



United States Department of Agriculture
Natural Resources Conservation Service
Plant Materials Program

'Sakakawea'

Silver Buffaloberry

Shepherdia argentea

A Conservation Plant Release by USDA NRCS Plant Materials Center, Bismarck, North Dakota



'Sakakawea' silver buffaloberry (*Shepherdia argentea* [Pursh] Nutt.) is a cultivar released in 1983 by the Natural Resources Conservation Service (NRCS) in cooperation with the State Agricultural Experiment Stations of Minnesota, North Dakota, and South Dakota.

Description

'Sakakawea' silver buffaloberry is a large shrub with silvery, oblong leaves and predominantly red fruit. It is winter hardy and drought and alkali tolerant. On favorable soils, Sakakawea silver buffaloberry reaches a mature height of 12 to 16 feet in 15 to 20 years. Crown width is 16 to 19 feet. Sakakawea spreads by sucker growth and can form a dense thicket. It fixes nitrogen via root nodules. Branches are spiny and have gray-brown bark. The leaves are opposite, simple, and oblong. They are 1 to 2 inches long and ¼ to ⅜ inch wide. Both surfaces are covered with silvery scales, and side veins are indistinct. Male and female flowers grow on separate plants. They bloom in April and are clustered on short spur branches or scaly stalks. The dry, thin-walled fruit ripens in September and is ⅛ to ¼ inch in diameter. The fruit is predominantly red, but 12 to 20 percent of female plants produce yellow fruit.

Source

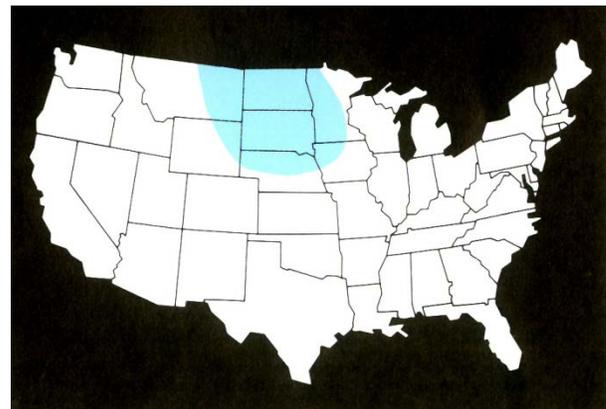
Sakakawea silver buffaloberry originated from open pollinated seed collected in 1954 from the cultivar 'Goldeye' at the Canadian Department of Agriculture's research station in Morden, Manitoba. Seedlings used for advanced testing were established at the SCS Plant Materials Center in Bismarck, North Dakota.

Conservation Uses

Sakakawea is highly recommended for revegetation of surface mined lands, transportation and transmission corridors, flood plains, and other disturbed areas. It is also recommended for the outside rows of farmstead windbreaks and multi-row field windbreaks and for wildlife habitat plantings. Mule deer browse the stems and twigs, and grouse and songbirds eat the fruit.

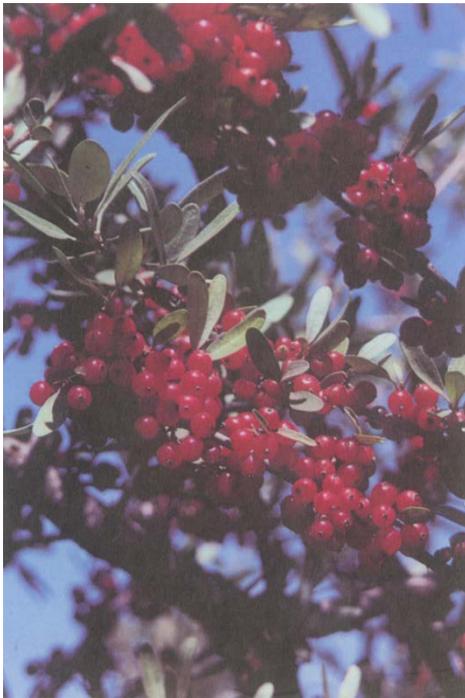
Area of Adaptation and Use

Sakakawea is adapted in the area of the northern Great Plains shown on the map below. It performs well on a variety of soils that are deep or moderately deep, well to somewhat poorly drained, and fine to moderately fine textured. Sakakawea also grows well on soils with a claypan subsoil, but should not be planted on soils that are coarse textured, extremely saline, or droughty. Sakakawea is tolerant of moderately saline and high pH soils. Sakakawea is winter hardy down to -40°F. Mean survival ranges from 60 to 95 percent under field conditions. Establishment and rate of growth are affected by weed competition, shade, drought, and adverse soil conditions. Seed production is good to excellent in most years. In performance, Sakakawea is equal or superior to common silver buffaloberry. It was selected for conservation uses because of its uniform growth and good to excellent stand establishment, survival rate, and seed production. It has no apparent insect problems.



Establishment and Management for Conservation Plantings

Cultivate the site and keep it fallow for at least 1 year before planting Sakakawea seedlings. Plant the seedlings in spring as soon as the ground thaws, when soil moisture is high. Recommended spacing in the row is 3 to 4 feet. Use 2-year-old seedlings that are 12 to 24 inches tall and have a stem diameter of 3/16 to 1/2 inch just above the root collar. One-year-old seedlings that reach this height and diameter are also suitable. Control weeds for 5 or 6 years. Sakakawea forms a solid stand and begins producing fruit in 3 or 4 years. Mature stands of buffaloberry can be rejuvenated by late winter coppicing (removal of all top growth leaving 2 to 4-inch stumps). Regrowth usually exceeds 50 percent of pre-coppiced height within one year.



Seed and Plant Production

Propagate Sakakawea from seed. Mature fruit can be collected in September and processed by wet maceration. Store the seed under cool, dry conditions. Seed can be planted in fall or spring. For spring planting, stratify the seed for 90 days in damp sand at 41° F. Plant 30 to 50 seeds per linear foot of row, and cover with ¼ inch of soil.



Availability

For conservation use: Sakakawea silver buffaloberry seedlings are available from conservation nurseries in the Upper Midwest. For more information on availability and use of Sakakawea silver buffaloberry, contact your local NRCS field office or Bismarck Plant Materials Center.

For seed or plant increase: For the purpose of establishing a seed orchard, limited quantities of seed may be available from the NRCS Plant Materials Center.

For more information, contact:
USDA-NRCS Plant Materials Center
3308 University Drive
Bismarck, ND 58504
Phone: (701) 250-4330
Fax: (701) 250-4334
<http://Plant-Materials.nrcs.usda.gov>

Citation

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For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov/>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov/>>