



THE SUSTAINABILITY IN PRISONS PROJECT (SPP)

Our mission is to bring science and nature into prisons. We conduct ecological research and conserve biodiversity by forging collaborations with scientists, inmates, prison staff, students, and community partners. Equally important, we help reduce the environmental, economic, and human costs of prisons by inspiring sustainable and compassionate practices.

OUR VISION

This union of ideas and activities—with people inside and outside prison walls—creates a collaborative, intellectually stimulating environment in which incarcerated men and women play key roles in conservation and advancing scientific knowledge. We encourage teamwork, mutual respect, and a stewardship ethic among individuals who otherwise have little or no access to nature or opportunities in science and sustainability. Our vision is to raise awareness for the scientific enterprise, save tax dollars and natural resources, and help incarcerated individuals rebuild their lives through education and opportunities to contribute.

OUR HISTORY

The Sustainability in Prisons Project is a partnership founded by Washington Department of Corrections (WDOC) and The Evergreen State College. The partnership grew out of WDOC's response to the Governor's directive to enhance the sustainability of its prisons, and Evergreen's dedication to interdisciplinary education and community service.

Pilot activities from 2002-2007 showed surprising successes and unexpected benefits. In July 2008, the partnership was formalized as the Sustainability in Prisons Project (SPP). For several years following, SPP focused on programming in four western Washington prisons, and brought together a growing number of program partners—governmental agencies, zoos, non-profits, and community organizations.

In 2012 SPP expanded and has become a multi-state, international effort. To support this effort, SPP has distilled the elements that best define our programming and disseminated these in multiple ways; we have provided new SPPs with our Essential Components, tips for success, tours of successful programs, and a handbook of protocols. SPP programs can be found in all twelve Washington State prisons, and also in Oregon, California, Ohio, Maryland, and Utah. The SPP Network is taking off!

AREAS OF PROGRAMMING

Conservation and Scientific Research

With guidance from collaborating scientists, we carry out ecological research and conservation programs involving inmates, college undergraduate and graduate students, and community partners. Incarcerated individuals raise endangered frogs and butterflies and propagate rare native prairie plants. With their contributions, we substantially increase the extent of restoration efforts.



Sustainable operations

We collaborate with corrections staff to develop cost-effective, environmentally-sound practices for operating prisons. At the same time, we engage inmates with direct responsibility for managing resources. Activities include recycling, composting, organic gardening, aquaponics, and water conservation. Purchasing practices have moved toward eliminating unneeded products and packaging and buying greener products.

Education

We connect inmates and corrections staff to the scientific and conservation community with guest lectures and workshops on sustainable practices, science, ecology, and environmentally conscious business. In addition, every SPP program involves an educational component, providing inmates and staff with detailed technical training and knowledge of related theories, planning, and intended outcomes.

Community contributions

Every program offers opportunities to contribute; we provide avenues for positive influences on the world outside prison walls. Programs such as bicycle and wheelchair restoration and pet training provide direct donations to nearby community members. Inmates acquire new skills and have an empowering experience of giving back to the outside community.

SYNERGISM AND BENEFITS

Responses to SPP have been extremely positive. Evergreen sees SPP as an opportunity for students and faculty to be involved with meaningful education, sustainability science, and cutting-edge conservation biology. Prison officials see it as a way to provide education, enhance social interactions, improve prison safety, and reduce operating costs. Conservation and community partners view it as a way to conduct restoration, research, and other community projects in cost-effective ways while at the same time giving inmates the chance to connect with nature and living things. SPP demonstrates that, given the opportunity, all sectors of society can benefit from education, participate in the scientific enterprise, and make positive contributions.

With every SPP program, we look to each participant for ideas on how to satisfy needs and objectives and find where these goals overlap. We only take on initiatives that include benefits to all partners: we believe that if everyone wins, then the programming itself will be sustainable.

Photos: Benj Drummond (front & 2nd from top), Rod Gilbert (top), Cyril Ruoso (bottom & middle), Shauna Bittle (2nd from bottom)

CONTACT US

Carri LeRoy, Ph.D.
SPP Co-Director
Member of the Faculty
The Evergreen State College
(360) 867-5483
Email: leroyc@evergreen.edu

Kelli Bush
SPP Program Manager
(360) 867-6863
Email: bushk@evergreen.edu





THE SUSTAINABILITY IN PRISONS PROJECT (SPP)

Our mission is to bring science and nature into prisons. We conduct ecological research and conserve biodiversity by forging collaborations with scientists, inmates, prison staff, students, and community partners. Equally important, we help reduce the environmental, economic, and human costs of prisons by inspiring sustainable and compassionate practices.

SUSTAINABILITY IN PRISONS PROJECT PROGRAMS

The Sustainability in Prisons Project has grown rapidly and now facilitates programming in all twelve Washington State prisons. SPP has also grown beyond Washington—with help from the National Science Foundation, we have launched eight other SPP teams across the country, and we have heard additional interest from around the world. In the midst of our evolution, the founding partnership between Washington Department of Corrections and The Evergreen State College remains the center of our work, and we continue to innovate and collaborate within prison walls.

Sustainable Operations

Among prison facilities statewide, from 2005 to 2012 the DOC has:

- Recycled 2,000 tons of waste
- Composted 1,800 tons of food and landscaping waste
- Reduced all solid waste to landfills by 47%
- Decreased potable water use by over 100 million gallons annually
- Decreased facility heating and energy consumption by 13%
- Reduced all transportation fuel consumption by 35%
- Reduced total carbon emissions by an estimated 41% from 2009 to 2012

Education and Training

From 2004-2013, SPP has facilitated:

- More than 125 lectures in five prisons, with more than 2500 inmates and 35 DOC staff attendees. (Due to participation in multiple activities, individuals may be counted more than once.)
- Presentations and lectures from more than 100 scientists and practitioners from more than 40 organizations, agencies, and universities.
- Nearly 30 workshops on sustainability-related topics, e.g. gardening, composting, soil science, wildlife biology, beekeeping, and arboriculture.
- Roots of Success environmental literacy instruction at four WDOC facilities. In the first offering, the program engaged approximately 70 inmates as students and 14 as instructors.



Research and Conservation

Oregon Spotted Frogs:

From 2009-2013, inmates at CCCC successfully raised more than 550 frogs.

Native Prairie Plants:

From 2009-June 2012, inmates have raised more than 600,000 native plants for South Sound habitat restoration.

Taylor's Checkerspot Butterflies:

In 2012 and 2013, inmate technicians, students, and corrections staff at MCCCW raised more than 7,000 butterflies for release.

Honey Bees:

Inmates and corrections staff maintain active beekeeping programs at CCCC, SCCC, and WCCW.

Community Contributions

Every WDOC prison hosts a pet program. Four prisons have partnered with organizations that provide service animals to people with disabilities, and all partner with non-profit shelters to train dogs or cats for adoption. Many facilities rehabilitate bicycles and/or medical equipment for community donations. The most productive gardening programs contribute thousands of pounds of produce to local foodbanks.

PROGRAM PARTNERSHIPS & COLLABORATIONS

American Association of Zoos and Aquariums

Department of Defense; Joint Base Lewis-McChord

Northwest Trek

Point Defiance Zoo and Aquarium

Prison Pet Partnership

The Center for Natural Lands Management

The Oregon Zoo

U.S. Fish & Wildlife Service

Washington Department of Fish and Wildlife

Washington Department of Natural Resources

Woodland Park Zoo

and many more!

SPP LEADERSHIP

Carri LeRoy and Dan Pacholke, Co-Directors

Nalini Nadkarni, Senior Advisor

Kelli Bush, Program Manager

Photos: Benj Drummond (front & middle), Cyril Ruoso (top & 2nd from bottom), Rod Gilbert (2nd from top), and Shauna Bittle (bottom).

CONTACT US

Carri LeRoy, Ph.D.

SPP Co-Director

Member of the Faculty

The Evergreen State College

(360) 867-5483

Email: leroyc@evergreen.edu

Kelli Bush

SPP Program Manager

(360) 867-6863

Email: bushk@evergreen.edu



CONSERVATION PROGRAMS IN PRISONS

The Sustainability in Prisons Project's conservation programs are among our most complex and rewarding endeavors. Each program represents a collaboration between an Evergreen graduate student, a faculty member, the SPP Program Manager, at least one science adviser from a partner agency, correctional staff, and inmate technicians at the Washington Department of Corrections (WDOC). Each member of the team plays a critical role which allows our unique science, conservation, and restoration work to be successful.

