

Seminar

Seed selection in a changing climate



Please join us for a joint seminar by

Bryce Richardson – Genetics and Niche Modelling Guide Restoration in a Changing Climate
Brad St. Clair – Climate-Smart Seedlot Selection Tool: Reforestation and Restoration for the 21st Century



Bryce Richardson is a Research Geneticist at the U.S. Forest Service Rocky Mountain Research Station in Provo, UT. His interests include population genomics, genecology, and phylogenetics of plants. He obtained a B.A. from the College of Idaho, a M.S. from the University of Idaho, Moscow, and a Ph.D. from Washington State University, Pullman.



Brad St. Clair is a Research Geneticist with the U.S. Forest Service Pacific Northwest Research Station in Corvallis, Oregon. His research interests are primarily concerned with understanding how plants are adapted to their environments, and implications for management including reforestation, restoration, tree improvement, gene conservation, and responding to climate change. He obtained a B.S. from the University of California, Berkley, a M.S. from the University of Wisconsin, and a Ph.D. from Oregon State University.

When: February 16, 2017

Where: Yates Building,
Roosevelt Room (2SE04)

Time: 11:00am – 12:00pm

Webinar:

1-888-844-9904

Participant code 3847359#

<https://usfs.adobeconnect.com/seedselection/>



Genetics and Niche Modelling Guide Restoration in a Changing Climate

Bryce Richardson (USDA Forest Service, RMRS-Provo)

Sagebrush ecosystems and the flora and fauna they support are currently under stress. Stresses are particularly strong for Wyoming big sagebrush, occupying the warmer-drier spectrum of these ecosystems. Loss of sagebrush has been the result of disturbance and weed encroachment; however, another underlying and increasingly important factor is climatic variability. For some areas of sagebrush, the notion of restoring to pre-disturbance conditions may need to be re-examined. For example, the climatic niche of Wyoming big sagebrush is expected to decrease by about one-third by 2060 with much of the predicted loss occurring in the Great Basin. I will discuss research that aids in restoring resilient sagebrush ecosystems and mitigates climate change impacts.

Climate-Smart Seedlot Selection Tool: Reforestation and Restoration for the 21st Century

Brad St. Clair (USDA Forest Service, PNW-Corvallis), Glenn Howe (Oregon State University), and Dominique Bachelet (Conservation Biology Institute)

Populations of native plants are genetically different from one another and are adapted to different climatic conditions. Therefore, natural resource managers must match the climatic adaptability of their plant materials to the climatic conditions of their restoration sites. We present a web-based mapping application, called the Seedlot Selection Tool, which can be used to map either current or future climates.

