

TREES AND SHRUBS

Prairie Species
Urban Forest Species

COMMON PRAIRIE TREE SPECIES

Willow, cottonwood, boxelder, green ash, elm and bur oak are the most widely distributed and common trees along the rivers and streams of South Dakota and therefore have each been described on a separate factsheet. There are, however, many other tree species native to our prairie, particularly along the Missouri River between Nebraska and South Dakota. There are also a few upland forests in our state, mostly concentrated in the northeast corner, that have trees unique to that habitat.

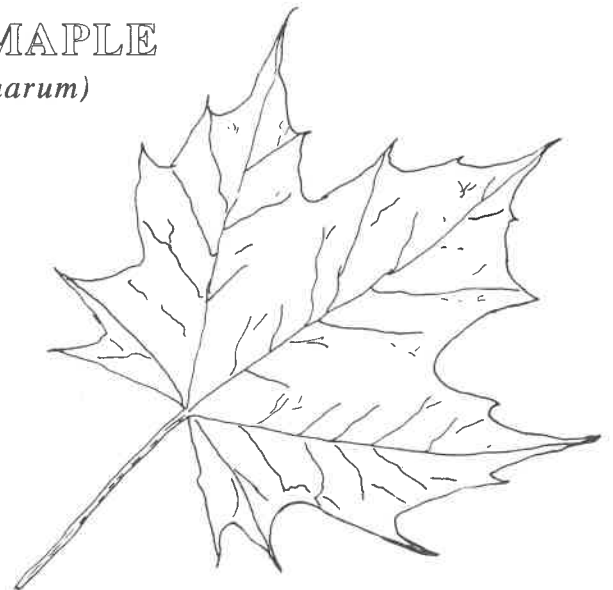
SUGAR MAPLE

(*Acer saccharum*)

Description

The Lakota name for sugar maple is *Canhasan*, meaning "white bark tree." Sugar maple has an *opposite*, 5-lobed leaf and a pointed terminal bud. The bark tends to be smooth and dark gray in color.

Related Species: There is a closely related species, known as black maple (*Acer nigrum*). The primary difference between the two maples is that black maple has a 3-lobed rather than a 5-lobed leaf. The differences are so minor that some botanists consider black maple to be a variety of sugar maple (*A. saccharum* var. *nigrum*) rather than a separate species. It is a native species from Minnesota to New England, and has been reported to be in Roberts and Marshall County.



Black maple requires similar growing conditions as sugar maple, except it can also grow on the moist soils found near the river. Black maple is used for the same purposes as sugar maple.

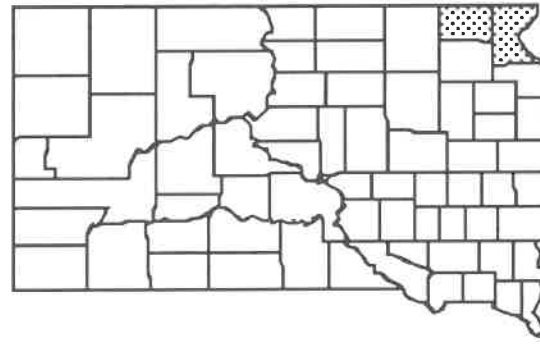
Distribution

Sugar maple is found throughout northeastern United States. In South

Dakota, it is limited to a few locations in Roberts and Marshall County. It can be planted in southeastern S.D. and parts of the Black Hills.

Sugar maple is found on fertile, upland, well-drained soils. It is usually located on the north-facing slopes where the temperatures are generally cooler than the more exposed south-facing slopes. Sugar maple is a very shade tolerant tree and is part of the *climax* forest community.

Size: Sugar maple is a long-lived species, often over 300 years, and may reach 80 to 100 feet (24 to 30 m). However, the champion sugar maple in S.D. is 67 feet (20 m) and is located in Sioux Falls.



