



# Foundation Seed Update

**Plant Materials Center, Bismarck, North Dakota**

March 2009

by Dwight Tober, Plant Materials Specialist

## Foundation Seed Availability

Timely rains helped the generally good foundation seed harvest in 2008. We are starting to build up supplies of some species. The Bismarck Plant Materials Center (PMC) is responsible for growing foundation seed for 21 grass and forb releases. The goal has been to try and keep seed on the shelf at all times, but we realize this is not always possible due to limited field space, isolation requirements, weather conditions, and demand for the seed. The PMC will no longer attempt to maintain quantities of foundation seed on an annual basis. The new strategy is to build up a supply of seed on the shelf, and target seed fields for five to ten year rotations. There may be times when foundation seed is not available for several years. The table below lists releases currently available in good supply, and releases in short supply. Those not listed below are available in limited quantities. The PMC shipped 14 orders totaling 1,705 PLS pounds of foundation seed in 2008. Requests vary from year to year but the trend has been down the last several years. We will start sending out order confirmations in March for requests on the waiting list. If you have any changes to your orders or want to check availability give me a call.

### Who We Are

The Bismarck Plant Materials Center (PMC) is one of 27 PMCs operated by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). The Bismarck PMC serves the States of Minnesota, North Dakota, and South Dakota. It is the mission of the plant materials program to develop plant materials and plant science technology for the conservation of our natural resources. The Bismarck PMC was established in 1954 as part of the Soil Conservation Service, now Natural Resources Conservation Service.

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Seed Currently on the Shelf (field to be reduced in size or rotated out in 2009)	Seed Currently in Short Supply (new fields being established)
Tomahawk Indiangrass	Mandan Canada wildrye
Badlands little bluestem	Rodan western wheatgrass
Red River prairie cordgrass	Pierre sideoats grama
Medicine Creek Maximilian sunflower	Bismarck purple coneflower
Bismarck purple prairieclover	Bismarck stiff sunflower
Manska pubescent wheatgrass	Nordan crested wheatgrass
Reliant intermediate wheatgrass	Bad River blue grama
Mankota Russian wildrye	

## Planning for Future Grass Releases

Seed collection, nursery evaluation, plant selection, seed increase, and new plant release are the typical steps involved in getting a new plant into commercial production and conservation use. A new plant release is of limited value and cannot solve a conservation problem until it is in commercial production (seed growers) and made available for purchase (seed vendors). For your planning purposes, the following species are in one of these plant development stages, and will hopefully be available to you in the next 3 to 10 years.

Species	Stage	Primary Use	Selection
Prairie sandreed	Increase	Native seedings	Disease resistance
Sand bluestem	Evaluation	Native seedings	Seed production
Indiangrass	Evaluation	Native seedings, landscape	Biomass, visual appeal
Prairie junegrass	Evaluation	Native seedings, turf	Seedling vigor, establishment
Prairie dropseed	Increase	Native seedings, landscape	Seedling vigor, establishment
Virginia wildrye	Collection	Forage, native seedings	Biomass, seed production

## New Release 'Manifest' Intermediate Wheatgrass Available

The most popular forage grass species at the Bismarck PMC is intermediate/pubescent wheatgrass. Ease of establishment, high forage production, and improved protein and digestibility are some of the reasons for this number one rating. Maska, Reliant, and Manifest are the three varieties available from the PMC. Manifest is the newest variety released last year cooperatively with the USDA ARS Northern Great Plains Research Laboratory at Mandan, North Dakota. Manifest has shown greater ability to withstand grazing while maintaining good forage production and quality. We anticipate good demand for certified seed from commercial growers for this new release. It is also being tested in various bioenergy trials in comparison with switchgrass and other grass species. Foundation seed is currently available from the Bismarck PMC.

## Foundation Seed Order Information 2009

Following are prices of Foundation and Select Class grass and forb seed produced by the Bismarck PMC. This seed is for sale through NDSU Foundation Seedstocks to commercial seed growers for the sole purpose of certified seed production. To order seed, contact Dwight Tober by email at [Dwight.Tober@nd.usda.gov](mailto:Dwight.Tober@nd.usda.gov) or call (701) 530-2075. All seed prices are subject to change. Once ordered, a confirmation letter will be sent from the PMC and billing will be sent from NDSU Foundation Seedstocks. Payment in full to NDSU Foundation Seedstocks must be received before seed shipment. If payment is not received within 30 days, the order will be cancelled. Prices are based on a Pure Live Seed (PLS) pound. Shipping charges (in the U.S.) will be \$1.00/PLS pound.

RELEASES	CLASS*	COMMON NAME	COST/PLS LB
<b>Native Warm-Season Grasses</b>			<b>U.S. Dollars</b>
Badlands ecotype	Select (G2)	little bluestem	14.00
Itasca germplasm	Select (G2)	little bluestem	14.00
Bad River ecotype	Select (G2)	blue grama	12.00
Bison	Foundation	big bluestem	12.00
Bonilla	Foundation	big bluestem	12.00
Dacotah	Foundation	switchgrass	6.00
Forestburg	Foundation	switchgrass	6.00
Pierre	Foundation	sideoats grama	12.00
Red River germplasm	Select (G1)	prairie cordgrass	65.00
Tomahawk	Foundation	Indiangrass	10.00
<b>Native Cool-Season Grasses</b>			
Lodorm	Foundation	green needlegrass	6.00
Mandan	Foundation	Canada wildrye	not available in 2009
Rodan	Foundation	western wheatgrass	6.00
<b>Introduced Grasses</b>			
Mankota	Foundation	Russian wildrye	8.00
Nordan	Foundation	crested wheatgrass	6.00
Manifest	Foundation	intermediate wheatgrass	4.00
Maska	Foundation	pubescent wheatgrass	4.00
Reliant	Foundation	intermediate wheatgrass	4.00
<b>Native Forbs/Legumes</b>			
Bismarck germplasm	Select (G1)	narrow-leaved purple coneflower	not available in 2009
Bismarck germplasm	Select (G1)	purple prairieclover	25.00
Bismarck germplasm	Select (G1)	stiff sunflower	175.00
Medicine Creek germplasm	Select (G1)	Maximilian sunflower	50.00

\*Generation number for select class materials is shown in parentheses (G1 = generation 1).