NATURE NEWS BLOG

Prisoners pitch in to save endangered butterfly

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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 <u>Mission Creek Corrections Center for Women</u> 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 <u>Sustainability in Prisons Project</u> (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 <u>Ecological Society of America Annual Meeting</u> 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 <u>Stafford Creek Correctional Center</u> 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 <u>Cedar Creek Corrections Center</u> 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