



*Native Plant Materials
Development Program*

Paradise Ridge Prairie

Coastal Prairies and the King Range National Conservation Area

The Bureau of Land Management's Arcata Field Office in northern California manages approximately 68,000 acres in the King Range National Conservation Area which has several designations including Wilderness, National Landscape Conservation System, and Area of Critical Environmental Concern. The area is comprised of mixed evergreen and coniferous forests, chaparral, coastal scrub, coastal dunes, and coastal prairies.



Arcata
Field
Office
(California)

For the past 60 years, management practices have decreased the use of fire and intensive livestock grazing, leading to a 30-40 percent reduction in coastal prairies primarily through conifer encroachment. At the same time, non-native annual and perennial grasses have taken hold and influenced the remaining prairie composition. While non-native grassland cover provides some ecological benefits, BLM seeks to enhance native, perennial grass populations which provide greater ecosystem services including deeper rooting, soil stability, nutrient cycling and water infiltration and retention, year round green forage for wildlife, and improved diversity to benefit native insects, pollinators, and wildlife.

The King Range Native Grass Program: An Integrated Partnership Approach

As outlined in the King Range Resource Management Plan, the King Range Native Grass Program's enhancement projects are pursued through an integrated approach including burning, grazing, reseeding, and transplanting with locally collected seed stock. The Program utilizes partners including the Mattole Restoration Council, Americorps watershed stewards, and youth employment from Nicks Interns to collect native seed within the King Range. The collected seed is propagated and cared for at a local nursery in Petrolia which is managed by the Mattole Restoration Council and partially supported by BLM. Collections of approximately ten different species occur annually in order to supply locally developed native plant materials in the form of increased seed and propagated grass plugs. The seed is applied when appropriate following landscape disturbances, and plugs are used to enhance species composition and populate corridor connectivity projects in selected prairies within the King Range.



Success Benefits the Ecosystem and the Community

Grass species such as Idaho fescue, prairie junegrass, Pacific hairgrass, leafy reed grass, California mountain brome, blue wild rye, Lemmon's needlegrass, California melic, California oatgrass, and tall trisetum have been collected, propagated, and reintroduced to prairies where populations are sparse or absent. As of February 2013, the Program has planted over 150,000 plugs to create more than 300 new colonies of native perennial grasses across the landscape. A native grass colony unit is a group of 500 plugs of the same species, spaced about 1.5 feet apart. As a result of the work, BLM staff have observed a dramatic increase in upland game activity in the project areas.

Private growers involved in the Project have increased their knowledge of germination and propagation of quality plugs for maximum transplant success. Container shape and size, cropping of plants to beef up root systems, and hardening off plants outdoors prior to transplantation have all been found to contribute to heartier plants for successful planting.

Local community volunteers and school-aged youth have been introduced and educated in grassland ecology, identification of native perennial grass species, and the benefits of perennial grasses versus non-native annual and perennial grasses. Over one hundred youth have participated in planting projects as well.

The Project has gained momentum within the community. The Mattole Restoration Council developed another branch of the Program to benefit private landowners and ranchers wanting to improve pasture composition and function. Enthusiasm and support from the community has encouraged the Mattole Restoration Council to apply for and be selected to receive outside grants to grow the effort in the region at large.

From left to right: Native grass plugs at a site ready for planting, Prairie Junegrass (Koeleria macrantha), Roemer's Fescue (Festuca idahoensis ssp. roemerii). All photos courtesy of the BLM Arcata Field Office.



For more information on the native plant work being done by the BLM Arcata Field Office or by the national Native Plant Materials Development Program, contact:

Jennifer Wheeler, Arcata Field Office Botanist, jsweele@blm.gov, (707) 825-2316
Peggy Olwell, Plant Conservation Program Lead, polwell@blm.gov, (202) 912-7273, blm.gov/plants/