Native Distribution for Sugar Maple

Significance

Sugar maple is known for its *hardwood*, brilliant red-orange fall color, and maple syrup. The sap is collected in the spring by drilling shallow holes into the trunk and placing a tap. The sap is collected in buckets and boiled to a syrup. It takes about 32 gallons of sap to make a gallon of syrup. In late winter and early spring squirrels may gnaw off the tips of branches or bark to feed on the sugary sap.

SILVER MAPLE

(*Acer saccharinum*)

Description

The Lakota name for silver maple is *Tashkadaⁿ*. Silver maple has an *opposite*, 5-lobed leaf. The lobes are much deeper than sugar maples and have a silvery underside. The bark is a light gray and is broken into long, scaly plates.



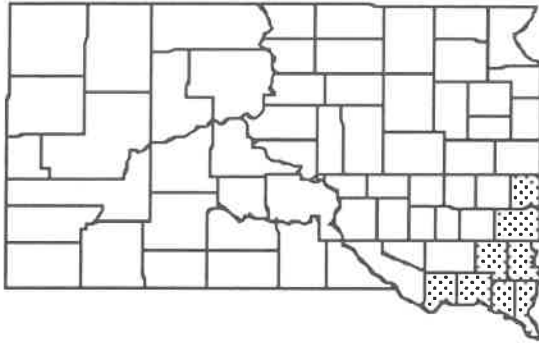
Distribution

Silver maple is found throughout the eastern United States. In South Dakota it is native to the extreme southeastern corner of the state. It can be planted in most East River locations as well as the Black Hills.

Silver maple is a common floodplain species. It, along with many other floodplain species, matures its seeds in the spring. If they land on moist soils, they germinate quickly. Silver maple is moderately tolerant of shade and usually is found in association with ash.

Size: In the milder climate of the eastern United States, silver maple can become 75 to 120 feet (23 to 37 m) tall. Our

state champion is located in Vermillion and is 60 feet (18 m) tall.



Native Distribution for Silver Maple

Significance

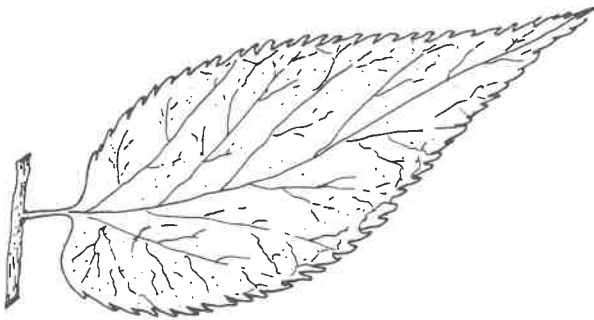
Silver maple is fast growing so it is a popular tree for windbreak and shade tree planting in the eastern half of South Dakota. Its usefulness as a shade tree is limited by the tendency of the leaves to turn yellow, especially on *alkaline soils* where iron is not available to silver maples. The American Indians made syrup from silver maple sap and a black dye from the twigs. Silver Maple has weak, brittle wood so is not an important timber species.

HACKBERRY

(*Celtis occidentalis*)

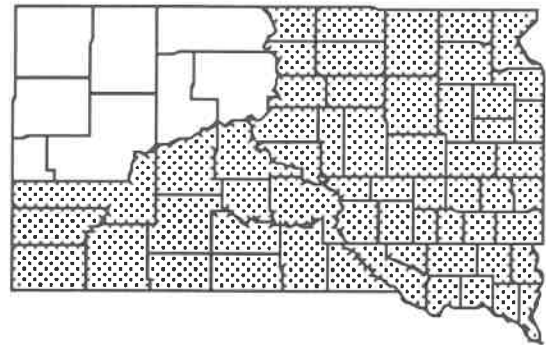
Description

The Lakota name for this species is *Yamnúnnuġapi*, meaning "crunching with teeth." Hackberry has an *alternate*, finely-toothed, *ovate* leaf that is lopsided at the base. The small round fruit becomes purple when ripe. The bark is grayish and covered with distinctive warty projections.



