

Bridger Plant Materials Center

Is the place you call home a large-acre farm/ranch operation? A small-acre ranchette? A single-family residence in town or in a subdivision? Or perhaps recreation and relaxation, are pursued in the country or in a National Park, aside a clean stream or lake. Maybe hunting upland game birds or big game animals in the wide open spaces or the timbered high country is a preferred activity? Has employment in agriculture, construction, logging, mining, or tourism been a way of life? If so, then there's a good chance that a plant materials center has devoted time and effort in helping solve the environmental problems that occur in all of the above! Vegetative solutions are applied to these and other conservation problems with a variety of plant materials (i.e., grasses, wildflowers, shrubs, and trees); thus the name 'Plant Materials Center (PMC).'

Plant Materials (PM) is a national program within the NRCS, with 26 PMCs across the United States, including Alaska, Hawaii, Puerto Rico, and the National PMC in Beltsville, Maryland. In the geographical region of the Northern Great Plains, four PMCs (Meeker, CO, Manhattan, KS, Bridger, MT, and Bismarck, ND,) cooperate to transcend state boundaries and provide customer service. The Bridger PMC primarily serves Montana and Wyoming, and actively collaborates with an additional seven Centers in the western United States. Furthermore, our service area has a Plant Materials Specialist (PMS) based out of the NRCS State Office in Bozeman, MT. The PMS is responsible for overall PM program management in Montana and Wyoming, PM efforts at the field office level, coordination of field evaluation trials and cooperative demonstration plantings, provides representation for PM on national issues, and assists in distribution and delivery of foundation seed to various state Crop Improvement Associations.

The Bridger PMC was established in 1959 and is a 140-acre farm owned by the Soil and Water Conservation Districts of Montana and Wyoming and operated by the USDA Natural Resources Conservation Service (NRCS). Conservation districts in both states play a major role in identifying conservation problems or needs and providing valuable input to the development of the Center's Long-Range Plan. Their ownership, involvement, and contributions, along with many other cooperating partners, has kept the PMC focused on issues important to farmers and ranchers, public and private land managers, university personnel, commercial seed growers, Native Americans, state forestry experts, international interests, environmentalists, highway administrators, community development specialists, and nursery operators, just to mention a few.

A large portion of the work conducted at the Center revolves around plant selection and development. The process begins with identification of an environmental problem/need and generally proceeds as follows: wildland collection of plant species found growing on sites similar to the problem area; initial planting and screening of test material (usually at the PMC) for a period of two to four years; secondary evaluation of better performing test material in comparison to commercially available species (another two to four years); selection of superior performing test material and initial seed increase (one to three years); off-Center field trials to evaluate plant performance under "real world" conditions (multiple years) and; final release of a selected plant cultivar. The PMC is then responsible for future maintenance and production of foundation seed.

and its distribution to commercial seed growers. The Bridger PMC has released 12 cultivars: nine grasses, one legume, one shrub, and one tree species.

In addition to plant selection and development, transfer of related technology to field offices and other partners is very important. For example, it's necessary to present seed dormancy-breaking protocols, planting techniques, seed processing mechanisms (harvesting, cleaning, and storage), cultural treatments (mechanical, chemical, and nutrient) sexual and asexual propagation, forage yield strategies, and seed production techniques in both verbal and written formats. The staff also provides tours of the Center and conducts training as requested. Persons with questions and/or other interests can call 406-662-3579, fax 406-662-3428, write to Rt. 1, Box 1189 Bridger, MT 59014, or visit 99 South River Road in Bridger. The PMC is now an active navigator on the communication superhighway and can be found on the Internet at <http://Plant-Materials.nrcs.usda.gov>.

Susan R. Winslow
Agronomist