

Recommended Trees for North Dakota Communities



American elm lined street, Bismarck 2019

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- Trees with **BLUE** highlighted text are links to a website and/or PDF with more information. (Items in blue text below are also links.)
- Numbers which follow tree descriptions indicate references (p.18) for that tree.
- Most of the References on page 18 also have links.

Please keep **DIVERSITY** of species in mind– communities should take steps to choose varieties that do not currently dominate the landscape. Follow this guideline:

- 20% or less of trees from the same Genus
- 10% or less of trees from the same Species

EXAMPLE:

Ulmus (Genus) *americana* (Species) 'Lewis & Clark' (Cultivar)

Common Name: 'Prairie Expedition' American elm

A Tree Inventory & Plan (TIP)/public tree inventory* is an excellent resource for managing community trees. Go to <https://ndcitytrees.org/NorthDakota/> , click 'Explore Cities'. Find your city and click on it. Scroll down and click 'Charts'. This will show you a pie chart of all of the tree species in your community. **If any tree species on your list are more than 10%, avoid choosing those species when selecting trees for planting.**

*contact [NDFS Community Forestry staff](#) if your community does not have a TIP/public tree inventory.

For more information on Tree Classification, please visit [The Arbor Day Foundation](#)

Large Trees (45' & up)

- Boulevard width: 7 feet or larger
- Planted more than 35 feet away from other trees

ELM *all elms listed have resistance to Dutch elm disease (DED)

'PRAIRIE EXPEDITION' AMERICAN ELM

(*Ulmus americana* 'Lewis & Clark')

Height: 55' **Spread:** 60' **Zone:** 3

Shape: Rounded to spreading vase

Foliage: Dark green **Fall Foliage:** Yellow

NDSU selection, fast growth, **moderate maintenance** during formative years. Tough and extremely cold hardy. High DED resistance. (1,2,6,7,8,10,11,12)



'TRIUMPH' ELM

(*Ulmus* 'Morton Glossy')

Height: 60' **Spread:** 35-40' **Zone:** 4

Shape: Upright

Foliage: Glossy, deep green **Fall Foliage:** Yellow

Very fast growth, **moderate maintenance** during formative years. Excellent disease and pest resistance. (2,6,7,8,10,11)



A NOTE ON ELMS: There are many different DED resistant elms available. Please be aware of MAINTENANCE information. The elms above require **moderate maintenance**. This means, once established (one or two years after planting), these elms will require regular pruning during their "formative years" to maintain shape. Structural pruning is very important in young elms to maximize optimal health and longevity. The following elms are DED resistant, but require **VERY HIGH MAINTENANCE** (regular annual pruning maintenance after establishment):

- 'Princeton' elm (*Ulmus americana* 'Princeton') Zone 4
- 'Valley Forge' elm (*Ulmus americana* 'Valley Forge') Zone 4
- 'Cathedral' elm (*Ulmus* 'Cathedral') Zone 4

LINDEN/BASSWOOD

AMERICAN LINDEN/BASSWOOD

(*Tilia americana*)

Height: 75-90' **Zone:** 3 **Spread:** 40-50'

Shape: Rounded at maturity

Foliage: Large, dark green **Fall Foliage:** Pale yellow

Tall, spreading, adaptable, native linden. Fragrant yellow flowers and large, dense foliage. (1,4,6,7,10)



'BOULEVARD' LINDEN

(*Tilia americana* 'Boulevard')

Height: 60' **Zone:** 3 **Spread:** 30'

Shape: Pyramidal

Foliage: Dark green **Fall Foliage:** Yellow

Fragrant yellow flowers. Ideal for boulevards and other sites where height is needed but width is limited. (1,7,10,11)



'FRONTYARD' LINDEN

(*Tilia americana* 'Bailyard')

Height: 60-75' **Zone:** 3 **Spread:** 40'

Shape: Rounded

Foliage: Green **Fall Foliage:** Yellow

Broadly pyramidal when young and nicely rounded with age. Dense foliage offers excellent shade. (1,7,10)



'REDMOND' LINDEN

(*Tilia americana* 'Redmond')

Height: 40-60' **Zone:** 3 **Spread:** 25-30'

Shape: Pyramidal, uniform

Foliage: Glossy, light green **Fall Foliage:** Bright yellow

Dense foliage, very hardy. Fragrant clusters of pale yellow flowers. (1,7,10,11)



MAPLE

'SIENNA GLEN' MAPLE

(*Acer x freemanii* 'Sienna')