POLLINATORS: HONEY BEES & BUTTERFLIES

The Sustainability in Prisons Project (SPP) has engaged the patience and diligence of inmate technicians to achieve great success with pollinating insects. Several prisons cultivate honey bees, bolstering struggling populations of this crucial crop pollinator. Various rare and endangered butterflies are the subject for developing SPP rearing programs, and our prairie plant programs grow numerous species that provide food and habitat for these ephemeral beauties.

Our flagship pollinator program is with the Taylor's checkerspot butterfly (*Euphydryas editha taylori*), a federally threatened species that once flourished from southern British Columbia to central Oregon. Currently there are only a few small, isolated populations of the butterfly remaining, the largest of which is in Washington on the Artillery Impact Area at Joint Base Lewis-McChord. The SPP captive rearing facility at Mission Creek Corrections Center for Women (MCCCW) adds to the scope and resilience of recovery efforts and bolsters the original rearing program at the Oregon Zoo.

In 2012 and 2013, inmate technicians, students, and corrections staff reared and released more than 4000 Taylor's checkerspot butterflies and achieved survivorship rates of over 95%. We release the caterpillars twice a year, both before and after dormancy, and we release adult butterflies in May or June. Inmates and Evergreen students are engaged in critical research on the plants these butterflies prefer for laying their eggs, and this will lead to better understanding of their habitat needs.

HERPETOLOGY: OREGON SPOTTED FROG & WESTERN POND TURTLE

The Oregon spotted frog (OSF; *Rana pretiosa*) is a state-listed endangered species and a candidate for federal listing; this warm water marsh specialist has vanished from an estimated 70% of its historic range. From 2009 to 2012, SPP partnered with the OSF recovery group: scientists and conservation leaders from the Washington Department of Fish and Wildlife, the US Fish and Wildlife Service, and three zoos. With support of the recovery group, SPP participated in a 5-year pilot to head start OSF in captivity and release them to wetlands at Joint Base Lewis-McChord (JBLM). SPP inmate technicians proved to be excellent at captive rearing, contributing to high rates of survival and on average the largest, most mature frogs of all four rearing



facilities. Inmates, staff, and students worked together to successfully raise more than 550 OSF at Cedar Creek Corrections Center (CCCC).

The OSF recovery pilot ended in 2012 and the head-starting program was put on hold during recovery plan updates. Field surveys in 2013 revealed OSF egg masses at JBLM, providing evidence that captive-reared and subsequently released OSF are successfully reproducing in the wild. Captive rearing may begin again in 2014, and in the interim CCCC is adapting their rearing facility to care for Western pond turtles (*Emys marmorata*), another state-endangered species, that are suffering from a shell disease.

PLANTS: RARE & ENDANGERED SPECIES

SPP is planning programs for heirloom crop seed saving and growing shrub-steppe species native to central Washington. Our main focus to date has been our prairie plant conservation programs, which now include three separate nursery sites: Stafford Creek Corrections Center, Shotwell's Landing Nursery, and the newest nursery at Washington Corrections Center for Women. SPP works closely with the Center for Natural Lands Management and Joint Base Lewis-McChord in a coordinated effort to restore the remaining prairie habitat of the south Puget Lowlands. The native plants grown by SPP are critical to such prairie-dependent species as the Taylor's checkerspot butterfly, mardon skipper, and zerene fritillary.

We produced more than 600,000 native plants of 26 species from 2009 to spring 2012. With increased capacity, we plan to produce more than 400,000 plants of 50 or more species annually. Each fall, our plants are out-planted to restoration sites or cultivated beds for seed production.

Conservation partners and SPP staff provide training and education to several inmate crews in prairie plant cultivation and restoration ecology. Inmates, SPP staff and students, and conservation partners are also engaged in scientific research relevant to the propagation of native plants. They track germination, establishment, and responses to environmental conditions and various cultivation techniques; these data result in invaluable propagation protocols for difficult-to-grow species.

SPP NETWORK

Newly launched SPP teams in other states across the country have already begun creating their own conservation programs; please visit our website for more details!

Photos: Benj Drummond (front), Cyril Ruoso (2nd from top); all others by SPP staff

CONTACT US

Carri LeRoy, Ph.D.
 SPP Co-Director
 Member of the Faculty
 The Evergreen State College
 (360) 867-5483
 Email: leroyc@evergreen.edu

Kelli Bush
 SPP Program Manager
 (360) 867-6863
 Email: bushk@evergreen.edu



SUSTAINABILITY IN PRISONS PROJECT (SPP) NETWORK

New teams have joined the SPP Network to synchronize programming, evaluation, and dissemination of results. The SPP Network is building a set of science, conservation, and sustainability research projects that increase the reach of restoration efforts and possibilities for coordinated funding.

SPP ESSENTIAL COMPONENTS

In support of new SPPs, SPP-Washington offers tips for success, custom protocols, and—most important—the Essential Components that define SPP. Although each state, county, and corrections institution is unique, our experience with the SPP approach points to five Essential Components for all SPPs. New SPPs may not be able to tackle all components from the start, but use them as guides for continued growth and improvement. Keep in mind that most SPP programs satisfy more than one of these essentials; our most successful programs encompass all five at once.

1. Partnerships with multiple benefits

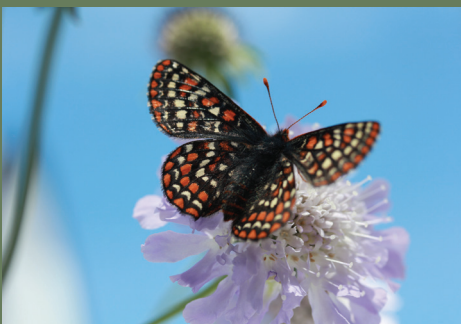
Seek out partnerships adapted to the needs of your region. Establish a truly collaborative approach in which each contributor plays an important role. See partnerships as central to accomplishing program objectives. Involve and benefit:

- Incarcerated individuals
- Students and/or education organizations
- Conservation, sustainability, and/or science organizations or initiatives
- Correction centers and corrections center staff
- Local communities and ecosystems

2. Bringing nature “inside”

Create opportunities to work with living things through lectures, workshops, conservation programs, gardens, and other programming. Examples are:

- Endangered species and/or ecological restoration programs in partnership with relevant conservation organizations and regulators
- Conservation lectures and workshops
- Canine and feline rescue programs
- Beekeeping
- Horticulture programs which contribute food to facility kitchens or charities
- Houseplants and nature imagery in staff and living areas



3. Engagement and education

Offer science and sustainability education to underserved audiences involving and benefitting inmates, college students, corrections staff, scientists, and the broader community. Provide green job training and skills development for a variety of employment options. Examples are:

- Sustainable operations and conservation programs that include education regarding how and why programs are implemented
- Incorporation of job skills and certification programs
- Emphases on opportunities to contribute and the importance of each task—i.e., how actions influence and contribute to the broader community and/or restoration efforts

4. Safe and sustainable operations

Reduce, reuse, repurpose, and recycle materials whenever possible. Increase prison safety by providing programs that reduce offender idleness and engage offenders in pro-social activities. Example initiatives include:

- Rainwater catchment, effluent reuse systems, or other water conservation programs
- Energy Service Company (ESCO) projects, alternative energy, and other energy-use mitigation strategies
- Green purchasing and procurement
- Zero waste garbage sorting centers, on-site composting, and vermicomposting systems

5. Evaluation, dissemination, and tracking

Provide for tracking, evaluation, and a plan for sharing program progress and results as a component of program implementation. Specifics should include:

- Provision of a comprehensive evaluation program (with approved Human Subjects Review)
- Information dissemination regarding SPP programs to all program partners, other SPPs, the public, funding sources, media, etc.
- Data systems to record baselines and track progress on targeted goals such as energy use, waste reduction, water conservation, etc.

**THE SPP NETWORK IS FUNDED BY
THE NATIONAL SCIENCE FOUNDATION.**



Photos: Benj Drummond (front), Shauna Bittle (top and middle), inmate technician at MCCCW (2nd from the bottom); all the rest by SPP staff

CONTACT US

Carri LeRoy, Ph.D.
SPP Co-Director
Member of the Faculty
The Evergreen State College
(360) 867-5483
Email: leroyc@evergreen.edu

Kelli Bush
SPP Program Manager
(360) 867-6863
Email: bushk@evergreen.edu

The New York Times

[U.S.](#)

Raising Frogs for Freedom, Prison Project Opens Doors



Matthew Ryan Williams for The New York Times

Taylor Davis, left, and Carri LeRoy counted frogs to be released near the Cedar Creek prison in Littlerock, Wash.

