

SAGEBRUSH

^{In} Prisons' Project

Newsletter

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Institute for Applied Ecology

The Sagebrush in Prisons Project is an ecological education & horticultural program for incarcerated adults. It is a partnership of the Institute for Applied Ecology (IAE), Bureau of Land Management (BLM), Wyoming DEQ, and State and Federal Correctional Institutions and is a part of the Sustainability in Prisons Project. The project is currently active at 9 prisons in 5 states including California, Idaho, Nevada, Oregon, and Wyoming.

What should we be doing? Sagebrush Crew To-Do List:

- ☐ Daily Watering
- ☐ Reduce watering & let the containers dry out a little between watering
- ☐ Watch for damping off
- ☐ Perform pH tests every other week
- ☐ Fertilize-Once a week
- ☐ Thinning



The Sagebrush Greenhouse at SRCI.



SRCI Officer Anderson and IAE contractor Ann Debolt thinning sagebrush while physical distancing.

Snake River Correctional Institution Continues Sagebrush in Prisons Project During Covid-19 Quarantine.

by Holly Hovis SPP Idaho and NE Oregon Contractor



IAE contractors Holly Hovis, Nancy DeWitt and Ann Debolt masked and ready to care for plants at the SRCI nursery.

You would never know that Snake River Correctional Institution (SRCI) was in the middle of a Covid-19 quarantine by looking at the sagebrush plants in their nursery. Despite the quarantining of key Adults in Custody (AICs) experienced with the program, the sagebrush plants are all alive and thriving. The minimum-security division of SRCI has grown sagebrush for public land restoration as part of the Sagebrush in Prisons program with the Institute for Applied Ecology (IAE) since 2014. As a result, SRCI staff are well versed in the operation of the sagebrush nursery and plant care. To allow staff to focus on AIC care during the Covid outbreak staff managed to quickly design and install an automatic watering system instead of the usual time-consuming hand watering. While AICs were quarantined, IAE contractors were granted temporary outside access to provide additional nursery management such as thinning plants, fertilizing, and modifying watering systems. Officers responsible for escorting IAE staff to the nursery also lent a hand by thinning and helping with fertilizing. States Holly Hovis, IAE contractor "The adaptability shown by SRCI staff and their dedication to the Sagebrush in Prison Program is impressive and very much appreciated by IAE staff, the Bureau of Land Management Vale District, and the wildlife who will benefit from the habitat we will create." We are all eager for the AICs involved in the program to be able to continue the good work they do in the nursery. Thanks SRCI Minimum for all the energy you put into this program!



Idaho State Correctional Center Education Staff Keep SPP Going During COVID-19 Lockdown.

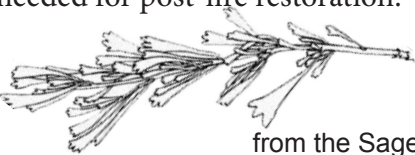
by Holly Hovis SPP Idaho and NE Oregon

Idaho State Correctional Center (ISCC) education staff have gone above and beyond to sustain the Sagebrush in Prisons Project during these difficult times. The education staff has kept over 30,000 sagebrush and bitterbrush plants watered, fertilized, and thinned while the AIC sagebrush crew continues to be on COVID-19 lockdown. Because of the education staff's daily attention to the sagebrush care, AIC will be able to return to their work once restrictions are lifted and Idaho landscapes will have the plants needed for post-fire restoration.



The education staff in the photo at L are: L-R: Stephen Heidt, Rich Murrison, Vicki Wolters, Brenda Davis, and Adrian Quiroz. Kevin Green is not in the photo but has also been a big help.

In the photo at right IAE Contractor Nancy DeWitt gives instructions on thinning sagebrush to ISCC education staff.



Take the Sagebrush Whiz Quiz: How Are Weeds Linked To Wildfire?

from the Sage Grouse Initiative website: <https://www.sagegrouseinitiative.com/sage-whiz-quiz>



- Weeds like cheatgrass and medusahead-rye are called “invasive annual grasses.”
- These non-native grasses dry out much earlier than native vegetation and ignite more easily, leading to hotter, more frequent wildfires that spread rapidly.
- After wildfires, weeds can more easily take over the landscape, creating a vicious cycle that disrupts water and soil cycles, degrades wildlife habitat, and reduces forage for livestock.