Height: 50-75'

Zone: 3

Spread: 40'

Shape: Pyramidal-oval

Foliage: Green

Fall Foliage: Yellow, orange, red

MN origin. Tolerant of alkaline, acidic and wet soil conditions. (1,7,11)



A NOTE ON MAPLES: In North Dakota, maples are often subject to iron and manganese chlorosis on high pH (alkaline) soils, which may cause dieback or death. Maples with iron and manganese chlorosis will exhibit yellow leaves with bright green veins. The selection above has been shown to tolerate alkaline soils. For more information on iron chlorosis in trees, please visit: <https://www.ag.ndsu.edu/publications/lawns-gardens-trees/iron-chlorosis-in-trees>

WHITE OAK

BUR OAK

(*Quercus macrocarpa*)

Height: 60-80'

Zone: 3

Spread: 60-80'

Shape: Rounded, open

Foliage: Dark green **Fall Foliage:** Yellow-brown to purple

Drought tolerant native oak of the white oak family. Tolerates a wide range of soil types and air pollutants. Attractive corky bark. (1,4,6,7,9,10,11)



'URBAN PINNACLE' OAK

(*Quercus macrocarpa* 'JFS-KW3' PP22815)

Height: 55'

Zone: 3

Spread: 25-30'

Shape: Narrow, upright

Foliage: Glossy, dark green **Fall Foliage:** Orange-yellow

Lobed, dark green, glossy foliage. Heat and drought tolerant. (1,6,10,11)



SELECTIONS FOR DIVERSITY

NORTHERN CATALPA

(*Catalpa speciosa*)

Height: 50-60' **Zone:** 4 **Spread:** 35-40'
Shape: Upright, oval
Foliage: Green, heart shaped **Fall Foliage:** Yellow-green
Fast growing. 2" long, tube-like white flowers appear in 4-8" clusters. Fruit is a long persistent pod. Very tolerant to heat and drought. (4,6,7,10,11)



HACKBERRY

(*Celtis occidentalis*)

Height: 50-75' **Zone:** 2 **Spread:** 50'
Shape: Spreading, rounded
Foliage: Bright green **Fall Foliage:** Soft yellow
Tall, spreading, native tree. Very adaptable to urban conditions. (1,4,6,7,9,10,11)



'AUTUMN GOLD' GINKGO

(*Ginkgo biloba* 'Autumn Gold')

Height: 50' **Zone:** 4 **Spread:** 30'
Shape: Upright broad conical
Foliage: Green **Fall Foliage:** Yellow
Fruitless selection. Fan-shaped leaves. Tolerant of urban conditions. (6,7,10,11)



'ESPRESSO' KENTUCKY COFFEETREE

(*Gymnocladus dioica* 'Espresso-JFS')

Height: 50-60' **Zone:** 4 **Spread:** 35-40'
Shape: Oval to vase
Foliage: Bluish-green **Fall Foliage:** Yellow
Seedless cultivar. Drought tolerant. Excellent for tough urban locations. (1,6,7,10,11)



Medium Trees (30-45')

- Boulevard width wider than 5 feet
- Planted at least 30-40 feet away from other trees

BIRCH

'PRAIRIE DREAM' PAPER BIRCH

(*Betula papyrifera* 'Varen' PP15768)

Height: 35-40' **Zone:** 2 **Spread:** 20-25'

Shape: Upright, oval

Foliage: Dark green **Fall Foliage:** Bright gold

NDSU selection for snow-white peeling bark. Excellent cold hardiness and resistance to bronze birch borer. Prefers a moist, well-drained site. (1,11,12)



'DAKOTA PINNACLE' ASIAN WHITE BIRCH

(*Betula platyphylla* 'Fargo')

Height: 35' **Zone:** 3 **Spread:** 10-12'

Shape: Upright, columnar

Foliage: Dark green **Fall Foliage:** Golden yellow

NDSU selection for form and bronze birch borer resistance. Tolerant of heat, drought, and alkaline soils. (1,7,11,12)



BUCKEYE

'AUTUMN SPLENDOR' BUCKEYE

(*Aesculus x arnoldiana* 'Autumn Splendor')

Height: 30-35' **Zone:** 3 **Spread:** 25'

Shape: Rounded

Foliage: Dark green **Fall Foliage:** Red

Large white blooms in spring, followed by brilliant red fall color. Prefers moist soil and full sun. Tolerates a wide range of soil conditions. (1,6,7,10)



'PRAIRIE TORCH' HYBRID BUCKEYE

(*Aesculus* x 'Bergeson')