By [KIRK JOHNSON](#)

Published: September 27, 2012

LITTLEROCK, Wash. — The birdman of Alcatraz became famous. But the frogmen of Cedar Creek are still anonymous beyond the tiny cult world of amphibian science. For now, they say.

Mat Henson, 25, serving a four-and-a-half-year sentence for robbery and assault, and his research partner, Taylor Davis, 29, who landed in the Cedar Creek

Corrections Center here in central Washington for stealing cars, raised about 250 [Oregon spotted frogs](#) in the prison yard this summer.

Working with biologists, Mr. Henson is now helping write a scientific curriculum for other frog-raisers, in prison or out. A previous inmate in the program, released some years ago, is finishing his Ph.D. in molecular biology.

When asked about his plans after he is released from prison in 2014, Mr. Henson paused only a moment. “Bioengineering,” he said.

The state program that connected the dots — or rather the felons and the frogs — is called [Sustainability in Prisons](#). Nationally, it is unique in enlisting inmates to help rescue imperiled species like the Oregon spotted frog, which is threatened across much of its range. Who really gets saved, though, is an open question.

“A prison, when you stop to think about it, is a place that should be able to contribute beyond just locking people up,” said Dan Pacholke, the Washington State director of prisons, who helped found the project in 2004 when he was superintendent at Cedar Creek, a minimum-security 500-bed prison. He still jointly directs the project from his office in the capital, Olympia.

The program’s broader goal of bringing nature and sustainable practices to prisons is echoed across the nation as states seek ways to run prisons more cost-effectively.

Utilitarian practicality led Wisconsin in 2008 to begin having inmates grow much of their own food. And federal energy rules are pushing the goal of zero-net energy use in federal prisons by 2030.

Indiana and Massachusetts have become aggressive in reducing energy and water consumption and waste in their prisons, and tough renewable energy mandates in California are pushing alternative generation and conservation at prisons there, said Paul Sheldon, a senior adviser at [Natural Capitalism Solutions](#), a Colorado-based nonprofit that works with government agencies and companies on sustainability issues.

Mr. Pacholke can rattle off statistics. The amount of waste generated per offender in Washington State has fallen from 2.9 pounds a day in 2004 to 1.5 last year through inmate-operated recycling and composting.

Because of practices like collecting rainwater, use of potable water has dropped by 100 million gallons a year even as inmate populations have increased.

But Washington State’s overlay of science — offenders in four state prisons work on projects involving the spotted frogs (*Rana pretiosa*), wild prairie grasses and butterflies — is also addressing a budget gap in habitat restoration and ecology.



Matthew Ryan Williams for The New York Times

Signs hang outside the tanks where Oregon spotted frogs, a threatened species, are raised at the Cedar Creek prison.



Matthew Ryan Williams for The New York Times

Inmates there tended a garden, one way states are seeking to run prisons more cost-effectively.



Matthew Ryan Williams for The New York Times
Oregon spotted frogs at the Cedar Creek prison.

The prisoners, who trained with a state biologist but also learned from one another, must compete to enter the program and maintain a record of perfect behavior to stay in it. They are paid 42 cents an hour, standard prison wages, for 10-hour workdays that involve sometimes tedious tasks like monitoring the frogs' water temperature or harvesting the hundreds of crickets grown for frog food — something that even an oppressed graduate student might avoid at real wages.

But there may be some intangible benefits for inmates who are being exposed to the scientific process, many of them for the first time, said Carri LeRoy, a professor of ecology at Evergreen State College in Olympia, and co-director of the Sustainability in Prisons project.

Science, she said, is about procedural order, point A to point B, with every step measured and marked for others to check and follow. And when the focus of that work is a creature that undergoes a profound metamorphosis from egg to tadpole to adult, the lesson is also one about the possibilities of change. In a prison, Professor LeRoy said, that is a big deal.

“This image of transformation, I think, allows them maybe to understand their own transformation,” Professor LeRoy said.

This week at Cedar Creek the day finally arrived, anticipated by inmates and scientists alike, for the frogs to leave their tanks and go off into the wild, six months after hatching.

Their new home is Muck Creek, about 90 minutes away in an area of the Joint Base Lewis-McChord military compound near Olympia. Scientists and volunteers in waders and rolled-up jeans carried the boxes to the water’s edge. Tree frogs, one of five or so frog species on the base, chirruped from the sidelines.

“Get out of here, you’re free!” said Andrea Martin, a graduate student at Evergreen State College who has been working with the inmates at Cedar Creek. She held up one of the frogs in a swampside goodbye, then carefully opened her hand.

The frog leapt and was gone.

Yet it was a moment that Mr. Henson and Mr. Taylor could not witness. Military rules barred the inmates from participating in an event on Department of Defense property.

Both men said they understood. Rules define prison life, they said.

The frog shed is only a few yards from the chain-link and razor-wire prison enclosure. As the frogs were netted, counted, placed in plastic bins and carried out to an S.U.V. for transport, Mr. Henson said he would picture his slimy charges finally swimming free.

“It’s a good feeling to know they’re going to be released,” he said as one furtive frog, hiding motionless in a dark corner of the tub, was fished out. “When you go to a zoo, you see the animals; they’re not really happy.”

With the frogs gone, it was time to start preparing for next year. Over the winter, Mr. Davis and Mr. Henson will rebuild the frog shed’s roof so that by March, when the next eggs arrive, a sun-and-shade system will be in place that better mimics the world the frogs are bound for.

http://www.nytimes.com/2012/09/28/us/raising-frogs-for-freedom-prison-project-opens-doors.html?_r=1&ref=science

A version of this article appeared in print on September 28, 2012, on page A21 of the New York edition with the headline: Raising Frogs For Freedom, Prison Project Opens Doors.

NATURE NEWS BLOG

nature.com

Prisoners pitch in to save endangered butterfly

09 Aug 2012 | 16:13 BST | Posted by [Ananyo Bhattacharya](#) | Category: [Uncategorized](#)



Prisoners are helping in efforts to conserve the Taylor's checkerspot butterfly.

U.S. Fish and Wildlife Service, Aaron Barna

Posted on behalf of Ed Yong.

At the [Mission Creek Corrections Center for Women](#) in Belfair, Washington, inmates are helping to save the endangered Taylor's checkerspot butterfly (*Euphydryas editha taylori*). Under the supervision of guards and graduate students, a small group of prisoners is breeding the beautiful orange-and-white insects in a greenhouse outside the prison. They have even carried out research to show what plants the butterfly prefers to lay its eggs on — information that will be crucial for boosting its dwindling numbers.

These efforts are part of the [Sustainability in Prisons Project](#) (SPP), the brainchild of Nalini Nadkarni of the University of Utah in Salt Lake City. “A lot of her work is about coming down from the ivory tower and involving under-served audiences in science,” says Dennis Aubrey, a student who works in the checkerspot initiative. He spoke about

the project at the 2012 [Ecological Society of America Annual Meeting](#) in Portland, Oregon.

The SPP works with prisons throughout Washington, and treats the inmates as collaborators rather than labourers. They apply for the positions and get training, education and a small wage. Together, they have helped to conserve endangered butterflies, frogs, flowering plants and moss.

Prisons may seem to be an unorthodox location for conservation work, but Carri LeRoy, project co-director of the SPP, says: “There’s a lot of clean, controlled space, and people with time on their hands, looking to do something valuable and change their lives.”

“Most people are in the prison yard talking about who did them wrong,” says Aubrey. “Then, all of a sudden, guards will tell us they hear people saying, ‘Hey did you see how that moss was growing?’ ”

The women in the checkerspot project have already reintroduced more than 800 of the butterflies into the wild, and raised more than 3,600 caterpillars for next year’s release. The Taylor’s checkerspot is found in just four small populations in Washington and Oregon, and it now lays its eggs on plantain, an introduced species. No one knew what the butterfly’s original host plants were. The inmates found out by allowing the adults to choose between three candidates and showed that they prefer to lay eggs on two native species — the harsh paintbrush and golden paintbrush — rather than the exotic plantain.

The golden paintbrush might be the butterfly’s original host, but it is also threatened. With the information from the inmates’ project, efforts to conserve both the plant and the butterfly could be combined. “That would eliminate the need to plant the exotic plantain at reintroduction sites,” says Aubrey. When the results are finally published, the inmates will be contributing authors on the paper.

