SEEDS Project Update Winter 2013



About SEEDS

The Seed Enhanced Ecological Delivery Systems (SEEDS) project is funded by the Canadian Oil Sands Innovation Alliance (COSIA). The project seeks to develop and test new seed delivery mechanisms for establishing a range of shrubs and herb species on disturbed sites. A central objective is to test whether 'pucks' that contain seeds and microsites can be used to cost effectively establish shrubs and herbs on reclaimed sites.



Finding the right mix

The first step in the SEEDS project is finding the right mix of puck components. It's proving to be difficult to develop pucks that hold together when dry, but absorb and retain moisture to aid in seed emergence. The team is experimenting with components as diverse as terra cotta, biochar, pulp mill sludge and even municipal compost.





Once the team narrows down the list of possible components, the team will test to see how the different pucks hold up when frozen, heated and under a range of moisture conditions. Through these tests, the team hopes to identify ideal recipes and begin testing pucks in the field.

Next Steps

Up next for the team is to start looking at the seeds themselves. They will look at a variety of seed coatings and seed treatments to better understand techniques that enhance seed emergence. This information will then be paired with knowledge about the best puck recipes to see what combinations result in the optimal conditions for seed establishment and survival.

WHO IS ON THE TEAM?

Richard Kryger (NRCan-CFS) Dave Larsen (Global Restoration) Tim Vinge (GOA) Doug Kulba (GOA) Scott Nielsen (UofA) Chris Powter (OSRIN) Ann Smreciu (Wild Rose Consulting)