

# PLANT MATERIALS TODAY

A newsletter from the USDA-NRCS Montana-Wyoming Plant Materials Program for those Interested in Plants and Conservation



Volume 18 Number 4

September 2012



For more information on Plant Materials or for electronic access to this and other documents, access our websites, [Montana NRCS](http://www.mt.nrcs.usda.gov) at <http://www.mt.nrcs.usda.gov> or [national Plant Materials Program](http://plant-materials.nrcs.usda.gov/mtpmc/) <http://plant-materials.nrcs.usda.gov/mtpmc/>. Direct inquiries to USDA-NRCS, Plant Materials Center, 98 South River Road, Bridger, MT 59014, phone: 406-662-3579, FAX: 406-662-3428.

## 🌻 Feature Topic 🌻

**WHAT IF PLANT MATERIALS CENTERS WENT AWAY? Much of your seed would suddenly become less available and more expensive!**

There are many roles the Plant Materials program and centers play, but one of the most overlooked, underappreciated, and misunderstood functions, is the production of Foundation seed. Most NRCS field staff and the general public have little knowledge of our responsibilities in producing this seed, or what happens when Foundation seed of our releases is unavailable.



Figure 1. Foundation seed production field of Meriwether Germplasm blanketflower.

The production of Foundation seed, and subsequent commercial seed production, is so important in fact, that it is a major planning

consideration in plant testing research before a single seed is collected for testing. If a species does not produce adequate seed, if producing that seed is extremely difficult, or if the species does not lend itself to mechanical cultivation, it will never become cost-efficient to grow commercially. If growers cannot make a profit,



Figure 2. Harvesting Foundation seed.

the release will not be available, or will be prohibitively expensive, and demand will consequently drop.

The process goes like this. Plant Materials Centers (PMC) are responsible for producing Foundation seed of every one of its own releases, *in perpetuity*, or until demand is deemed to no longer exist. Foundation seed of Bridger's 31 releases, because it is the germplasm used to start commercial fields, is

highly regulated, inspected by the certification program through the Montana Seed Growers Association at Montana State University, and must meet very stringent standards for purity – even higher than certified seed. Foundation



Figure 3. Tags of various classes of seed.

seed is the seed that growers use to produce registered or certified seed for eventual sale to the public. No seed is sold directly from the Bridger PMC to the consumer in order to avoid competition with the commercial seed industry. Want Foundation seed for seed production? Call the Foundation Seed Program at Montana State University, or the Wyoming Crop Improvement Association. Need certified seed for a project? Call a seed grower or commercial seed wholesaler from the directory on the Montana NRCS website at <http://www.mt.nrcs.usda.gov/technical/ecs/plants/technotes/pmtechnoteMT57.html>.

Wonder what the Bridger PMC farm staff does all winter when they cannot be outside? No, they are not polishing the John Deere. They are processing, weighing, inventorying, storing, and shipping Foundation seed! Cleaning to the high level of Foundation standards requires extensive skill and experience. The Bridger PMC maintains numerous pieces of specialized equipment designed to remove unwanted material from the target crop. Cleaned lots are sampled and tested at the Seed Laboratory at



Figure 4. Super 47B seed cleaner.

MSU. If standards are not met, the entire lot must be cleaned until Foundation quality is achieved.

So, the next time you are developing a conservation seed mix, or looking for commercial seed of a conservation release, remember the Plant Materials Program. Compare the availability and cost of wildland collection of grasses and forbs to certified lots of Plant Materials releases. If there is high quality and relatively inexpensive seed available, there is a good chance it came through the USDA-NRCS Plant Materials program.

#### **Bridger PMC Staff**

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal employment opportunity provider and employer.