Meanwhile, prisoners at the [Stafford Creek Correctional Center](#) have been raising 40 species of endangered prairie plants for planting all over the state. In the process, they found that several species germinate better after being grown in smoke-infused water, which mimics the fires that the plants experience in the wild.

Other prisoners at [Cedar Creek Corrections Center](#) are rearing the endangered Oregon spotted frog (*Rana pretiosa*). For 3 years running, they have been voted the best rearing facility in the state, surpassing the zoos that trained them in the size and health of the frogs they raise. “They’re adaptively changing the protocols, and providing information to the restoration community of tweaks that would increase success,” said LeRoy.

LeRoy also presented preliminary evidence that the SPP was helping to reduce the rates of recidivism among the inmates. Of the 238 prisoners who attended a single lecture

and were later released, only two returned to prison within a year — a rate of 0.8%, compared to the usual average of 10.4%. Of the 78 prisoners who took part in actual conservation work, 18 have been released, none have re-offended and one-third are employed.

LeRoy cautions that these numbers are small, given the low number of people who have been through the programme. But it is clear to her that the inmates are learning new skills and are empowered by actively contributing to society.

Others benefit too. Graduate students get management experience on a real conservation project. Conservation partners learn how to better breed their target species. The Department of Corrections saves money because recidivism goes down, as do violent infractions within the prison walls. And local media coverage has “improved public perception of prisons”, says LeRoy, by changing the way people see prisoners and what they can do. “It’s win-win-win-win-win.”

<http://blogs.nature.com/news/2012/08/prisoners-pitch-in-to-save-endangered-butterfly.html>

First Impressions

Stafford Creek Correctional Center in Washington state participates in the Sustainability in Prisons Project. Here, an inmate takes a break from mowing prison lawns with a push reel mower. Photo by Benjamin Drummond. See page 12.





STATE OF WASHINGTON
Department of Corrections
[Barcode]

112



Interpreting in Prisons

The Sustainability in Prisons Project

AMY STASCH

with

KELLI BUSH

CARRI LEROY

NALINI NADKARNI

DAN PACHOLKE

In July 2010, I found myself at the gates of Stafford Creek Corrections Center, turning over my identification in return for a badge. Prison staff escorted me through a series of gates, which I heard dramatically slam behind me. After another series of checkpoints, we arrived in a multipurpose room, where we hastily moved tables and chairs, set up a projector, and tested a microphone. In prior work I'd spoken to large audiences and never needed a microphone—but my audiences had never been quite this

large, and never quite this inquisitive. I nervously worried that the subject wasn't "real" or "tangible" enough and that I'd insult the audience by attempting to transport them far from the walls that confined them. Some of these inmates had been in prison for years; could they relate to the bears and wildness of Katmai National Park and Preserve? For the next 90 minutes I would offer the same evening program I'd offered for two seasons as a seasonal ranger at Katmai, but with a stronger dose of conservation biology, and "hard"



BENJAMIN DRUMMOND

conservation goals while reducing the environmental, economic, and human costs of prisons.

While working to further conservation, SPP asks us to ask questions about ourselves. As citizens, scientists, and interpreters, how do we view prisons and prisoners? What are the conceptions and misconceptions we hold of these places and people? How do we interpret the role of prisons in our society? How does a prisoner view the prison they occupy? How does a prisoner view their relationship with society and their ability to contribute? What impact might science education and connection with the natural world have on incarcerated individuals? How do we view ourselves, as scientists, in society?

More than 1.5 million people are in prison in the United States. In many states, recidivism, or the likelihood of an inmate recommitting a felony within three years of release, hovers at 70 percent, according to the Bureau of Justice Statistics. However, whether we have family members who are survivors of violent crime, or we simply find it easier to not think about, inmates experience a very different daily life than the rest of us. The prison gates serve not just as physical, but also metaphorical barriers between prisoners and society. Some states work to engage inmates in education and drug treatment programs proven to reduce recidivism, while other states struggle to keep up with the tides of incarceration.

Central to SPP's work is breaking down our known definitions of education, conservation, and interpretation.

Interpretation's forefather Freeman Tilden said, "Interpretation is a communication *process* designed to *reveal meanings and relationships* of our natural (and cultural) heritage to the *public* through *firsthand experience* with *objects, artifacts, and landscapes*" [emphasis added]. As interpreters and scientists we strive to engage audiences in this type of learning, an objective that is

well-aligned with the need to offer incarcerated individuals positive programs that serve to inspire connection with community and good stewardship of our natural and cultural resources.

Process

SPP acknowledges the interpretive process by aiming to engage inmates with multiple opportunities over a period of time. Monthly lectures are offered at four correctional facilities, presented by a variety of speakers. The program is a partnership between The Evergreen State College and the Washington Department of Corrections that actively engages the academic and conservation community to bring scientists and sustainability experts into prisons. With SPP, interpretation is a process for both the audience and interpreter/scientist. The program engages scientists in a medium and activity that may be unfamiliar—presenting



BENJAMIN DRUMMOND

Stafford Creek Correctional Center inmates tend to a garden whose vegetables are incorporated into meals.

science. For 90 minutes I would feed off some of the most engaged and ingenious questions I'd heard in my career, and forget about the uniforms worn by the prisoners, or what may have brought them to prison.

In Washington state, the Sustainability in Prisons Project (SPP) is challenging our assumptions of prisons, prisoners, prison staffs, scientists, and conservation biology. This innovative project brings together prisons, academics, and conservation partners to leverage financial and human resources to further

to the non-scientific audience in a prison—while also providing a new experience and understanding of the prison environment (typically presenters are also offered a tour of the facility and conservation projects).

To the Public

Fundamental to developing an interpretive program is defining your audience. As much as we emphasize the inmates, the “audience” of the Sustainability in Prisons program is broad and multifaceted. The project staff itself is an audience, interacting with varied stakeholders and developing unique perspectives on prisons, conservation, and education. It is the graduate and undergraduate students who serve as the ambassadors of the program, spending time in the prisons engaging inmates in conservation projects and writing papers and theses on the science involved. It is the scientists who come and give talks, and find the experience as eye opening for them as it was for the inmates. It is the prison staff members to escort project staff and facilitate conservation projects, sit in on lectures, and develop their own strategies for reducing resource consumption and waste in the prisons. The media have helped share the project far beyond the prison walls, by telling the community about positive contributions inmates are making and the education occurring in prisons. The staff is careful to constantly ask who the audience is, what the intention is, and what the possible ripples are.



BENJAMIN DRUMMOND

At Stafford Creek Corrections Center, inmates sort garbage, diverting compost and recyclables.

Reveal Meanings and Relationships

A few everyday scenes with the Sustainability in Prisons Project:

- An inmate delicately transfers butterfly larvae to a food source plant.
- An inmate sprinkles native plant seeds that will be used for habitat restoration projects.

- An inmate collects data including temperature and water quality to ensure continued growth of frogs in their care.

SPP engages inmates in monthly lecture series, occasional workshops, and conservation projects—working with endangered and threatened species including native prairie plants, Oregon spotted frogs, and Taylor’s checkerspot butterflies. For months at



Helping You Navigate the Interpretive Jungle Since 1994

Interpretive Panels & Frames
Routed & Carved Signs

envirosigns.com
888-492-5377





BENJAMIN DRUMMOND

At the Stafford Creek Corrections Center greenhouse, inmates tend to native prairie plants that are transplanted into habitat at Joint Base Lewis-McChord.

a time, inmates work day in and day out, paying diligent and continuous attention to living entities. Some inmates comment that their time working on conservation projects represents the first time they have felt compelled or responsible to care for another thing. The seedling, frog, or butterfly pupae an inmate cares for comes to represent their linkage to the outside world, their opportunity to contribute. For some inmates, these linkages become parallel to other areas and relationships in their lives, including their friends and families.

Firsthand Experience

Many who agree to present talks for SPP worry that their presentations may not be relatable enough to an inmate. Is it rude to enter a prison and talk to them about people and places far beyond the walls? Can they relate to or understand talks about phenomena occurring far away? SPP has found that inmates will indeed engage in these subjects, and often find

parallels, analogies, and metaphors that do relate to their daily encounters in prison. Climate change can be seen in the weather patterns of the areas prisons are located. With an increasing number of these inmates working with SPP and/or prison jobs in gardens and landscaping, they can relate to the soil, moisture, plants, and the food cycle. Inmates had and will have lives outside of the prison. According to the Washington Department of Corrections, 96 percent of inmates in Washington state may be released from prison. And when they return to society, they will make decisions to purchase goods, participate in society, and be community members. We can acknowledge their past experience, and what their experience in the future may be.