Distribution

Hackberry is found from North Dakota to Vermont and Oklahoma to North Carolina. It is found throughout most of South Dakota, except in the north-western quarter.



Native Distribution for Hackberry

Hackberry is a floodplain species. In the western extreme of its range, however, it is often found in ravines or low areas. The moisture conditions in these areas are more dependable than some rivers since the water drains in from the surrounding area. The depressions also shelter the trees from the harsh winds and summer heat. Along the lower Missouri River, hackberry is found on the upper slopes of the floodplain rather than in low areas.

Size: Hackberry is a long-lived tree, often reaching the age of 150 years. It can reach heights of 80 to 100 feet (24 to 30 m). Our state champion is 65 feet (20 m) tall and is in Brandon.

Significance

Hackberry wood is fairly soft and coarse grained. It is only occasionally used for lumber. The primary use for hackberry is as a shade and windbreak tree. The

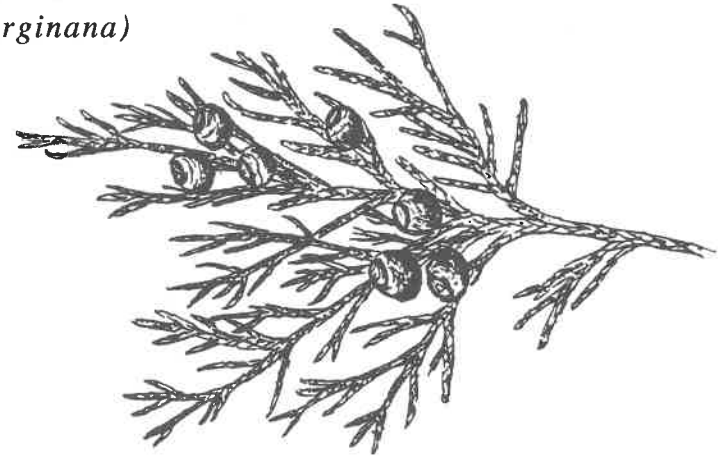
Dakotas used the hackberry berries as a flavoring for meat. The fruit is eaten by pheasants, wild turkeys, robins and other birds.

EASTERN REDCEDAR

(*Juniperus virginiana*)

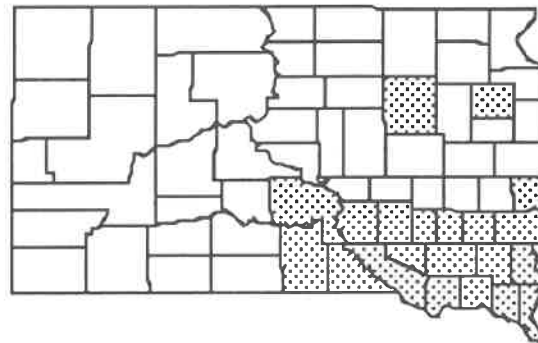
Description

The Lakota name for this species is *hante'*. Eastern redcedar has an evergreen, scale-like needle. Instead of the typical cone found on pines and spruces, it produces a small, round berry-like cone that is pale green to dark blue. Eastern redcedar is native to every state east of the 100th meridian and is the only evergreen tree native to the eastern half of South Dakota. It is now planted throughout South Dakota.



Distribution

Eastern redcedar is found on a wide variety of sites in the eastern part of its native range. However, it is limited to bottomlands in the western, drier locations. Eastern redcedar is considered intolerant, but sometimes occurs as an *understory* species in cottonwood forests along the Missouri.



Related Species: There is a closely related juniper, known as Rocky Mountain juniper (*Juniperus scopulorum*), found in some west river locations, the Black Hills and on to the Pacific coast of Washington state. The two species are very close in appearance and were considered as one species for many years. The primary difference between the two is that Rocky Mountain juniper cones mature in two seasons instead of one. In South Dakota, Rocky Mountain juniper is found on dry soils along with ponderosa pine.

