## Sustainability in Prisons Project Newsletter

Spring 2012, Issue 1



*Our mission is to bring science and nature into prisons* 

## SPP Evaluations Internship Experience

by SPP Spring Quarter Undergraduate Intern Jaal Mann

As an undergraduate intern with the Sustainability in Prison Project for the last 10 weeks, there has been a lot to learn. I have spent much of my time analyzing survey responses from the prison lecture series, and it has been fascinating and inspiring to see the positive feedback inmates return.

Inmates learned about benefits of shopping locally and pledged to do so in the future after attending a lecture about organic agriculture. After a lecture on energy use and biofuels, they learned how biofuels could play a role in solving energy problems and "would love to see [biofuels] used by our farming communities to operate their equipment."

The monthly lecture series is able to reach a much broader inmate population than the frog, butterfly, or native plant projects. It is SPP's hope that the wide variety of inmates attending sustainability lectures will take home a different view of the lecture subject and everyday sustainability issues.

Many of these lectures have left inmates with lasting information and skills, such as how to use natural herbs to treat illnesses, that "not just herbicides will kill plants", and "to be mindful of what goes down the drain."

Evaluation of effectiveness is a complex subject, but so far it is evident that not only knowledgebased responses are improving through lectures, but attitudes about the subjects and sustainability as well.

While our evaluation techniques are still being improved, when we hear that attendees have learned "about the importance of balance needed between our use of land, care for land and the value of butterflies," and that "the world is way more complicated than I ever thought," it helps us know that we must be doing something right.

#### DOC Enables Former Frog Technician to Join in the Annual OSF Release Event

By Graduate Research Associate Sarah Weber

The SPP was thrilled to include a former frog technician inmate at the 2011 annual frog release! Harry Greer worked with the Oregon spotted frog project at Cedar Creek Corrections Center since the project's inception in 2009. During the 2011 season Harry raised OSF through July when he was moved to work release. Department of Corrections staff at CCCC went above and beyond to accommodate and clear Harry for attendance at the release event. Many thanks to DOC Superintendent Doug Cole, Captain Charlie Washburn and Classification Counselor Marko Anderson. It was a real joy to see Harry release the frogs he so carefully raised.

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#### **Featured Partner:**



Marc Hayes, Ph.D. Senior Research Scientist Washington Department of Fish and Wildlife

Dr. Hayes directs a multiyear project to save the endangered Oregon spotted frog, a Pacific Northwest species impacted by habitat destruction, predation by exotic plants and animals, and chytrid fungal infections exacerbated by climate change.

From Olympia, Washington, he oversees a network of field biologists and rearing institutions such as Northwest Trek, The Oregon Zoo, Woodland Park Zoo, and our own team at the Cedar Creek Corrections Center (CCCC). Captive reared mature frogs are reintroduced in the fall to nearby wetlands at Fort Lewis, while immature frogs overwinter at CCCC, fattening up for their release in the spring.

With nearly 40 years in amphibian and reptile studies, Marc coordinates Washington State's Agreement for Adaptive Management Research in Headwater Streams for Forests and Fish. His ecological research has taken him from the Pacific Northwest to Arizona, California, Florida, Mexico and Costa Rica – not to mention his own backyard, where he snares and tags tiny alligator lizards darting among the rocks walls.





## SPP Plant Profile: Roemer's Fescue (Festuca roemeri)

By Graduate Research Associate Evan Hayduk

#### Plant Profile:

This is the first installment in a new series of pieces we are calling our plant profiles. Over the coming months we will highlight one of the 40 species of prairie or riparian plants that are grown at Stafford Creek Correctional Facility. This is intended to give you an idea of what we are growing, focus on the conservation importance of each species, and offer a few fun facts about each species.

#### **Basic Information:**

Roemer's fescue is a bluish, graygreen tufted bunch grass that grows from British Columbia (southeastern Vancouver Island and the Gulf Islands), and west of the Cascade Mountains in Washington, Oregon and Northern California. These areas are typically temperate, with maritime influence. Roemer's fescue grows from sea level to about 2500 ft. The species is also found in thinsoiled windswept shorelines on the islands of the Puget Sound, the Strait of Juan de Fuca and the Straits of Georgia.

