



National Fire Plan

Wildflowers and Razorwire:

Minnesota inmates raise native plants for restoration project at Big Stone National Wildlife Refuge

Four years ago, inmates at the Prairie Correctional Facility in Appleton, Minnesota started an eight-foot square garden plot in the prison yard to grow native plants for nearby Big Stone National Wildlife Refuge. It was part of a program initiated by the refuge to help restore its native tallgrass prairie. The garden is now half the size of a football field, and in 2004 yielded 41 pounds of pure wildflower seed from 15 species of plants – a rare commodity worth about \$4,000.

In the 30 years since the refuge was established, about 4,300 acres of native tallgrass prairie has been restored - primarily through the use of prescribed fire, which reduces thatch and stimulates new vegetation. About four to eight grass species are typically found in tallgrass prairies, and as many as 150 species of plants grow in such areas. This type of prairie used to occupy millions of acres, but is now one of the most endangered ecosystems in the United States with less than one percent of such prairie remaining.

The idea of restoring native prairie was a good one, but the refuge couldn't afford to buy the native wildflower seed, which averages about \$200 a pound. The other problem was that when it came to species diversity – the key to successful prairie ecosystems – refuge staff found it nearly impossible to obtain the wide variety of species necessary to do such restoration. The combination of problems forced the refuge to come up with another plan.

In mulling over partnership possibilities, refuge staff and Corrections Corporation of America (CCA), which operates the Appleton prison, came up with the idea for the garden. Parent seed came from plants growing on the refuge, and now the inmates help return the progeny yearly to their native soil. In 2005 the tally of species grown in the prison garden stands at 24, but by the end of the year, it may grow to 30. Over time, the harvestable seed will be made available to other refuges and wetland management districts to enhance other native prairie restoration programs.

“To my knowledge, a prison facility in Louisiana is working with the State Department of Natural Resources (DNR) to develop a partnership that would allow inmates to hand harvest native wildflower seed for the DNR,” said Kim Bousquet, a biologist at Big Stone Refuge who helps run the restoration program. “Shiawassee National Wildlife Refuge in Michigan is also trying to develop a similar type of partnership with a State run prison facility. Both of these partnerships have spawned off of our partnership with CCA from

the outreach efforts we have conducted. I suspect more partnerships like this will develop. It's just a matter of time."

Big Stone Refuge provided plant identification books to the prison when the wildflower production program started, and refuge employees provided technical and logistical support. Refuge managers and biologists assist prison personnel and inmates with plant identification and expertise pertaining to plant life history and the habitat requirements needed to maximize seed production from the native plants. The inmates also are taught when and how to harvest the wildflower seeds. The prison's education department offers horticulture classes to the inmates involved with the project.

"Most of the work in the wildflower production garden is performed by the hands of the inmates," said Bousquet. "A cultivator is used once in awhile between the rows to remove weeds...(but) all of the flower seed is hand-collected, dried, and processed by the inmates. The inmates also document which plants are in the rows, planting dates, and seed harvest dates. In addition, some of the plants are started at the greenhouse in the Prison and later transplanted in the garden."

The CCA is the founder of the private corrections industry and is the nation's largest provider of jail, detention and corrections services to governmental agencies. It runs 61 prisons throughout the United States and is considering developing programs like this one to promote local partnerships and natural resource conservation. Refuges would benefit greatly from such a program, whether it involves native prairie, woodland restoration, endangered species, or even restoring damaged wetlands. The corporation plans to replicate the seed production program in at least seven other prisons.