Height: 30 **Zone:** 3 **Spread:** 30

Shape: Round, upright

Foliage: Dark green **Fall Foliage:** Orange-red

NDSU selection, showy yellow-green flowers. Fruit are spiny golf ball sized capsules that attract wildlife. Prefers moist well-drained soils. (11,12)



LINDEN

LITTLELEAF LINDEN

(*Tilia cordata*)

Height: 35-45' **Zone:** 4 **Spread:** 30-35'

Shape: Broad, pyramidal

Foliage: Glossy, dark green **Fall Foliage:** Yellow

Glossy dark foliage and fragrant pendulous flowers in early summer. Very adaptable, does well in poor soil. (1,4,7,9,10)



'GREENSPIRE' LINDEN

(*Tilia cordata* 'Greenspire')

Height: 40-50' **Zone:** 4 **Spread:** 30-35'

Shape: Oval

Foliage: Leathery, dark green **Fall Foliage:** Yellow

Fragrant, creamy-yellow flowers are followed by a small nutlet. Tolerant of urban conditions. (1,7,10,11)



'HARVEST GOLD' LINDEN

(*Tilia x mongolica* 'Harvest Gold' PP12,232)

Height: 30-40' **Zone:** 2 **Spread:** 25-30'

Shape: Upright, oval

Foliage: Green **Fall Foliage:** Golden yellow

A very hardy selection with upright growth. Glossy, heart-shaped flowers and fragrant yellow blooms in early summer. Exfoliating bark. (1,4,7,10,11)



OAK

'PRAIRIE STATURE' OAK

(*Quercus x bimundorum* 'Midwest')

Height: 30-40' **Zone:** 3 **Spread:** 25-30'

Shape: Pyramidal

Foliage: Glossy, dark green **Fall Foliage:** Reddish-purple

Outstanding NDSU selection. Prefers a moist, well-drained site. Excellent boulevard, feature or park tree.

(1,6,7,10,11,12)



'REGAL PRINCE' OAK

(*Quercus x warei* 'Long')

Height: 40' **Zone:** 4 **Spread:** 20-25'

Shape: Upright oval

Foliage: Dark green **Fall Foliage:** Yellow-brown

Grows faster than other oak, becoming oval with age. Tolerates wet or dry soil conditions. Shade tree or vertical accent. (6,7,10,11)



SELECTIONS FOR DIVERSITY

'PRAIRIE HORIZON' MANCHURIAN ALDER

(*Alnus hirsuta* 'Harbin')

Height: 30-40' **Zone:** 3 **Spread:** 20-30'

Shape: Upright

Foliage: Dark green **Fall Foliage:** Yellow

NDSU selection for upright growth and attractive foliage. Rapid growing. Decorative purple catkins and clusters of brown cone-like fruit. Drought tolerant. (1,4,6,7,10,12)



'NORTHERN ACCLAIM' HONEYLOCUST

(*Gleditsia triacanthos* var. *inermis* 'Harve')

Height: 35-45' **Zone:** 3 **Spread:** 30-35'

Shape: Symmetrical & upright

Foliage: Dark green **Fall Foliage:** Yellow

NDSU selection for hardiness. Thornless and seedless, drought resistant. (1,6,7,10,11,12)



'STREET KEEPER' HONEYLOCUST

(*Gleditsia triacanthos* 'Draves' PP 21698)

Height: 45' **Zone:** 4 **Spread:** 20'
Shape: Narrow, strongly upright, tightly pyramidal
Foliage: Dark green **Fall Foliage:** Yellow

Narrow form for city streets. Canopy half as wide as other cultivars. Fine textured leaves. (6,10,11)



IRONWOOD/AMERICAN HOPHORNBEAM

(*Ostrya virginiana*)

Height: 30-45' **Zone:** 3 **Spread:** 25'
Shape: Oval to rounded
Foliage: Bright green **Fall Foliage:** Golden yellow

Slow growing. Hop-like fruits in late summer. Full sun to part shade. Prefers moist, well-drained soils. (1,4,6,7,9,10,11)



'PRAIRIE REFLECTION' LAUREL WILLOW

(*Salix pentandra* 'Silver Lake')

Height: 35-40' **Zone:** 2 **Spread:** 25'
Shape: Rounded
Foliage: Shiny, dark green **Fall Foliage:** Golden yellow

NDSU selection. Grows rapidly. Dark green, highly glossy foliage. (1,7,12)



YELLOWWOOD

(*Cladrastis kentukea*)