The 21st-century environment challenges us to broaden our base and be relevant to our audiences. This relevance is the subject of countless meetings, conferences, and

brainstorming sessions. Efforts like the Sustainability in Prisons project remind us that creativity can build bridges, leverage resources, and magnify results. How can we, as interpreters, emulate SPP and more broadly define our audiences in our parks, museums, and zoos? How can we creatively leverage community groups, organizations, and institutions to embrace conservation, education, and the environment as unified purposes, rather than separate special interests?

Although fundamentally a conservation program engaging scientists, inmates, and others in education and active conservation projects, the Sustainability in Prisons Project reaches beyond definitions and asks all of us—citizens, scientists, interpreters, inmates—to consider our roles, our capacity to have an impact, and the assumptions and stereotypes we may carry.

For More Information

Bureau of Justice Statistics.
<http://bjs.ojp.usdoj.gov>

Sustainability in Prisons Project.
www.sustainableprisons.org.

Washington Department of Corrections. Quarterly Fact Card, March 31, 2012. http://www.doc.wa.gov/aboutdoc/docs/msFactCard_005.pdf

Amy Stasch was interim manager of the Sustainability in Prisons Project from March to July 2010. She now holds a permanent position with the National Park Service. Kelli Bush is the current manager of the Sustainability in Prisons Project. Carri LeRoy is co-director of the Sustainability in Prisons Project and Faculty at The Evergreen State College. Nalini Nadkarni is senior advisor to the Sustainability in Prisons Project, and the director for the Center for Science & Math Education at the University of Utah. Dan Pacholke is co-director of the Sustainability in Prisons Project, and deputy director of prisons for the Washington Department of Corrections.

Composting & the Prison Experience

By inmate Steve Mahoney

I should preface this piece by saying that not all prison experience results in positive outcomes. Unfortunately the statistics regarding recidivism bear that out again and again. I can only relate my personal experiences and the healing process I have been through.

I started my prison experience in the suicide section of the county jail nearly ten years ago. I was placed in this unit with delirium tremens and severe suicidal ideations. I was charged with First Degree Assault which resulted in a one hundred eighty-four month prison sentence. I had absolutely no hope. I was at the bottom. I cared not for life and death would have been most welcome.

The yellow bucket is full. Waste from breakfast, lunch and dinner combined to make a soup of organic material that seems fit only for maggots, flies and vermin of that particular ilk. The bucket is weighed and thrown into the dank stall with waste from former meals. The odor is unbearable to the uninitiated. Bark chips are added to create heat; the process begins.

After trial I was sent to a maximum security prison in Forks, Washington to begin my sentence. Stench of wasted lives and human failure personified assaulted me in my every waking moment. The walking dead were mixed with the hopeless to create an environment that was volatile on good days. It is only in

hindsight that I realize my healing began at the very place I thought my life might end.

The organic pile has been building for a month. The temperature has reached nearly one hundred sixty degrees. Close to two thousand pounds of rotting material have been combined to make a mound that is ready to be moved. The process continues.

I spent nearly two years with recurrent thoughts of suicide and other plans for my own demise. I hadn't seen my chil-

the process begins.

Wheelbarrows loaded one after the other as the decomposing waste is transferred from the stall to the next stage of the process. The temperature is still around one hundred and sixty degrees. Evidence that the material is breaking down can be seen throughout. Cabbage is now a wet, mushy substance that is putrefying moment by moment. The smell seems more powerful than when the pile was in the safe confines of the stall. Much work is yet to be done.



The visit with my children was bitter-sweet. Children deserve to have their father home with them. Children need their parents not only present but actively involved in their growth. How could I provide my kids anything from the place I found myself in? Long Distance Dads was the first program of-

dren the entire time I had been incarcerated. One day while contemplating my very bleak future I was given a reprieve. I was called into the counselor's office and informed that my three youngest children would be coming to see me. Hope! Dare I? My mother would bring them in about a week. I couldn't let these innocents see the mess I had become. My children certainly deserved better than what I was serving myself on a regular basis. I had to do something;

ferred that I partook of. I was out of the stall, I was still extremely hot and my life was odiferous to say the least, yet I was changing.

Twice a week for the next six to twelve weeks the decomposing pile of organic waste is turned inside out. The center of the pile becomes the outer and this is repeated over and over again until the temperature starts to drop. While the temperature of the pile remains in the

Cont'd next page...

*Cont'd from
previous page*

120-150-degree range, change is becoming more visible. The pile no longer looks like food waste. The material is breaking down and begins to resemble bark mixed with dirt. The odor remains strong.

Over the next several years I began working a program of healing and transformation. I attended an anonymous meeting where I was given tools with which to conduct my life in a more harmonious union with myself and others. I worked with mental health for over four years on anger and violence issues. I spent three years with a substance abuse counselor learning a way to live my life *sans* alcohol. Still a little warm on the inside but there was certainly a change my family recognized long before I did.

The pile of compost is dark brown, almost black, and has the smell of rich, luxuriant topsoil. The temperature is almost down to the ambient temperature. If the outside temperature is seventy degrees then the pile will be the same. The last stage of the process is to sift the larger bark chips out. Shovelful by



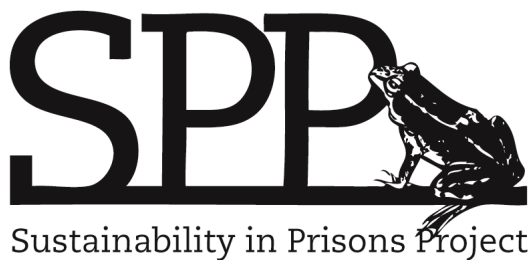
shovelful the compost is put on a metal grate and hand-sifted. The finished product will be used in the very garden that produced the vegetables that produced the waste in the yellow bucket so long ago.

I am not out of prison as of this writing; how-

ever, my thought processes resemble little the mess that lay on the suicide floor ten years ago. I could say anything about who I have become yet I will let the actions I take each day speak for themselves. I have had much healing and restoration that I can only credit to a mind that has been transformed in much the same way as the composting process. I am actively involved in my own recovery. I freely share the precious gems of mental health and stability that have been given to me.

My hope is that when I am released I will be like the compost and be used by society to produce a harvest that will benefit others.

Photos Shauna Bittle.



Mail: The Evergreen State College
Environmental Studies, Lab II
2700 Evergreen Parkway NW
Olympia, Washington 98505

Email: bushk@evergreen.edu

www.sustainableprisons.org

The Salt Lake Tribune



(Brian Maffly | The Salt Lake Tribune) Ed Stahl, an inmate at Washington State's Cedar Creek Corrections Center, looks after a tilapia growing operation, where wastewater is cycled through a hydroponic vegetable garden. The experiment, conducted under Washington's Sustainability in Prisons project, not only decontaminates water, but produces peppers and tomatoes for the prison kitchen. Prisoners are saving nature, one frog at a time

Conservation » University of Utah hopes to replicate Washington's science-in-prison program.

By Brian Maffly

| The Salt Lake Tribune

First Published Jul 27 2012 12:24 pm • Last Updated Jul 27 2012 01:02 pm

Littlerock, Wash. » In a previous life, Taylor Davis boosted cars. But these days his focus is the health and welfare of 300 small amphibians.

He and Matt Henson, another inmate at Washington state's Cedar Creek Corrections Center, feed a captive research colony of Oregon spotted frogs three times a day, change their water and adjust the pH, look for signs of infection, grow the frogs' cricket meals, and monitor their growth.

This one-of-a-kind program enlisting prisoners in conservation is growing in scope and expanding into other parts of Washington. And other states are taking notice, according to Nalini Nadkarni, a one-time Evergreen, Wash., biologist who shaped the state's Sustainability in Prisons program after persuading officials to let her

bring science to prisoners. Now at the University of Utah, Nadkarni is hoping to establish something similar at the Utah State Prison.

Nadkarni, one of the nation's most charismatic science ambassadors, moved to Utah last year to head the U.'s new Center for Science and Math Education. The Washington program was the subject of her recent [TED talk](#), in which she described how connections to nature can mend social schisms and heal psychological wounds.

"If prisoners can grow plants and raise frogs, then perhaps there are other static entities that we hold inside ourselves, like greed, like addiction, like racism, that can also change," she said.

