

Warm-Season Forage Grasses from the Bismarck PMC and Partners

Improved forage grasses for livestock production have been a high priority at the Bismarck PMC since the beginning of the program. The PMC works closely with the USDA Agricultural Research Service and the three States' Agricultural Experiment Stations in the release of new varieties and production of foundation seed. In addition to increased forage yields, improving the protein content and digestibility of the forage base will add to livestock profitability. The recent publication "Grasses for the Northern Plains—Volume 1, Cool-Season" is one of the more popular plant materials documents to download on the web, and had received 3,377 downloads from February through June 2008. "Volume 2, Warm-Season" is in a first draft stage and is expected to be completed by spring 2009.



Indiangrass

Tall sod-forming grass with excellent palatability and forage quality. Will not persist on drier sites. Forage production not as good as big bluestem or switchgrass.

- ◆ **Tomahawk** – earliest maturing variety of Indiangrass.



switchgrass

Tall, rhizomatous grass with yield potential of over five tons/acre on good sites. Palatability and forage quality not as good as big bluestem or Indiangrass. Recent information documents potential toxicity to sheep, goats, and horses grazing on pure switchgrass.

- ◆ **Dacotah** – earliest maturing and shortest variety; upland type.
- ◆ **Forestburg** – two weeks later than Dacotah; higher forage yield.

big bluestem

Tall, sod-forming grass with high palatability and forage quality in mid-summer.

- ◆ **Bison** – earliest maturing variety.
- ◆ **Bonilla** – matures two weeks later than Bison.
- ◆ **Sunnyview** – matures three weeks later than Bison; most productive variety.



prairie cordgrass

Tall, wet site species with strongly spreading, scaly rhizomes. Fair palatability in late spring prior to boot stage.

- ◆ **Red River Natural Germplasm** – only seed propagated release commercially available.



sideoats grama

Drought tolerant mid-grass that can provide high quality forage on shallow soils and steep slopes. Excellent seedling vigor and establishment.

- ◆ **Pierre** – earliest maturing formal variety.
- ◆ **Killdeer** – informal release; one week earlier than Pierre; no certification.



Cool-Season Forage Grasses from the Bismarck PMC and Partners

crested wheatgrass

Drought tolerant, long-lived bunchgrass with very early green-up.

- ◆ **Nordan** – old variety but still in demand for early season pasture, especially on droughty sites.
- ◆ **NU-ARS AC2** – broadly adapted composite with stable yields.



Canada wildrye

Easy to establish, short-lived species with large coarse leaves, excellent seedling vigor, and fair palatability. Performs well on sandy soils and has some flooding tolerance.

- ◆ **Mandan** – an old variety that has experienced renewed interest primarily for its compatibility with native mixtures and its adaptation to sandy soils.



Russian wildrye

High forage quality, long-lived bunchgrass with fine basal leaves that is used primarily to extend the grazing season into late fall. Protein content remains at relatively high levels when saved for fall grazing.

- ◆ **Mankota** – selected for improved seedling vigor, leaf disease resistance, and higher forage yields.



western wheatgrass

Drought resistant, long-lived sod-forming grass with excellent saline tolerance and adaptation to clay soils. Also tolerates flooding. Stands develop slowly from seed but spread quickly by rhizomes.

- ◆ **Rodan** – more productive on coarse textured soils and in higher rainfall areas.



creeping foxtail

High forage quality, long-lived sod forming grass that grows best on wet or imperfectly drained soils; the seed is light and fluffy.

- ◆ **Garrison** – matures early and seed shatters readily.



green needlegrass

Drought tolerant, early maturing bunchgrass adapted to a wide range of soils. Good forage quality. Seed may have a high level of dormancy.

- ◆ **Lodorm** – selected for lower seed dormancy.



intermediate/pubescent wheatgrass

Vigorous, fast-growing sod-forming grass that is easy to establish. High forage yields with good digestibility.

- ◆ **Reliant** – good compatibility with alfalfa.
- ◆ **Manska** – improved animal daily gains.
- ◆ **Haymaker** – higher average forage yields.
- ◆ **Manifest** – higher forage yields and persistence under grazing.



Grass identification training at the PMC in 2008