#### **Ecological Importance:**

A foundation species of the prairies of the Pacific Northwest, Roemer's fescue is predominately found in the glacial outwash prairies of the South Sound and those which have a history of anthropogenic burning. Its quick growth makes this fescue an effective ground cover, but its bunch grass nature allows for the growth of other important prairie species, including associated species common camas (Camassia quamash), field woodrush (Luzula campestris), spike goldenrod (Solidago spanthulata), early blue violet (Viola adunca) and prairie lupine (Lupinus lepidus) to name a few.

### Who is this Roemer guy anyway?

Roemer's fescue is named for Swiss physician, professor of botany and entomologist Johann Jakob Roemer (1762-1819). Roemer was best known for one of the greatest achievements in the history of Swiss entomology, the *Genera insectorum Linnaei et Frabricii*. Roemer also published the 16<sup>th</sup> edition of Carlos Linnaeus' *Systema Vegetabilium*.

# Taylor's Checkerspot Butterflies Thriving at MCCCW

By Graduate Research Associate Dennis Aubrey

After a year of preparation, the butterfly program at Mission Creek Corrections Center for Women is rearing endangered butterflies! In early March we received 755 post diapause Taylor's checkerspot larvae from Mary Jo Andersen at the Oregon Zoo (OZ). When they emerged from their cooler, they found themselves in caterpillar paradise. Cool nights, warm bright days, perfect moisture, fresh leaves every morning, no predators, vehicles, or hard freezes; what more could a caterpillar ask for?

When the caterpillars arrived, light conditions in the new facility were perfect, and they responded immediately. Of the 755, 600 were released a week later onto a Joint Base Lewis-McChord reintroduction site and 155 continued to develop at the prison. Throughout the season inmates weighed and measured adult butterflies as they emerged. Weights are being compared with historic averages from the OZ. One of the original goals of the facility design was to more closely mimic natural conditions in order to produce butterflies as large

as wild-caught individuals. It can be challenging to rear full sized adults in captivity.

The four inmates currently involved with the project are meticulous in their care of the animals. They keep detailed records and observations. Their careful manner was critical as they assisted in a research project examining which host plants the butterflies preferred for oviposition (egg laying). This work is an attempt to better understand which native prairie plants are most valuable to the butterfly as a resource in habitat restoration plots. This critical, relevant research, also involves a second endangered species, stateendangered Golden paintbrush (*Castilleja levisecta*). The outcome could alter restoration project management decisions for both species and make both recovery efforts more synergistic. The Inmates and three students ran a total of 30 research trials over 4 weeks for 5-6 days each week. Adult butterflies were successfully mated resulting in over 3000 Taylor's checkerspot eggs!

#### **Foundation Donations Provide Support for SPP!**

#### By SPP Project Manager Kelli Bush

The Sustainability in Prisons Project (SPP) received generous donations from two different family foundations this spring. The first donation will be used to help support our evaluation program, efforts to expand SPP to other states, and some of our general operating costs. The second donation provides much needed help with general operating costs such as supplies for our conservation projects, printed pamphlets describing our work, education materials for incarcerated individuals or transportation to prisons. Both awards are greatly appreciated and make a significant difference in helping us accomplish our mission.



**Carri J. LeRoy** Co-Director, Sustainability in Prisons Project Member of the Faculty, The Evergreen State College

Hello! It is an honor to address you at the Co-Director of the Sustainability in Prisons Project. I came on board in June of 2011 and have been immensely satisfied by my work with the SPP. I am pleased to note that the SPP has expanded in terms of staff, students and research projects. To that end we would like to thank our generous donors and grantors. We continue to reach broad audiences and have been delighted with recent media pieces (a French film documentary titled "Sentinelles de la Nature," and a recent article in Conservation Magazine, to mention two). Together with our amazing conservation partners, graduate students, DOC staff and inmates we have released over 300 Oregon spotted frogs and raised over 600,000 prairie and riparian plants. We have provided science lectures to over 2400 inmates and helped the DOC reduce costs by diverting from their waste stream 90% of food waste to compost and 89% of recyclables statewide. This fantastically "win-win-win" project is gaining speed nationally and we hope to host a large conference this year and work toward finalizing an SPP handbook. As a side note – you may have noticed our name change – we made this carefully deliberated minor change to better address sustainability in prisons.

Thanks to all of you for making the SPP a successful and inspiring collaboration!

#### Sustainability in Prison Projects Vision:

The Sustainability in Prisons Project 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 and informing sustainable practices. This union of ideas and activities – and 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 typically have little or no access to nature or opportunities in science and sustainability.





#### Sustainability in Prisons Project

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