Oregon's spotted frog (*Rana pretiosa*) was once common in the warm marshy regions of the Pacific Northwest. Now a candidate for federal listing as an endangered species, the animal has been eliminated from about three-fourths of its range thanks to habitat loss and predation by invasive non-native bullfrogs. Washington wildlife officials intend to release Cedar Creek's captive-reared frogs in a research project conducted with Evergreen State College to better understand how to restore a creature that plays a vital role in the natural food chain.

Davis is proud of his operation's 80 percent survival rate, which is better than the Northwest's other captive rearing programs, typically at zoos.

"Ours grow bigger faster. We're the only facility that can raise them to maturity in less than a year. In nature it takes two to three years," he said.

The U.'s proposals to engage prisoners in ecological research face some cultural and institutional hurdles that aren't an issue in Washington, where prisons have a history with resource conservation, and sustainability is a policy goal across state government.

But Nadkarni expects to get her foot in the door with a science lecture series that will kick off at the Draper prison next month. The U. will host a national conference in January devoted to making prisons more sustainable. As for conservation research at the Utah prison, she is exploring the idea of growing native riparian flora that would be transplanted along the nearby Jordan River.

"It might not have the glamour of growing frogs, but it's a step in the right direction. I'm not discouraged at all. [Utah corrections chief] Tom Patterson has been courageous to invite us in for science lectures," Nadkarni said. "These kinds of relationships take time. I am happy to let it mature at its own pace."

Among the U. faculty interested in presenting their research to Utah prisoners are biologists David Carrier and Baldomero Olivera, and chemist Henry White.

Patterson declined to comment on the U. proposals because they are "extremely hypothetical" at this point.

"Department personnel are still in the middle of sorting through the information and working with the U. to see if there is evidence showing that this is something that is consistent with, and helps to further, Corrections' mission of protecting public safety and helping offenders to succeed," wrote spokesman Steve Gehrke in an email.

Prison as garden » Washington's Cedar Creek, a minimum-security 480-bed prison, is located on state forest lands in a wooded canyon outside the bucolic town of Littlerock, south of Olympia. A nature lover who wound up on the wrong side of the law would want to serve his time here. But inmates must earn their way to this

institution, where many get to leave the secure compound to work on tree nurseries, tend bees, plant saplings, fight wildfires and perform other tasks related to Washington's rich natural resources.

It's a plum situation for an incarcerated felon, and few jeopardize the privilege by breaking the rules, according to superintendent Douglas Cole. Only well-behaved inmates with a release date within four years serve at Cedar Creek, which has not had a walk-away in almost three years.

Davis and Henson exit most days to look after the frogs, which live in tanks just outside the fence.

Although surrounded by a towering chain-link fence topped with razor wire, the grounds include carefully arranged flower and herb beds and other garden features that would make Martha Stewart herself feel at home — if Cedar Creek was not an all-male facility.

But Washington operates a similar women's center outside Aberdeen where inmates also grow gardens and engage in conservation research. Mission Creek Corrections Center inmates raise Taylor's checkerspot (*Euphydryas editha taylori*), an endangered butterfly.

Nadkarni, an expert in forest canopies, launched her conservation research at Cedar Creek a few years ago with inmates cultivating the silvery mosses that grow on tree trunks and have been harvested at alarming rates for floral arrangements. Now numerous inmate-staffed projects are under way at the prison, including Ed Stahl's "aquaponics" operation that combines tilapia aquaculture with a hydroponic vegetable garden.

In this experiment, wastewater from the fish-growing tank is cycled through the garden's gravel beds. The process not only decontaminates the water but boosts yields of peppers and tomatoes for the prison kitchen.

Up the hill, Robert Gibson uses worms to make nutritional gold. Inmates compost the prison's food waste, then transfer the muck into wooden boxes they call "worm farms." When sufficiently degraded, the compost is steeped in water to produce a rich tea-like liquid that feeds a productive vegetable garden. This stuff could sell for \$5 a gallon, and Gibson brews 100 gallons at a time.

The prison superintendent said some inmates use their green skills when they look for jobs after being released.


"Even if they don't apply the trade they can apply the mind-set. They can take garbage and make something useful with it," Cole said. The compost operation processes about 400 yards of waste a year, cutting the prison's tipping fees by 75 percent when coupled with recycling initiatives.

In the frog operation, scientists harvest fertilized eggs from two sites, and the inmates rear them separately and insert tiny chips under the baggy folds of skin on the neck. In October, the current cohort of Cedar Creek frogs will be released in wetlands at a military base, and scientists will monitor them with wand readers that detect the chips. Then new batches of eggs will arrive at Cedar Creek.

Meanwhile, Davis is expanding the grow operation to include crickets as a way to reduce the frogs' grocery bill, which reaches \$120 a week because of expensive crickets imported from Louisiana.

The pay might not be great and the hours are long, but the frog work is helping the former thief learn valuable habits and a new appreciation for life.

"It's giving a little back. When I was out I was taking a lot," Davis said. "Now I'm building a work ethic. You can't decide to not work. If you don't they'll die."

 **FUND FOR THE NEEDY**  **Creating hope and opportunity for Seattleites of Asian and Pacific Islander descent.** 

IN THE NEWS: Insee transition | Boeing Dreamliner | Amazon | Killer whales | Seahawks

Originally published November 25, 2012 at 4:25 PM | Page modified November 25, 2012 at 9:26 PM


Monroe prison inmates restoring bikes for the needy

Share:    

160

SECTION SPONSOR

The Everett Clinic
For the whole you.

Fund For The Needy
100% goes directly to non-profits serving some of the most vulnerable members of our community — children, families and seniors 

Marvin Chapman and Richard Gillmere are among a small crew of inmates at the Monroe Correctional Complex who volunteer to repair stolen or abandoned bicycles collected by the Snohomish County Sheriff's Office. Once repaired, the bikes are turned over to local human-services groups so they can be handed out to needy adults and children.

By [Jennifer Sullivan](#)
Seattle Times staff reporter



Inmate Marvin Chapman adjusts a derailleur cable while working on a bike at the prison repair facility. Officer Wayne George, who also volunteers in the program on his personal time, watches from a doorway.
MIKE SIEGEL / THE SEATTLE TIMES



The Twin Rivers' storage area is protected by barbed wire. MIKE SIEGEL / THE SEATTLE TIMES

Marvin Chapman pulls a tiny magenta- and plum-colored bicycle off a shelf and begins a careful inspection.

He laments the bike's condition, judging the white nubby tires inadequate to zip a child around. Nearby, Richard Gillmere turns away from his own repairs on an adult's mountain bike to assure Chapman they can fix up the little girl's bike in time for Christmas.

Chapman and Gillmere are among a small crew of inmates at the Monroe Correctional Complex who volunteer their time and labor to repair stolen or abandoned bicycles collected by the Snohomish County Sheriff's Office. Once repaired, the bikes are turned over to human-services groups, which distribute them to needy adults and children.

State Department of Corrections Officer Wayne George, who oversees the program, said that in the three years since they opened the repair shop inside the prison's Twin Rivers Unit, inmates have refurbished more than 200 bikes.

"I just enjoy giving back," said Gillmere, 45, of Bellingham. "Most of us have been taking most of our lives."

Inmates work in a tiny room just off the prison gym, three evenings a week. They have a seemingly endless pool of bicycles to work from, with more than 150 bent, broken and scuffed-up bikes awaiting their attention.

Shari Ireton, spokeswoman for the Snohomish County Sheriff's Office, said most of the bicycles delivered to the prison were abandoned on Community Transit buses or on transit property. A small number were found abandoned or collected by deputies during criminal investigations.

Ireton said bicycles that are recovered by deputies are held in the Sheriff's Office evidence facility for 60 days, in case someone claims them, before they're turned over to the prison.

"To supply bikes to kids is total excitement. I know they're using them, they're enjoying them," said Susan Goettsch, a resource coordinator at Volunteers of America in Everett. "The bikes they get are phenomenal. They're really nice."

Goettsch said she gives George a list of the bikes she needs for clients, mostly children, and picks them up at the prison.

"When I was a kid, having a bike was a normal thing, and it was used year-round. It gave you a sense of freedom. Today, a lot of them can't afford that expense," Goettsch said.

George said the bike shop developed out of a nearly 10-year-old program at Stafford Creek Corrections Center in Aberdeen. An inmate who transferred from Stafford Creek to Monroe told him about the program, and George, a bicyclist himself, was intrigued.

