Utah		
University of Washington Ecosystem Science Division		
University of Washington, Composting and Waste Treatment Scientists		
University of Washington – Tacoma, Assistant Professor Criminology		
<u>Un-loop</u>		
Veterans Housing Project		
VOA Crosswalk Youth Shelter		
VOA Hope House		
WA Department of Enterprise Services		
Walla Walla County		
Walla Walla Fairgrounds		
Walla Walla Foundry		
Walla Walla Landfill		
Sustainability in Prisons Project (SPP): Eiscal Year 2019 Annual Report		

Walla Walla Police and Sheriff's Department
Walla Walla Veterans Administration
Washington Department of Ecology
Washington Department of Fish and Wildlife
Washington Department of Natural Resources
Washington State Beekeepers Association
Washington State Board of Community and Technical Colleges
Washington State Department of Transportation
Washington State University Department of Entomology
Waste Connections
Waste Management
Welfare for Animals Guild (WAG)
West Columbia Gorge Humane Society
West Plains Beekeepers Association
West Sound Beekeepers Association
Westlake Shelter
Westport Shipyard
Wheels for the World
Whidbey-Camano Land Trust
Wolf Haven International
Women and Children Rescue Mission
Women's Shelter of Monroe
Woodland Park Zoo
WSU Extension, Pierce County
YWCA
198 reported organizations + 100's more charities receiving donations



This team, including two previously incarcerated conservation technicians, presented at the WSDOT Environmental Conference in October 2018.

# **Appendix 3. Abbreviations**

Table 41. Common abbreviations found in FY19 Report	
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Prisons		
АНСС	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)	
MCC-SOU	Monroe Correctional Complex, Special Offender Unit	
MCC-TRU	Monroe Correctional Complex, Twin Rivers Unit	
MCC-WSR	Monroe Correctional Complex, Washington State Reformatory	
MCCCW	Mission Creek Corrections Center for Women, Belfair (Kitsap Peninsula)	
0CC	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	
WSP-MSU	Washington State Penitentiary, Minimum Security Unit	
WSP-BAR	Washington State Penitentiary, Baker Adams Rainier Unit	
Organizations	·	
АВКА	American Boarding Kennel Association	
CI	Correctional Industries	
CPD	Capital Planning & Development (WA Corrections)	
CNLM	Center for Natural Lands Management	
DNR	Department of Natural Resources	
DoD	Department of Defense	
Evergreen	The Evergreen State College, a public, four-year institution	
IAE	Institute for Applied Ecology	
JBLM	Joint Base Lewis-McChord	
NSF	National Science Foundation	
OR Zoo	Oregon Zoo	
RDA	Research & Data Analytics (WA Corrections)	
SPL	Sustainable Practices Lab	
SPP	Sustainability in Prisons Project	
USFWS	U.S. Fish and Wildlife Service	
WA Corrections	Washington State Department of Corrections	
WDFW	Washington Department of Fish and Wildlife	
WPZ	Woodland Park Zoo	
WSDOT	Washington State Department of Transportation	
WSIRB	Washington State Institutional Review Board	
Definitions		
	Maximum custody areas are also called IMUs (Intensive Management Unit)	
MAX	and segregation	

	Medium custody includes close custody, which has less freedom, and general	
MED	population.	
	Minimum custody areas are also called MSUs (Minimum Security Unit). WA	
	has three prisons (CCCC, LCC, and MCCCW) that are wholly MIN and house	
MIN	incarcerated individuals with four years or less remaining on their sentences.	



SPP Program Coordinator Anna Duron and Conservation Technician Josh Hieronymus talk about the aquaponics system for the EVM nursery. Photo by Shauna Bittle.

# SPP's Year in Photos, 2018-2019

**Gardening curriculum**: In response to years of demand, SPP partners are creating a widelyaccessible <u>gardening course for corrections</u> environments. This is a highly collaborative endeavor, engaging and incorporating the expertise of <u>Oregon Food Bank</u>, <u>Institute for Applied Ecology</u>, <u>University Beyond Bars</u>, and SPP partners from <u>Washington State Department of Corrections</u> (WA Corrections) and <u>the Evergreen State College</u> (SPP-Evergreen). Perhaps even more crucial, the course is co-authored and reviewed by incarcerated gardeners at <u>Stafford Creek Corrections Center</u>, <u>Monroe Correctional Complex</u>, and one—pictured to the right—at <u>Coyote Ridge Corrections Center</u>. Both photos on this page by <u>Ricky Osborne</u>.





**Call for writing in prison**: SPP was invited to write a chapter on science in prisons for publication in the first volume on the topic (expected fall 2020 from <u>SUNY Press</u>). With amazing support from corrections staff, we distributed a call for writing to SPP incarcerated participants and the response was excellent: forty-four incarcerated writers from eight prisons submitted work. They shared moving reflections on experiences and evolution as learners and practitioners of science. Two of the writers to be published are shown in the image to the left: Ashely McElhenie (orange hat) and Ambrosia Riche (blonde hair). An excerpt from Ambrosia:

"I thought nature had nothing to do with me, aside from the fact that I could look at the sunrise or walk through a forest. I didn't realize that humans are in fact a very large part of nature. I didn't realize nature and science was something so tangible."