Height: 30-40' **Zone:** 4 **Spread:** 30-40'
Shape: Broad-rounded
Foliage: Bright green **Fall Foliage:** Yellow

Spectacular in spring with creamy white flower panicles that are 8-14" long and loaded with fragrant pea-like flowers. 4" light brown seed pods form in autumn. Grows especially well in high pH soils. (6,7,10,11)



Small Trees (15-30')

- Boulevard width wider than 4 feet
- Planted at least 25-30 feet away from other trees
- Recommended for areas with overhead utilities

CRABAPPLE

'MARILEE' CRABAPPLE

(*Malus 'Jarmin'* PP 14337)

Height: 25' **Zone:** 4 **Spread:** 10'
Flower: Double, large white
Foliage: Medium green **Fall Foliage:** Orange
Upright, narrow form and virtually fruitless. Good disease resistance. (6,7,10,11)



'RED SPLENDOR' CRABAPPLE

(*Malus 'Red Splendor'*)

Height: 20-25' **Zone:** 3 **Spread:** 20'
Flower: Single, pink
Foliage: Glossy green **Fall Foliage:** Reddish-purple
Rounded form. Shiny, cherry-like, red, extremely persistent fruits. Good wildlife plant. (3,6,7)



'SPRING SNOW' CRABAPPLE

(*Malus 'Spring Snow'*)

Height: 25-30' **Zone:** 4 **Spread:** 15'
Flower: Single, white
Foliage: Shiny, bright green **Fall Foliage:** Yellow
Upright, narrow, columnar form. Fruitless. Pink buds open to fragrant white flowers in spring. (3,6,7,10,11)



'GLADIATOR' CRABAPPLE

(*Malus x adstringens* 'Durleo' PP20,167)

Height: 20' **Zone:** 2 **Spread:** 9'
Flower: Pink
Foliage: Bronze-purple **Fall Foliage:** Bronze-purple

Upright, columnar and compact. Ideal for space-challenged sites. (3,6,7)



HAWTHORN

THORNLESS COCKSPUR HAWTHORN

(*Crataegus crus-galli* var. *inermis*)

Height: 15-20' **Zone:** 4 **Spread:** 15-20'
Shape: Rounded, spreading
Foliage: Dark green **Fall Foliage:** Orange

Abundant white flowers in June, followed by small bright red persistent fruit in autumn. Prefers moist conditions, but is drought-tolerant. (1,7,11)



'SNOWBIRD' HAWTHORN

(*Crataegus x mordenensis* 'Snowbird')

Height: 12-15' **Zone:** 3 **Spread:** 20'
Shape: Upright, rounded
Foliage: Dark green **Fall Foliage:** Yellow

Fragrant double white flowers, minimal fruit production. (1,7,11)



MAPLE

'HOT WINGS' MAPLE

(*Acer tataricum* 'GarAnn' PP15,023)

Height: 20-25' **Zone:** 3 **Spread:** 18-20'
Shape: Upright, spreading
Foliage: Dark green **Fall Foliage:** Yellow to red

Bright red samaras. Tolerant of alkalinity and dry conditions. (1,5,7,11)



SELECTIONS FOR DIVERSITY

AMUR MAACKIA

(*Maackia amurensis*)

Height: 20-30' **Zone:** 4 **Spread:** 25-35'

Shape: Rounded

Foliage: Dark olive green **Fall Foliage:** Insignificant

White flowers bloom mid-summer. Amber to copper colored bark. Adaptable to a range of soils.

(1,5,6,7,10,11)



'AUTUMN BRILLIANCE' SERVICEBERRY

(*Amelanchier x grandiflora* 'Autumn Brilliance')

Height: 20-25' **Zone:** 3 **Spread:** 15'

Shape: Rounded

Foliage: Small, blue-green **Fall Foliage:** Red-orange

White blossoms in spring, followed by sweet purplish-black fruit. Fall leaves are quite persistent. (1,4,5,7,11)



JAPANESE TREE LILAC

(*Syringa reticulata*)

Height: 25' **Zone:** 3 **Spread:** 25'

Shape: Spreading

Foliage: Deep green **Fall Foliage:** Yellow

Creamy white flowers in large panicles early summer. Glossy red-brown bark. Tolerates a wide variety of moist, well-drained soils. (1,4,5,6,7,9,10)



'NORTHERN EMPRESS' JAPANESE ELM

(*Ulmus davidiana* var. *japonica* 'Burgundy Glow')