Eastern Redcedar Native Distribution

Size: Eastern redcedar is a long-lived tree, often surviving more than 200 years. Old trees are not common in South Dakota since even light fires can injure the thin-barked tree. The tree can reach a height of 120 feet (37 m), but in Yankton our state champion is 37 feet (11 m) tall.

Significance

Eastern redcedar is a common shelter-belt and windbreak species in our state, because of its tolerance to *alkaline* and dry soils. It is especially desirable for

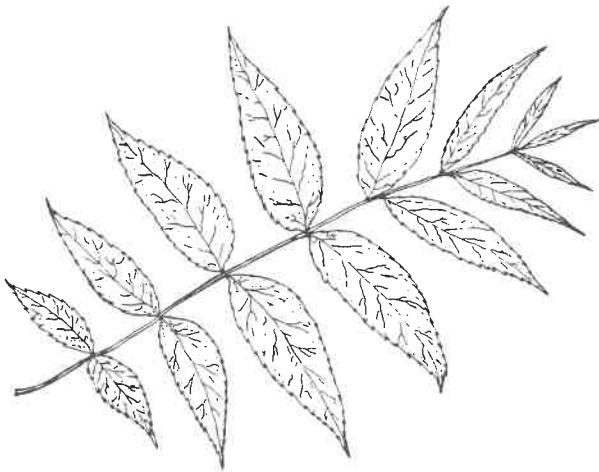
wildlife habitat plantings. The American Indians used the *cones* in medicine and they are still used as a flavoring in gin. The *cones* are eaten by many small mammals and birds.

BLACK WALNUT

(*Juglans nigra*)

Description

The Lakota name for black walnut is *cansápa*, meaning "black tree." This species has an *alternate, pinnately compound* leaf with 15 to 23 *leaflets*. The bark is divided by narrow furrows and is grayish black in color.



Distribution

Black walnut is native throughout the eastern United States. It is found in the southeastern part of South Dakota and can be planted in many communities east of the river.

Near the western limits of its range, black walnut is confined to moist floodplains. It is considered intolerant and occurs commonly as scattered trees in an elm-ash-hackberry forest. Groves of walnuts may sometimes grow because the squirrels buried the nuts in that location. Walnut roots release a toxin that is harmful to certain grasses and trees. This provides a natural method of weed con-

tol which allows the walnuts to become established. Unfortunately, this same toxin is very poisonous to vegetable crops such as tomatoes and potatoes so gardens must be kept away from walnut trees.



Native Distribution for Black Walnut

Size: Black walnut mature in about 150 years. It can be a large tree perhaps 70-90 feet tall (21 to 27 m). The champion in South Dakota is in Sioux Falls and is 86 feet (26 m) tall and 98 inches (249 cm) in circumference.

Significance

Black walnut, because of its rich, dark heartwood and durability is a valuable veneer wood. In 1984, a single tree in south-central Minnesota sold for \$35,000! The *nuts* are also an important crop, with certain varieties of walnuts selected just for their large, easily extracted nut meats. The American Indians found the nut an important food source. The nut was eaten plain, mixed with honey or served in a soup. A black dye was also made from the nut husks.

CHOKECHERRY

(*Prunus virginiana*)

Description

The Lakota name for this species is *Canpa'hu*, meaning "bitterwood stem." Chokecherry has an *alternate*, oval, fine-toothed leaf. The white flowers occur during May. The reddish-black fruit ripens in midsummer.



Size: Chokecherry, as with many other cherry species, seldom lives more than 40 or 50 years. Chokecherry usually does not become more than 40 feet (12 m) tall. South Dakota has not yet recognized a state champion.



Native Distribution for Chokecherry

Distribution

Chokecherry can be found throughout South Dakota. Chokecherry is very intolerant of competition. It is a *pioneer species* in recently disturbed soils, particularly along stream banks. Chokecherry does not tolerate flooding so it does not grow next to the stream or in low swampy areas. It is a common tree in the Black Hills, where it is an understory tree in ponderosa pine-quaking aspen forests.

