



Sustainable Living at Cedar Creek Corrections Center

A collaborative effort with The Evergreen State College

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Introduction

The Cedar Creek Corrections Center (CCCC) is a minimum custody federal prison located in the Capital Forest ~ 23 miles SW of Olympia, near Littlerock, WA. ~ 400 male adult offenders with < 4 yrs on their sentence are housed in the facility. CCCC is considered a "work camp": all offenders are required to work in preparation for re-entry to the community as productive citizens.

Sustainability Mandate

The offenders at CCCC are engaging in a unique effort by the prison's superintendent to become "more sustainable".

"Sustainability" is protecting and managing resources to meet current needs without sacrificing the needs of future generations and natural systems. Goals of the facility include:

- reducing dependence on non-renewable energy sources,
- reducing use of toxic materials,
- reducing water use, and
- reducing waste.

Sustainability Activities Include:

- using hybrid vehicles,
- water saving measures:
 - limiting lawn and flowerbed watering,
 - using water meters to monitor water usage,
 - finding and repairing leaks in water distribution system,
 - practicing cold water laundering,
 - maintaining water catchment systems,
 - low water flow showerheads and toilets,
- recycling paper and aluminum products,
- duplex copying for all multi-page copying,,
- increasing the use of organic foods & organic gardening,
- composting significant amounts of food waste, shredded paper, sawdust, grass, and weeds.

Sustainability Lectures

A unique collaboration with The Evergreen State College and CCCC has developed a sustainability lecture series held onsite at CCCC. Local presenters have included:

- Dr. Nalini Nadkarni - Sustainability & The Moss Project;
- Dr. Ken Tabbutt - Groundwater Hydrology;
- Matt Nelson & Steve Abercrombie - Green Roofs;
- Mike Pelly - Biodiesel Fuels;
- Lucas Bucci - Composting with Worms.



Organic gardens at CCCC. The prison harvested 3,188 pounds of produce in 2004, including 18 varieties of hot peppers and 412 lbs. of cabbage. Pumpkins were donated to Littlerock Elementary for Halloween.



Rainwater catchment systems on Administration Bldg & White House. Total water storage = 18,000 gallons. The prison has decreased the amount of water used per offender from 132 gallons/day (6/03) to 111 gallons/day (6/04).



Worms are used to compost food scraps from the kitchen. The worm farm will be expanded in 2005, in an effort to treat all pre-meal scraps at the CCCC.



CCCC recycles all tin cans, aluminum, cardboard, paper and plastic (above). Recycle bins were built for each housing unit, programming areas and for the Administration Building (below).



Steve Abercrombie and Matt Nelson (above), both TESC students in the Masters in Environmental Studies Program, present the benefits of green roof building during the Sustainability lecture series.



Natural habitat for *Metaneckeria* sp. (left), one of four species of mosses grown at CCCC, in an experimental farming effort.

Moss Harvest & Culture

- Working with plants can be beneficial for incarcerated persons.
- Exposure to growing plants can be therapeutic, and the skills learned in growing plants can be applied to earn money once prisoners are released.
- To date, no prison has had a program to grow moss.
- Yet mosses lend themselves to the prison environment due to their small stature, hardiness and lack of need for sharp implements.



Four species of mosses are grown in trays in a shed housed at CCCC (above). The inmates participate in the sampling for dry-weight equivalents to document growth rates.

- Collection of moss and other "secondary forest products" from the forests of WA & OR is a growing industry for the horticultural trade (Muir 2004).
- Recent studies have shown collecting mosses from branches and trunks of trees in old-growth forests, is NOT sustainable - yet collecting continues on an illegal basis.
- This non-forest 'greenhouse' moss growing effort is a direct response to these unsustainable activities currently undertaken in our public forestlands, attempting to reduce pressure on natural habitats.
- Dr. Nalini Nadkarni, in collaboration with CCCC, initiated the project at CCCC to investigate optimal ways to grow mosses for the horticultural trade.
- We are also developing value-added products (e.g., small "moss gardens") that prisoners can create that could build vocational skills once they return to the outside world.
- We intend to communicate our results to the ecological community so our experimental farming efforts might lead to less pressure on natural habitats.

What's Next?

TESC Masters in Environmental Studies graduate students are collaborating with CCCC to construct a green roof on the CCCC facility. Associated with roof construction is a monitoring program to study the roof's water quality, quantity and retention values. The inmates will construct the roof, and be trained by the graduate students to participate in data collection.

Information and Acknowledgements

<http://www.evergreen.edu/researchambassador/moss/>
<http://www.doc.wa.gov/facilities/cccccdescription.htm>
 Muir, P. S. 2004. An Assessment of Commercial "Moss" Harvesting from Forested Lands in the Pacific Northwestern and Appalachian Regions of the United States: How Much Moss is Harvested and Sold Domestically and Internationally and Which Species are Involved? Final Report to U.S. Fish and Wildlife Service and U.S. Geological Survey, Forest and Rangeland Ecosystem Science Center. 80 pages. <http://foregonstate.edu/~mccuneb/MuirReport.htm>
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International Canopy Network (ICAN) - www.evergreen.edu/ican/
 Photographs courtesy of Georgia Harvey (CCCC) and ICAN.