Check your answers on the bottom of the other side

- 1. Before the spread of invasive annual grasses, how often (on average) would wildfires occur in the sagebrush-steppe?**
 - A. Every 1-5 years
 - B. Every 5-30 years
 - C. Every 30+ years
- 2. By acreage, what caused the most wildfire damage in the Western U.S. in 2017?**
 - A. People
 - B. Lightning
- 3. Cheatgrass -- one of the biggest invasive species problems in the West -- is estimated to cover how much land?**
 - A. 10-20 million acres
 - B. 50-70 million acres
 - C. 100-150 million acres



2020 Season Update from SPP Nevada

written by Shannon Swim, SPP Nevada Contractor

Lovelock Correctional Center (LCC) has overcome root rot, Covid-19 outbreaks with institution-wide lockdowns, low pH, and the wind! They applied a fungicide to take out the pythium root rot pathogen and have been liming to combat the low pH (SPP liming protocol was developed at LCC. There must be something in the water!). They are also conducting an experiment with three different soil treatments, which were in part the result of a Covid-19 soil delivery crisis. These soil treatments consist of a T22 (biological control), plus lime, and regular soil (control) treatments. Results are still pending. The LCC crew also has a voracious appetite for educational films. They currently have 78,609 sagebrush babies growing well!



The sagebrush nursery at Lovelock Correctional Center

Both crews at Northern Nevada Correctional Center (NNCC) are rockin' the sagebrush growing despite the birds and squirrels! Both the Unit 5 and Unit 3 crews have horticulture experiments going on including a T22 treatment, fine sand, and coarse sand treatments (results still pending, although to date there is no significant difference). The Unit 5 crew took it upon themselves to conduct their own experiment, looking at how soil and containers affect plant growth. Preliminary results: sagebrush likes clay soil and lots of space for its roots! The Unit 5 crew currently has 62,328 sagebrush plus. The Unit 3 crew has been using the "Herlong/Sagebrush Soak" method of watering and have somehow managed to keep the family of squirrels living in the sagebrush area away from the plants. Unit 3 is currently growing 59,980 plants. All told NNCC is growing over 120,000 sagebrush plugs! That is A LOT of sagebrush babies!

WSSC has quite the mix of plants this year. They are growing plants for three different BLM regional offices and have four different species/subspecies, plus a T22 treatment. That means they have five different colors of flagging out in their sagebrush area to differentiate between them all. WSSC currently has 50,371 plant babies.



Healthy sagebrush starts at Northern Nevada Correctional Center Unit 5 on the left Unit 3 on the right



Update from the 'Am-bush-ious' SPP Crew at South Boise Women's Correctional Center

by the South Boise Women's Correctional Center SPP Crew

Our Motto: "The smallest task, can make the biggest difference...one sagebrush at a time."

This sagebrush season has been a bit of a rollercoaster with ups, downs and not quite knowing what is around the next corner. We started out strong in April with a 97% overall germination rate. Then, Covid-19 hit and effected the operations. Our plants went from having 60 plus hours of care to less than 2 hours! There were several days our plants missed being watered because of the limited access to the area due to restrictions at the time. Now that there has been some relief to some of the restrictions, we have been able to nurse many of the pants back to good health. Although we are managing a 75% overall germination rate, we understand that patience is power and through dedicated teamwork the end result will be worth the sacrifice. Through this our mission is to remain am-bush-ious! While there are limitations, we are grateful that the Sagebrush project has brought us together as a team and will continue to strive for excellence!



The Sagebrush Crew at SBWCC masked up in front of their hoop house



SPP crew member filling out the daily log inside the hoop house



SPP crew member thinning plants



Update from the Wyoming Honor Farm

by Tina Russell, SPP Wyoming Contractor

At the Wyoming Honor Farm in Riverton, WY the sagebrush seedlings are growing strong and healthy. The program has recently had a change in the crew with the loss of two veteran workers and the addition of two new workers. With the careful instruction of one of the more experienced crew members the two new workers have learned quickly. All are doing an excellent job at keeping the plants in good shape. They have recently seen a number of ladybugs on the plants which are keeping any potential bad bugs in check.

The program has had two presentation so far this summer. The first was a video recorded presentation from the Wyoming Game and Fish about their resident owl, Jupiter and his special adaptations to the sagebrush prairie ecosystem. The second presentation was from a researcher at The Nature Conservancy (TNC) on their research of the success of various sagebrush planting techniques. The inmates were excited to learn about TNC's pasta machine that is used to develop nutrient rich sagebrush seed pellets for enhanced planting measures.



Close up of healthy sagebrush starts at Wyoming Honor Farm



Inside the green house at Wyoming Honor Farm

Several out-plantings of the seedlings will hopefully happen in early October in the Gas Hills uranium mine reclamation district, with both the inmates at Wyoming Honor Farm and middle schoolers at Lander Middle School. If these plant-outs are cancelled due to COVID19 restrictions it is hoped that various community members will be able to help transplant the sagebrush seedlings. The remaining seedlings will be distributed to BLM offices across the State for out-planting.