Height: 28' **Zone:** 3 **Spread:** 24'

Shape: Rounded open crown

Foliage: Green **Fall Foliage:** Burgundy red

NDSU selection. Very hardy small to medium sized elm. Tolerant of higher pH soils. Good drought tolerance. (6,10,12)



PAGODA DOGWOOD

(*Cornus alternifolia*)

Height: 15-20' **Zone:** 3 **Spread:** 20-25'

Shape: Rounded

Foliage: Green **Fall Foliage:** Red-purple

Fragrant pale yellow flowers late spring, followed by blue-black fruit. Prefers moist, cool, acidic soil and partial shade. (1,4,5,6,7)



Selections for Diversity in Parks

These selections (conifers included) prefer a more protected site (ex: parks, cemeteries, yards, etc.).

BLACK WALNUT

(*Juglans nigra*)

Height: 35'-60' **Zone:** 4 **Spread:** 30'-50'

Shape: Oval to rounded, open

Foliage: Green **Fall Foliage:** Yellow

Prefers moist, well drained soils. Fruit is a drupe bearing a nut. Good for wildlife. (1,4,6,7,9,11)



'FALL FIESTA' SUGAR MAPLE

(*Acer saccharum* 'Bailsta')

Height: 50-75' **Zone:** 3 **Spread:** 50'

Shape: Upright, rounded

Foliage: Glossy, leathery green **Fall Foliage:** Orange-red

Rapid grower, prefers well-drained soil with slight acidity. Intolerant of road salt and soil compaction. **Refer to page 5 for 'A NOTE ON MAPLES'.** (1,7,11)



'GREEN MOUNTAIN' SUGAR MAPLE

(*Acer saccharum* 'Green Mountain')

Height: 50-75' **Zone:** 4 **Spread:** 35-40'

Shape: Upright oval

Foliage: Glossy, deep green **Fall Foliage:** Orange-scarlet

Excellent heat tolerance, performs well in dry, restricted sites. Generally intolerant of road salt and soil compaction. **Refer to page 5 for 'A NOTE ON MAPLES'.** (1,7,11)



KATSURA

(*Cercidiphyllum japonicum*)

Height: 40-60' **Zone:** 4 **Spread:** 20-30'

Shape: Pyramidal, broad

Foliage: Bluish-green **Fall Foliage:** Yellow to apricot

Heart-shaped foliage. Little tolerance for drought when young. (7,10,11)



Conifers/Evergreens

'BLACK HILLS' SPRUCE

(*Picea glauca var. densata*)

Height: 30'-60' **Zone:** 2 **Spread:** 15'-25'

Shape: Pyramidal

Foliage: Blue-green **Fruit:** Brown cone, 1½ to 2" long

Grows best on moist loams. Best in full sun, but tolerates light shade. Fairly drought resistant. (4,7,9)



'ROYAL SPLendor' NORWAY SPRUCE

(*Picea abies 'Noel'*)

Height: 40' **Zone:** 3 **Spread:** 25'

Shape: Pyramidal

Foliage: Bright green **Fruit:** Brown cone, 3 to 5" long

NDSU selection. Performs best in well-drained soil and is tolerant of higher pH soils. Resistant to needle cast. (12)



'PRAIRIE STATESMAN' SWISS STONE PINE

(*Pinus cembra 'Herman'*)

Height: 30' **Zone:** 2 **Spread:** 15'

Shape: Narrowly erect

Foliage: Emerald green **Fruit:** Violet brown cone, which remain on the tree for 3 years

NDSU selection. Drought tolerant, resistant to most pests and diseases. (12)



'HYLAND SPLENDOR' MUGO PINE

(*Pinus mugo* 'HyDak')

Height: 15'-18' **Zone:** 3 **Spread:** 8'-10'
Shape: Upright, pyramidal
Foliage: Dark green **Fruit:** 1-2" ovoid cone

NDSU selection. Full sun to partial shade. pH adaptable and tolerant of higher pH soils. (12)



PONDEROSA PINE

(*Pinus ponderosa*)

Height: 50'-'70' **Zone:** 3 **Spread:** 25'-30'
Shape: Oblong and open
Foliage: Green **Fruit:** Brown cones 3" to 5" long

Grows best on deep, well-drained loam soils, but will tolerate sandy soils. Tolerates drought. Does not tolerate flooding or poorly drained soils. (4,9)



'MEDORA' JUNIPER

(*Juniperus scopulorum* 'Medora')

