

### Who We Are

The Bismarck Plant Materials Center (PMC) is one of 27 PMCs operated by the USDA Natural Resources Conservation Service.

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. A principal task of the PMC has always been tree improvement. There is a need to evaluate how different trees and shrubs will perform in various conservation plantings under diverse soils and climatic conditions.

### Staff

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## Edible Windbreaks

Edible landscaping is the use of food producing plants in landscape planting, usually in residential settings. So why not edible windbreaks for rural plantings?

Since 2006, the Bismarck Plant Materials Center (PMC) has released three fruit-bearing shrub selections, 'Prairie Red' hybrid plum, 'McKenzie' black chokeberry and Riverview Germplasm American black currant. These shrubs are well suited to windbreaks, as well as fruit production. The chokeberry, also known as Aroniaberry, and the currant fruit can be used in wine and juice production, as well as jams and jellies. Producers who raise grapes should consider establishing a row of McKenzie black chokeberry or Riverview Germplasm American black currant.



**Prairie Red plum**  
(inset photo: harvested fruit)

McKenzie black chokeberry (*Aronia melanocarpa*) was released in 2008 as a seed propagated cultivar for use in conservation plantings. This medium-sized shrub has become popular with fruit producers in the Midwest, who prefer to use Aroniaberry as the common name. The fruit contains high amounts of antioxidants, even more than cranberries. McKenzie is being grown and sold by numerous nurseries in the Midwest and Eastern U.S. The Midwest Aronia

In 2006, the PMC released Prairie Red plum, a seed propagated cultivar of hybrid plum. The PMC received this plum source in 1973 from Wilfred Herman, a farmer and self taught horticulturist from Miller, SD. The fruit from this cultivar is larger on average than the fruit of common plum. Bareroot seedlings are available from Big Sioux Nursery in Watertown, SD. Limited amounts of seed of Prairie Red plum are available from the Bismarck PMC.



**McKenzie black chokeberry fruit**

Association was organized in 2010. The membership is made up of growers and processors of this healthful fruit. The organization can be contacted at [www.midwestaronia.org](http://www.midwestaronia.org)

American black currant (*Ribes americanum*) is native to the Midwest and Eastern U.S. Riverview Germplasm originates from along the Big Sioux River, not far from the Big Sioux Nursery at Watertown, SD. The fruit, which contains Vitamin C, can be used to make jelly, wine or pie. This species is not the same as the introduced black currant (*Ribes nigrum*). Riverview Germplasm American black currant seedlings are available from Big Sioux Nursery. Seed of this species is very small and will pass through the standard window screen mesh (18x16). A limited amount of seed of Riverview Germplasm black currant is available from the Bismarck PMC.



photo credit: Oikos Tree Crops

**fruit of  
American black currant**

## Fourwing Saltbush

The Bismarck PMC has been growing four wing saltbush (*Atriplex canescens*) for almost 10 years. Fourwing is a long lived perennial shrub that is native to the western Dakotas, south to Texas and west to Washington. It is usually found on dry, alkaline soils. The seed source grown by the PMC was collected at the SDSU Cottonwood Range and Livestock Research Center in Jackson County. The PMC staff has hand harvested seed annually and has enough seed to provide a packet to conservation nurseries interested in producing bare root seedlings.

## PMC Releases

The Bismarck PMC has released the following trees and shrubs. Most of them are cultivars, but several are tested genotypes. Informational brochures which describe the plant and its potential uses are available on request, or can be viewed (some) or downloaded from the Bismarck PMC website under Publications. Bareroot seedlings for most releases are available from selected conservation nurseries. Limited amounts of seed for some releases are available. If interested in brochures, seed, or seedlings, contact the PMC at (701) 250-4330.

'Midwest' Manchurian crabapple	'Regal' Russian almond
'Cardan' green ash	'Legacy' villosa lilac
'Oahe' hackberry	Silver Sands germplasm sandbar willow
'Sakakawea' silver buffaloberry	Survivor germplasm false indigo
'Centennial' European cotoneaster	'Prairie Red' hybrid plum
'McDermant' Ussurian pear	'McKenzie' black chokeberry
'Homestead' Arnold hawthorn	Prairie Harvest germplasm hackberry
Riverview germplasm American black currant	

## Mike Knudson Retires



Mike Knudson, Forester/Assistant Manager at the Bismarck Plant Materials Center (PMC), has retired effective December 31, 2010, after 36 years of federal service. Mike began his NRCS career as a Soil Conservationist at the Wahpeton Field Office, later moving to the Lisbon Field Office as District Conservationist, and then to the PMC as Forester. The PMC will miss his knowledge and expertise, but wish him well in retirement.



**Mike at an off-center evaluation planting**