

Collecting Sand Cherry

The PMC would like assistance in collecting sand cherry this summer. District plantings that are 5 or more years old would be of interest. Significant variation exists in planting stock of sand cherry. We would like to collect a small amount of seed from some of the larger and more vigorous shrubs with good tasting fruit. Seed will be propagated and plants established in a replicated nursery at the PMC for evaluation. Selected plants will be used to develop a new variety of sand cherry. Please notify the PMC if you have plantings in your county and would be willing to participate in the study.



Photo Credit: USDA-NRCS PLANTS Database / Herman, D.E., et al. 1996. North Dakota tree handbook. USDA NRCS ND State Soil Conservation Committee; NDSU Extension and Western Area Power Administration, Bismarck.

Dwight Tober, Plant Materials Specialist

Purple Prairieclover: A Native Forb for Grazing with Lots of Potential*

*Reprinted with permission from the Semiarid Prairie Agricultural Research Center, Swift Current, Saskatchewan's "Forage and Grazing Research in the Semiarid Prairies," November 2010



The benefits of purple prairieclover are numerous.

Purple prairieclover (*Dalea purpurea*) is a warm-season, tap-rooted, drought-resistant, nitrogen-fixing legume which grows to a height of 30 to 75 cm. At Agriculture and Agri-Food Canada, Semiarid Prairie Agricultural Research Center (AAFC-SPARC), the plant is 30 to 45 cm tall. Several stems may grow from a single base and flowers are pinkish-purple on elongated spikes 2 to 4 cm long. Found to be very palatable, purple prairieclover is grazed at various physiological stages of maturity (vegetative to flowering) by cattle at AAFC-SPARC from the end of June to the beginning of October. In terms of forage quality, its digestibility averages 65 to 50% and protein content averages 20 to 12% from the vegetative to seed pod stage, respectively. Since purple prairieclover is a warm-season forb, much of its growth is during July and August. Generally, this is the time when many of our cool-season grasses are in that mid-summer nutritional slump (i.e., forage quality is declining as the plant matures). Thus purple prairieclover in your pastures can improve the nutritional profile and help to extend the grazing season. Researchers at AAFC-Lethbridge

and AAFC-SPARC have found that purple prairieclover contains unique condensed tannins, properties which not only can improve protein utilization by cattle but also will inhibit the growth of *Escherichia coli* 0157:H7. In addition, forages with condensed tannins are considered bloat-safe. Purple prairieclover is a prolific seed producer and the plant, once established, can increase under grazing. All these potential benefits make purple prairieclover an interesting plant. Studies are underway on how to best utilize purple prairieclover in a grazing system for western Canada. Work will continue until 2012. Support for this research comes from the Beef Cluster Initiative, Southwest Forage Association (SWFA) and Horned Cattle Purchases Fund (HCPF). (Contact: Alan Iwaasa, Ruminant and Grazing Management, 306-778-7251, alan.iwaasa@agr.gc.ca)

New Forester

The Bismarck PMC staff would like to welcome Craig Stange to the PMC. Craig will be working part time as the PMC Forester. Craig was raised on a livestock and grain farm in southeast Iowa. From as early as six years old, he can remember planting trees. He was always playing in the trees and forests of the farm, mostly as a way to avoid weeding the garden. He graduated from Iowa State University with a Bachelor of Science degree in Forest Management. From 1977 to 1992, he was a soil conservationist or district conservationist in three field offices in Iowa. Beginning in the fall of 1992, he became the state forester for NRCS in North Dakota and still retains that title. Starting in March of this year, he also became half time forester with the PMC, following the retirement of Mike Knudson. Craig will have responsibility for active tree and shrub projects at the PMC including:



Craig evaluates black currant.

- maintaining all breeder tree and shrub stock, as well as seed collection, processing, and distribution
- evaluation and selection of native hawthorn
- assist North Dakota State University with evaluation and selections of chokecherry that are resistant to X-disease
- evaluation and selection of improved bur oak sources
- evaluation of lodgepole pine as a windbreak species
- evaluation and selection of improved skunkbush sumac
- direct seeding of woody species in riparian zones
- continue to collect data from the Off-Center Evaluation Planting site at the Dickinson Research and Extension Center.