Height: 10'-12' **Zone:** 3 **Spread:** 2'-3'
Shape: Columnar
Foliage: Blue green

Slow growing. Dense foliage, holds shape without pruning. Impressive year-round color. (7)



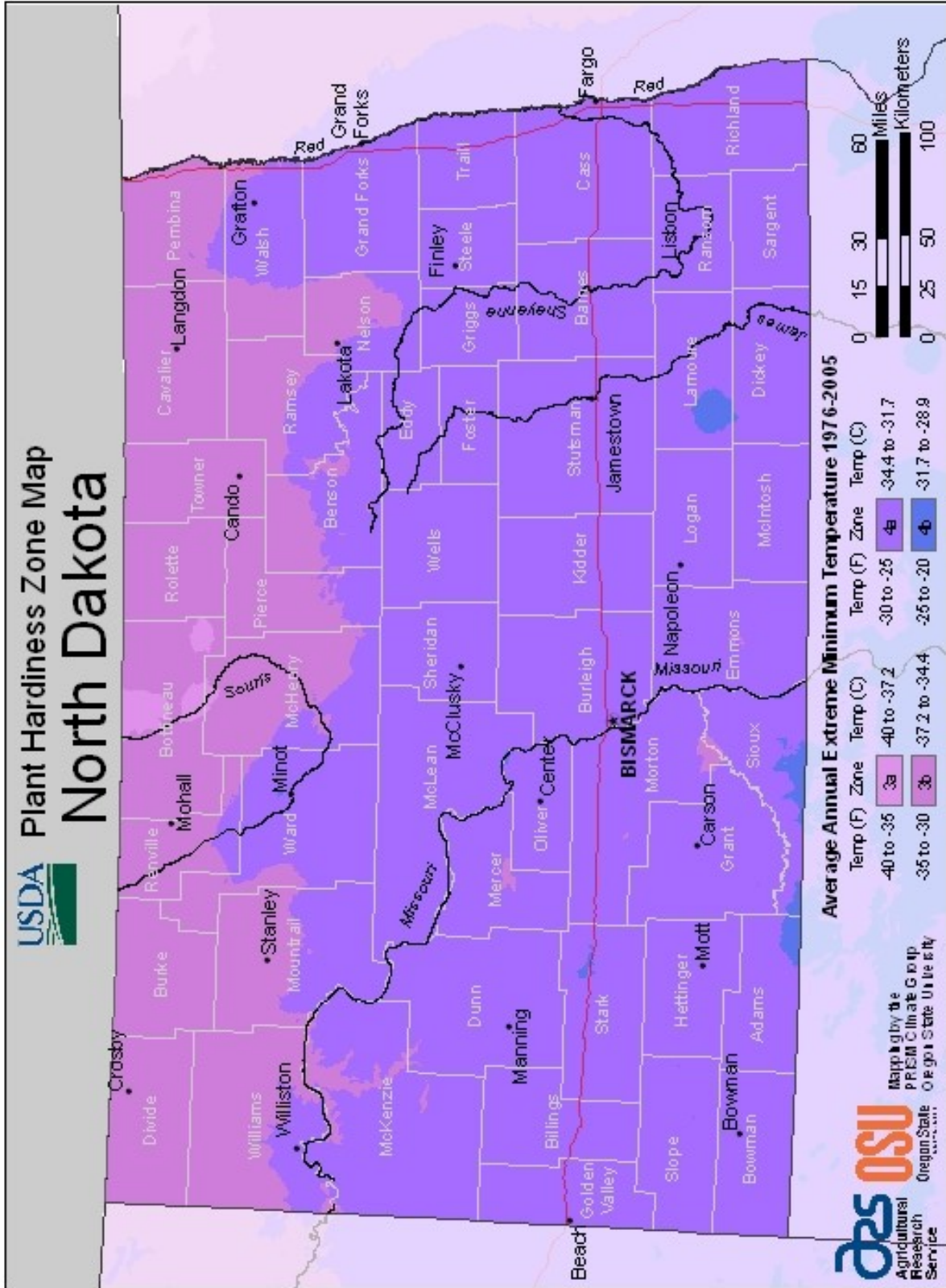
'TAYLOR' EASTERN REDCEDAR

(*Juniperus virginiana* 'Taylor')

Height: 25' **Zone:** 3 **Spread:** 3'
Shape: Columnar
Foliage: Gray green

Tolerant of poor, dry sites and high pH soils. Can be used in tight spaces or as a hedge. (6,7)





To view online, please visit : <https://plants.usda.gov/hardiness.html>

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