Inmates have to undergo an intensive interview before they're allowed into the program to ensure they can be trusted around tools and won't violate their freedom to work evenings out of their cells.

An ability to repair bicycles is not a requirement, George said.

At Stafford Creek, facilities manager Chris Idso said he prefers inmates who have never repaired a bike before.

"More often than not, you find yourself looking for offenders who have good attitudes, an open mind and a willingness to learn," Idso said.

Unlike the Monroe program, Stafford Creek inmates are paid for their bike-repair work, with wages topping out at 42 cents an hour, or \$55 per month. Inmates at the Aberdeen prison can crank out about 50 bikes per month, Idso said.

Prison officials also are considering paying the Monroe inmates who participate in the program.

Both prison programs rely on donations — the Lion's Club in Aberdeen donates money to buy chain guards, paint, new tires, reflectors and other gear, Idso said.

In Monroe, a nearby Knights of Columbus chapter and George's church, St. Michaels, in Snohomish, donate funds, George said.

George, who comes in on his time off to run the repair shop, said other community members with a love for biking and bicycle repairs also work with the four inmate volunteers in the program.

"Officer George does a lot to train them (inmates)," said Sally Neiland, superintendent of the Twin Rivers Unit, a complex that houses medium-security inmates and the state's Sex Offender Treatment Program.

Gillmere, who is in prison for first-degree child rape, said he's been riding and repairing bikes since he was 6. But, he jokes, George has taught him how to fix them correctly.

"I was from one of the families who would have gotten something from this program," Gillmere said.

Chapman, 25, who is serving time for first-degree manslaughter with a deadly weapon, said he loves the work — especially fixing up BMX-style bikes for more daredevil kids.

"I'm here trying to help other people. I believe in karma," Chapman said. "If you do good things, good things will happen to you."

News researcher Miyoko Wolf contributed to this report.

Jennifer Sullivan: 206-464-8294 or jensullivan@seattletimes.com. On Twitter @SeattleSullivan.

http://seattletimes.com/html/localnews/2019765232_prisonbikes26m.html



Aux Etats-Unis, les prisonniers s'évadent dans la nature

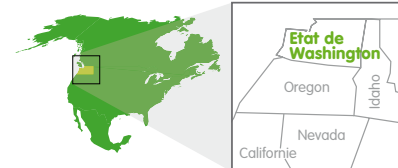


Les prisonniers peuvent assister chaque mois à des conférences sur les énergies renouvelables, le changement climatique, l'agriculture bio.

Dans les prisons de l'Etat de Washington, les détenus élèvent des grenouilles et assistent à des conférences sur le changement climatique. Qui l'eût cru ? Les hommes et l'environnement peuvent s'épanouir derrière les barreaux !

Par KARINE LE LOËT

Etats-Unis



Tout a commencé en 2004. Nalini Nadkarni, spécialiste des forêts et chercheuse à l'université Evergreen de l'Etat de Washington, aux Etats-Unis, s'alarme, lors d'une conférence, du pillage des mousses – les fleuristes s'en servent pour leurs compositions – dans

les forêts primaires. Indispensables à l'écosystème, elles sont longues à se régénérer. L'idée de la chercheuse est simple : cultiver de la mousse en pot pour fournir l'industrie horticole. Mais qui dispose d'assez de temps et de la fraîcheur d'esprit nécessaires pour tenter plusieurs cultures, les regarder patiem-

benjamin.drummond - www.bsisj.com

ment pousser dans des bacs et imaginer des solutions innovantes pour améliorer leur croissance ? Des prisonniers, pardi ! « Lors de la conférence, la docteure Nadkarni a expliqué qu'elle adorerait travailler avec des gens qui ne sont pas habituellement confrontés à la science et à la nature, se souvient Kelli Bush, l'une des organisatrices du « Sustainability in Prisons Project » (« Projet pour la durabilité dans les prisons »). *« Quelqu'un dans le public était employé dans une prison locale et l'a invitée. »* L'idée a germé comme ça : entre les murs du centre de Cedar Creek, à Littlerock, avec un gardien, deux étudiants, un bénévole et douze prisonniers passionnés, équipés d'un calepin et d'un crayon.

7 000 kg de légumes bios

Depuis, plusieurs pénitenciers ont rejoint l'aventure. A Stafford Creek, localisé à Aberdeen, une serre et un jardin ont été aménagés. Ils permettent de récolter chaque année près de 7 000 kg de légumes bios – arrosés directement avec de l'eau de pluie récupérée – pour une économie de 13 000 euros : ils sont directement cuisinés et ajoutés au menu de la cantine. Les amateurs de douceurs ne sont pas en reste avec les ruches qui produisent du miel et du savon ! Des projets scientifiques voient également le jour : les détenus cultivent des espèces de plantes locales destinées à être replantées çà et là et à préserver la biodiversité. Au centre pénitentiaire de Cedar Creek, les prisonniers s'occupent, quant à eux, des grenouilles maculées de l'Oregon, dont les effectifs sont en forte baisse. A chaque fois, scientifiques et étudiants d'Evergreen conseillent les prisonniers et décryptent et organisent leurs données. Ils viennent aussi chaque mois donner des conférences sur les énergies renouvelables, l'hydrologie ou le changement climatique.

Et les détenus dans tout ça ? Les missions ne sont pas obligatoires, mais ouvertes à candidature. Et la sélection est difficile. Ici, on ne demande ni expérience préalable, ni diplôme, mais du dévouement, de la méticulosité, et un comportement exemplaire. Les prisonniers ne sont pas motivés

Sur les terres de la prison de Stafford Creek, les détenus cultivent des légumes bios et les ruches produisent miel et savon.



« Ils apprennent l'écologie, la biologie, l'entomologie... Certains disent qu'ils feront du jardinage à la sortie. »

Kelli Bush, organisatrice du « Projet pour la durabilité dans les prisons »

par l'argent – la paie est plafonnée par l'Etat à 34 centimes d'euros par heure – mais par l'apprentissage.

« Toujours vivante »

Dans une des publications de la Société américaine d'écologie, Nalini Nadkarni raconte l'histoire d'un prisonnier qui avait placé de la mousse dans sa table de chevet. Chaque matin, il ouvrait le tiroir : « La mousse était enfermée dans le noir très longtemps, et pourtant elle était toujours vivante le matin, confiait-il.

Comme moi. » Au détour des ateliers, les détenus apprennent « l'écologie, la biologie, l'entomologie... », énumère Kelli Bush. *Certains disent qu'ils feront du jardinage quand ils sortiront, d'autres qu'ils retourneront à l'école pour développer ces nouveaux talents. »* —

Impact du projet

👤 12 000 détenus et 80 experts ont déjà participé aux conférences
🌿 7 000 kg de légumes bios récoltés chaque année

Corrections Directions

ASSOCIATION OF STATE CORRECTIONAL ADMINISTRATORS

May 2013, Vol. XXX, No. 3

OTHER NEWS

Continued

tuberculosis. Untreated former prisoners carry those diseases into communities on the outside and spread those infections.

'Sustainability in Prisons' Network Goes National

With the completion of its second national symposium, funded in part by the National Science Foundation, the Sustainability in Prisons Project Network has officially gone national.

The first symposium was held at The Evergreen State College, led by faculty member Carri LeRoy, Ph.D. and Washington Department of Corrections' Dan Pacholke, to introduce participants to the multi-faceted activities going on in Washington State prisons.

The second symposium, held March 20-22 at the University of Utah in Salt Lake City, convened with corrections representatives from six states, along with academic experts, scientists, and national authorities on sustainability in corrections, to share resources, ideas, and action plans for implementing sustainability-oriented practices and science-based education and research programs in corrections facilities nationwide.

The Utah Symposium provided an opportunity to continue and extend the work begun at last September's first Symposium at The Evergreen State College in Olympia, Washington.

Thirty-six participants represented teams from California's Los Angeles County and Santa Clara County, Oregon's Multnomah County, the State Departments of Corrections of Maryland, Ohio, Oregon, California, Utah, and Washington. Science faculty from The Evergreen State College, University of Maryland-Baltimore County, University of Utah, and three national resource representatives also participated.

The group convened to present action plans to implement science research, conservation biology, and science/sustainability education as well as cost-savings and revenue-generating programs in detention centers and incarceration facilities nationwide.

The event began with a poster session and included team presentations, panel discussions, and group visioning work. By the end of the workshop, the teams developed a vision for creating a National and International Sustainability in Prisons Project Network.