Meeting the shifting strategies of regional restoration ecology projects, SPP's <u>prairie conservation</u> <u>nurseries</u> are producing more native seed. Participants in the nurseries at <u>Washington Corrections Center</u> and <u>Washington Corrections Center for Women</u> receive education an training to grow several species of native flowering plants; program teams have become exemplary seed collectors. Photo by Alex James.



This year the <u>Taylor's checkerspot butterfly program</u> hosted by <u>Mission Creek Corrections Center for</u> <u>Women</u> doubled in size. With funding from <u>U.S. Fish and Wildlife Service</u>, partners built a second, 12' x 28' greenhouse. The custom-designed lab has twice the capacity for breeding and raising federallyendangered Taylor's checkerspot butterflies; in spring 2019, the team broke all previous program records for number of checkerspots released onto Salish lowland prairies. Photo by Keegan Curry.



In the <u>sheep conservation program</u>'s second year, 9 Suffolk ewes birthed 18 lambs at <u>Washington State</u> <u>Penitentiary</u>. Program technicians provided general care and feeding for the entire sheep flock, treated the animals with vaccines, installed ear tags, assisted ewe mothers in the birthing process and cared for lambs. In this photo, an adult sheep eyes sheep husbandry expert (and photographer) Gerry Glenn.



Compost program co-founder Nick Hacheney successfully submitted a proposal to present at 2019's International Conference on Sustainability. SPP partners supported the technicians at Monroe Correctional Complex filming their virtual tour of the program and technicians describing its impacts; the resulting video and presentation were warmly received at the conference and by regional partners. Screen shot from the video; viewable at http://sustainabilityinprisons.org/stories/9431/



<u>Washington State Beekeepers Association</u> (WASBA) oversees nearly all beekeeping <u>education and</u> <u>certification</u> curriculum statewide. In 2018 and '19, new leadership revamped their curricula, administration, and website, with impressive results. SPP-Evergreen and WASBA formalized their partnership and commitment to prison beekeeping education. WASBA's educational lead Ellen Miller (pictured above), <u>West Plains Beekeepers Association</u>, and Millers Homestead also helped beekeepers at <u>Airway Heights</u> <u>Corrections Center</u> write the statewide manual for Journeymen beekeepers! Photo by Kay Heinrich.



In its second year, <u>McNeil Island Bee Program</u> continued to thrive and served as a model of partnership and collaboration. From April to October, WASBA-certified beekeepers from <u>Cedar Creek Corrections</u> <u>Center</u> join beekeeping experts and corrections staff to tend the hives and gain hands-on education. The shared enthusiasm and appreciation for this program is infectious! Photo by Rachel Friederich.



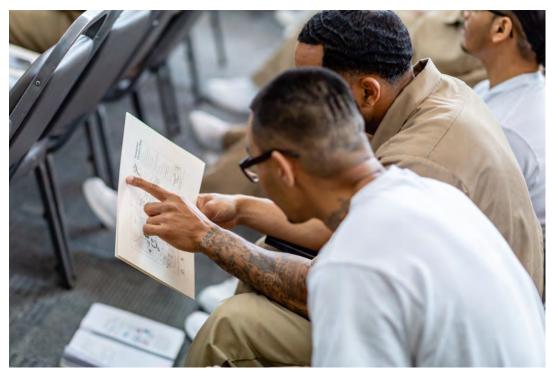
<u>WA State Department of Transportation</u> (WSDOT) and SPP have identified education, training, and outreach opportunities to support post-release employment for formerly incarcerated people. While several employment pathways appear promising, partners agreed to start with a focus on environmental careers. Toward this goal, WSDOT staff presented three workshops at both Cedar Creek and Mission Creek Corrections Centers. Photo of workshop attendees by Allison Campbell.



In September 2018, the new Evergreen Education Coalition for Justice Involved Students (EECJIS) met for the first time. With the shared goal of supporting justice involved students, the day-long summit united Evergreen faculty, staff, and students from <u>Tacoma</u> and Olympia campuses, along with Education Navigators, and corrections education leaders from WA Corrections, <u>WA Board of Community and Technical Colleges</u>, and more. The event was sponsored by SPP-Evergreen <u>donation</u> funds. Photo by Keegan Curry.



This year, <u>Evergreen Justice Involved Student Group</u> and SPP partners co-organized and presented a reentry symposium: the <u>Pathways to Reentry</u> event was hosted by Stafford Creek Corrections Center and attended by nearly a hundred incarcerated residents. We were joined by sixteen education and workforce development organizations, and the program was both inspiring and practical. Previously incarcerated and other partners shared guidance on how to attain post-secondary degrees and forge successful careers. Group photo by Ricky Osborne.



At the Pathways to Reentry Event and within ongoing SPP programs, increasing numbers of incarcerated students are considering options for higher education, both during incarceration and post-release. At the same time, more incarcerated individuals are pursuing opportunities to engage as students, mentors, and experts. The insight, knowledge, and leadership they offer improves programs and expands education capacity statewide. Photo by Ricky Osborne.