Significance

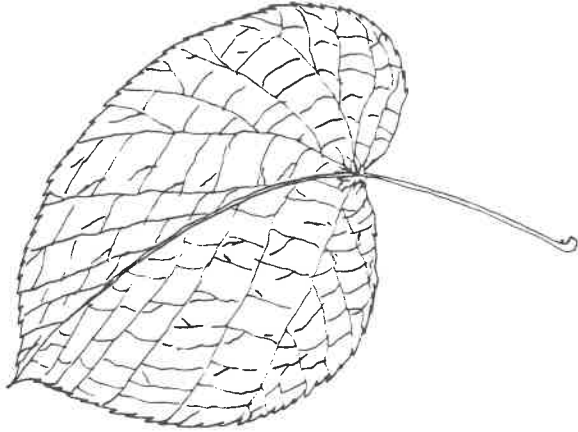
Chokecherry has become a popular *ornamental* tree. Shubert chokecherry, a *cultivar*, is a small, flowering tree that has purplish-colored leaves during the summer. Chokecherry is very important to the Dakota and Lakota cultures. A summer month of the Dakota calendar is called *Canpásapa-wi*, "The month when cherries are ripe". The fruit was eaten fresh or dried for winter storage. It was also used as the dried fruit in pemmican.

BASSWOOD

(*Tilia americana*)

Description

The Dakota name for basswood is *Hintacan*, meaning "hair's wood." Basswood has an *alternate*, heart-shaped, coarsely-toothed leaf. The light brown bark is broken by shallow, vertical ridges.

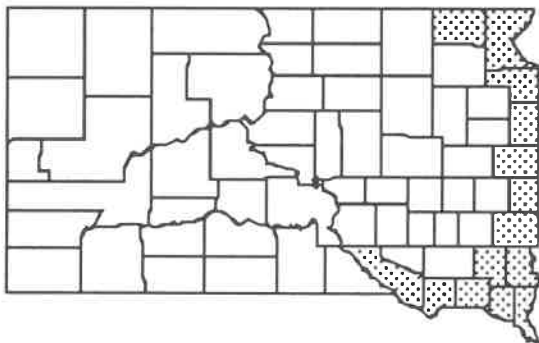


Basswood does best on clay loam soils that occur on floodplains and upland depressions. It is not common on swampy or sandy soils. Basswood is a shade tolerant species that forms a climax community with sugar maple in the northeast corner of our state.

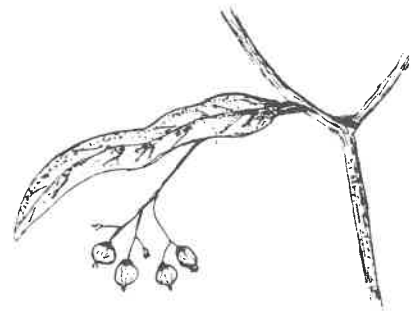
Size: Basswood live to be about 150 years old. They are susceptible to decay and large, old trees are often hollow. They generally reach 80 to 90 feet (24 to 27 m) in height. The state champion is in Sioux Falls and is about 70 feet (21 m) tall.

Distribution

Basswood is native from eastern North Dakota to New Brunswick and south from Kansas to North Carolina. It is found in the counties that form the eastern boundary of South Dakota and also along the Nebraska border from Union to Charles Mix County. Basswood can be planted in most East River communities, as well as the Black Hills



Native Distribution for Basswood



Significance

Basswood is soft, stringy and not very durable. It is rarely used as lumber, but is sometimes considered a pulp species. The American Indians used the stringy inner bark for making cords and ropes. Basswood flowers attract bees and are a source for excellent honey. The most common use of basswood is as an *ornamental* tree. Basswood, along with its closely related European species, little-leaf linden (*Tilia cordata*), is a common sight in lawns throughout eastern South Dakota.

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