Partnerships for Developing Regional Native Seed Sources for Use in Restoration

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Acquiring native seed from genetically, local sources to use in restoration and revegetation projects on western U.S. rangelands requires long term planning and collaboration. Grass and forb seed of local provenance is difficult to locate in the marketplace and in many cases is more expensive than non-native and native cultivars. There are many benefits to using seed of local origin: they assist in returning more normal fire intervals and fuel loading; use less water; provide food sources for native insects, birds and other wildlife; compete with weeds; are less likely to be invasive or overly competitive with other native vegetation; protect biodiversity and stewardship of our natural heritage and are more genetically diverse and therefore able to adapt to changing climate and environmental conditions. In order to develop native seed for restoration in an efficient and economic way, a partnership was formed within the Deschutes Basin of Central Oregon.

The Deschutes Basin Native Plant Seedbank (DBNPS) formed as a collaboration of over 20 partners to collect, propagate, store, and provide local seed of common restoration species to federal, state, local agencies; non-profit organizations; private companies and landowners involved in restoration and revegetation activities in the Deschutes Basin. The Seedbank secures funding, coordinates contract growers, distributes seed, facilitates cooperation between formal partners and other users of the Seedbank and provides educational opportunities concerning the benefits of native plants, their use and seeding guidelines. In 2004, a formal agreement, Memorandum of Understanding (MOU), was drafted and signed by the cooperators.

In the last three years the organization accomplished many of its goals: we wild collected and contracted native seed farmers to grow seed of eight species (six grasses and two forbs); we designed and distributed 10,000 brochures to provide guidelines for seeding native species; sold over 1,000 kilograms of seed to 30 customers for an average price of $12 USD/lb.; and secured funding for our operating budget by receiving federal and state grants, donations and seed sales. In the future we plan to monitor collaborators' revegetation projects in order to determine the effectiveness of our seed.

After a few years of successful operations, the Seedbank recently formed a non-governmental, non-profit organization (NGO). DBNPS is similar to a buyers cooperative providing relatively affordable, local seed of bluebunch wheatgrass, (*Pseudoroegneria spicata*), bottlebrush squirreltail (*Elymus elymoides*), Basin wildrye (*Leymus cinereus*), Sandberg's bluegrass (*Poa secunda*), Idaho fescue (*Festuca idahoensis*), Thurber's needlegrass (*Achnatherum thurberianum*), western blue flax (*Linum perenne* var. *lewisii*), and basalt milkvetch (*Astragalus filipes*). Species for collection and propagation were selected by a majority vote of the partners. Wild collections incorporated the diversity within the Basin; elevation, slope and soil conditions. All available seed was sold each year. The Seedbank has proven to be an effective model for other regions interested in creating partnerships for developing native plant materials.