

Cooperators

USDI Bureau of Land Management, Great Basin Restoration and Native Plant Initiatives, and UT, NV, ID, and OR State Offices

USDA Forest Service, Rocky Mountain Research Station, Shrub Sciences Laboratory, Provo, UT and Boise, ID

Utah Division of Wildlife Resources, Great Basin Research Center, Ephraim, UT

USDA Agricultural Research Service, Forage and Range Research Laboratory, Logan, UT

USDA Natural Resources Conservation Service, Aberdeen Plant Materials Center, Aberdeen, ID

USDA Agricultural Research Service, Bee Biology and Systematics Laboratory, Logan, UT

USDA Agricultural Research Service, Western Regional Plant Introduction Center, Pullman, WA

USDA Forest Service, National Seed Laboratory, Dry Branch, GA

Association of Official Seed Certifying Agencies and State Foundation Seed Programs of ID, NV, OR, UT, and WA

Brigham Young University, Department of Plant and Animal Science, Provo, UT

Colorado State University, Tri-River Area Cooperative Extension, Grand Junction, CO

Oregon State University, Malheur Experiment Station, Ontario, OR

Utah Crop Improvement Association, Logan, UT

USDA Agricultural Research Service, Eastern Oregon Agricultural Research Center, Burns, OR

Boise State University, Department of Biology, Boise, ID

Montana State University, Department of Land Resources and Environmental Sciences, Bozeman, MT

Utah State University, Department of Plants, Soils, and Biometeorology, Logan, UT

USDA Forest Service, Pacific Northwest Research Station, Corvallis, OR

USDA Forest Service, Umatilla National Forest, Pendleton, OR

Private seed industry

For more information, visit these web sites:

Great Basin Native Plant Selection and Increase Project
<http://www.fs.fed.us/rm/boise/research/shrub/greatbasin.shtml>

Great Basin Restoration Initiative
<http://www.fire.blm.gov/gbri>

Related links:

Revegetation Equipment Catalog
<http://reveg-catalog.tamu.edu>

Seed Testing Protocols
<http://www.nsl.fs.fed.us/>



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Great Basin Native Plant Selection and Increase Project



PROJECT SUMMARY

Demand for native plant seed is increasing, especially in federal agencies such as the Bureau of Land Management (BLM). BLM is guided by Executive Orders, Congressional direction, the National Fire Plan, and the Great Basin Restoration Initiative to increase, where feasible and practical, the use of native plant seed. The BLM, in cooperation with the USDA Forest Service, Rocky Mountain Research Station, initiated this collaborative research and development project in 2000 to increase the availability of and success in restoring native plant communities across the Great Basin. There are currently 26 major cooperators in 11 states and more than 20 private seed growers working together to meet project objectives that emphasize native forb increase.

Focus of the project is beginning to shift to application strategies and technologies to improve native seed establishment. For example, research on techniques to increase native plant diversity in introduced grass seedings is ongoing and a new project to evaluate rangeland drills and determine appropriate native seed application rates is being initiated. This project is continuing to improve land manager's ability to obtain and use native plants on rehabilitation and restoration projects.

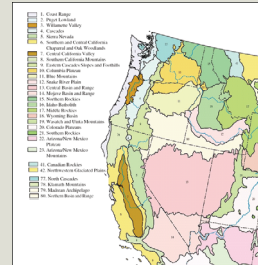
GOALS

- ◆ Increase the variety of native plant materials, particularly native forbs, available for restoration in major plant communities of the Great Basin.
- ◆ Develop seeding technology and equipment for reestablishing native species and communities.
- ◆ Provide for transfer of research results to seed growers and land managers.



RESEARCH OBJECTIVES

Develop plant materials, particularly native forbs, examine variation within species, and formulate seed transfer guidelines.



Determine factors regulating seed germination and develop seed harvesting, cleaning, testing, and storage technology.



Develop cultural practices including irrigation regimes, herbicide options, and seeding rates and dates for commercial seed production of individual species.



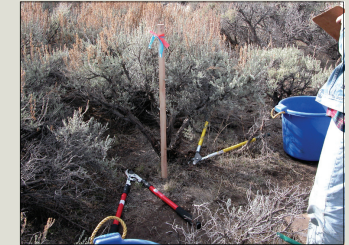
Cooperate with Foundation Seed organizations and private seed growers to facilitate seed increase of selected native species.



Identify pollinators, seed predators and plant diseases, and develop management strategies to enhance agricultural seed production.



Evaluate approaches for managing wildland stands of Wyoming big sagebrush and antelope bitterbrush for seed production.



Examine interactions of exotic invasives and restoration species.



Develop techniques for adding native plant diversity to crested wheatgrass stands.

Develop seeding technology for reestablishing functional native communities.



Provide for rapid and effective application of research results.