Each regional group in the emerging Network has proposed sustainability-oriented projects, all of which are based on science and technology, job training, safety, and security.

Science programs often feature propagation and reintroduction of endangered species, such as butterflies, frogs, and native prairie plants.

One of the interesting programs under development by the Ohio Department of Corrections is the proposal to evaluate the feasibility and benefits of breeding and reintroducing the "Eastern Hellbender" in Ohio's rivers and streams. Led by a team of corrections professionals, scientists, the Columbus Zoo, The Wilds, and The Vera Institute of Justice, Ohio, SPP-OH has chosen this endangered species as the focus for science education, skills training, and ecological restoration.

Other facilities, such as Los Angeles County Sheriff's Department's Pitchess Detention Center and Santa Clara County's Elmwood Complex, are pursuing local, organic gardens for job training and reduced food costs, as well as restoration of local creeks and streams bordering or flowing through the residential facilities.

Oregon's SPP has made huge strides. All of the State of Oregon Prisons are involved and offer a wide range of programming. They offer science lectures, growing Kincaid's lupine and golden paintbrush as nectar sources for native butterflies, multiple produce gardens, nature imagery projections in a segregated housing unit, and ongoing and increasingly efficient and environmentally-friendly operations. Plans for the future include butterfly rearing and expansion in all areas of programming.

California Department of Corrections and Rehabilitation (CDCR) has implemented many sustainability programs in its facilities to build green infrastructure, reduce waste, care for animals, bring nature inside the walls, and promote green corrections. Already the CDCR has seen substantial energy savings and waste reductions. The state of California has discussed additional programming with the Center for Natural Lands Management, Mills College/Saint Quentin, and other potential academic and conservation partners.

The Maryland Green Prisons Initiative is a collaboration between the Department of Public Safety and Correctional Services (DPSCS), scientists at the University of Maryland, Baltimore County (UMBC), and Baltimore Ecosystem Study LTER researchers. Current programs include sustainable operations, tree planting, restoration of the American chestnut, Master Gardener certifications, and growing oysters to replenish populations of Chesapeake Bay. Complementing these sustainability programs, faculty and graduate students are planning research programs examining biodiversity patterns in the urban environment.

For more information on the Sustainability in Prisons project, visit <http://www.sustainabilityinprisons.org>.

Source: *CorrectionsOne*

<http://www.asca.net/system/assets/attachments/5811/May2013CorrectionsDirections.pdf?1369229500>

04|20|13 ISSUE



CONTENTS
Dose of Reality: HPV is epidemic, which is odd since it is largely preventable
Ignition Failed: How America's latest attempt at fusion power fizzled
SUBSCRIBE
GIVE A GIFT
RENEW
RSS FEEDS
EMAIL ALERTS
DIGITAL EDITION
PODCAST

Home / Departments / April 20, 2013; Vol.183 #8

Prisons an unlikely laboratory

The Science Life

[ShareThis](#) [Tweet](#) [Share](#) [+1](#)

By Devin Powell
Web edition: April 4, 2013
Print edition: April 20, 2013; Vol.183 #8 (p. 32)

A+ A- Text Size

Graduate student Craig Ulrich carried out his first published research project not in a university lab, but as a prison inmate.

In 2004 Ulrich accidentally shot and killed a college classmate. Convicted of first-degree manslaughter (which in Washington state means a death caused through recklessness), he ended up at the Cedar Creek Corrections Center in Littlerock, Wash. His college background in biology made him a perfect candidate to work in the facility's composting program, set up by Evergreen State College in nearby Olympia. Data he collected appeared in a 2009 research paper showing that composting programs can help prisons cut landfill-bound waste in half and improve wastewater quality. Today Ulrich (left) is pursuing a Ph.D. in biochemistry at the University of Nevada School of Medicine in Reno.



ENLARGE
Two Cedar Creek Corrections Center inmates care for flowering plants destined for the wild. The project teaches prisoners about Northwest landscapes and environmental restoration.
Benjamin Drummond



FOLLOW US

SN Science News Magazine
 55,757

 [@sciencenewsorg](#) 446K followers

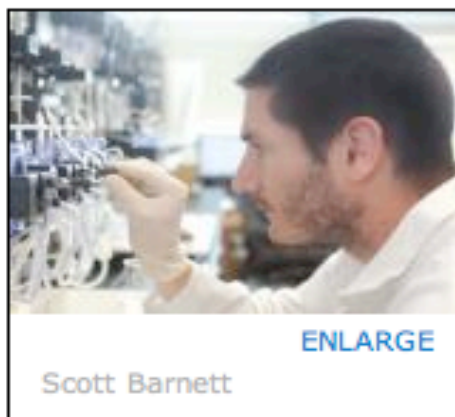
FEATURES

From Great Grandma to You
Of Mice and Man

MOST READ

Molecule in meat may increase heart disease risk

"I went into prison and came out a scientist," says Ulrich, one of many Washington prisoners connected to science and nature by collaborative projects between Evergreen and the Washington State Department of Corrections.



ENLARGE

Scott Barnett

About an hour's drive from Ulrich's former cell, a women's prison works with the Oregon Zoo in Portland on a project raising and releasing endangered Taylor's checkerspot butterflies. Inmate Carolina Landa had no experience in science, but she helped develop a technique for grinding up plantain leaves that helped the butterflies digest them.

"We call it 'plantain pesto,'" says Evergreen graduate student Dennis Aubrey, who worked with

Landa. "It really worked. Insects that ate the pesto went through their first three molts almost twice as fast." Inmates at three prisons grow indigenous plants that provide the butterflies and other insects with food and places to lay eggs outside the prison fences. To date, almost a million golden paintbrush and other prairie plants have been raised at the facilities, and many have been transplanted into the wild.

The programs have another side effect, says Charlie Washburn, correctional program manager at Cedar Creek. One inmate working in the plant program "was always uptight, always angry and always mad," he remembers. "That anger went away out there in the greenhouse," Washburn says. "I got a call after he got out of prison. He said, 'I'm looking for a job in a nursery, and I need a reference.' "



N.J. Drummond

One program at Cedar Creek Corrections Center has prisoners raising endangered Oregon spotted frogs. The prisoners collect data on water quality, frog growth and mortality while rearing the animals. Last fall, a crop of 246 frogs was released into the wild at Joint Base Lewis-McChord near Tacoma, a safe haven for the species.

http://www.sciencenews.org/view/generic/id/349399/description/Prisons_an_unlikely_laboratory



Illustration by Marcos Chin

When prison inmates wield hoes and rakes at Cedar Creek Corrections Center, they're not digging their way to freedom or working on a chain gang. They're working on green initiatives that make the prison more sustainable and help with their own rehabilitation. Located in Washington's Capital Forest, the minimum-security corrections center's unprecedented green efforts save it money, reduce its ecological footprint, and even help spark environmental careers for some prisoners (once they get out). The program's founding scientist and the prison's superintendent hope to implement similar initiatives in other prisons. "People here are exposed to sustainability in a way that's pervasive," says Dan Pacholke, who championed green efforts while he was prison superintendent from December 2003 to August of last year.

Each month, Cedar Creek composts an average of 2,800 pounds of kitchen waste, which nourishes the 13,000 pounds of organic produce grown each year; low-flow showerheads and toilets and rainwater catchments reduce water usage; there is a zero-waste recycling center; and the light bulbs are energy efficient. These initiatives cut garbage bills by about \$500 per month and reduced water usage per inmate from 130 to 100 gallons a day. "Part of what we're getting at is an overall context that hopefully lends itself to a more successful environment that reduces the likelihood that they're oriented toward crime," says Pacholke.

For some prisoners, it seems to be working. Craig Ulrich, an inmate who heads up the composting program, introduced a method of using worms to turn raw materials into rich soils and tweaked the existing compost heap to make it more efficient. Today, he can turn your banana peel into black soil in 45 days. Redirecting organic material like kitchen scraps into the compost rather than down the drain improved wastewater quality so much that the prison scrapped plans to build a \$1.3 million treatment plant.

Ulrich recently submitted a research paper about his composting program to a scientific journal and is applying to a biochemistry PhD program, which he hopes to attend once he's released next summer. Two other former inmates have entered landscaping and horticulture. "We educate as many people as possible on the program in order to get people to incorporate this type of lifestyle when they get out," Ulrich says.

As former Cedar Creek interim superintendent Mike Obenland points out, the green program is "just the right thing to do."