This publication was completed by the Adams County Soil Conservation District in cooperation with the USDA Natural Resources Conservation Service and funding from the Environmental Quality Incentives Program (EQIP).

Contact your local soil conservation district office for assistance in designing your tree planting.

Photos courtesy of:

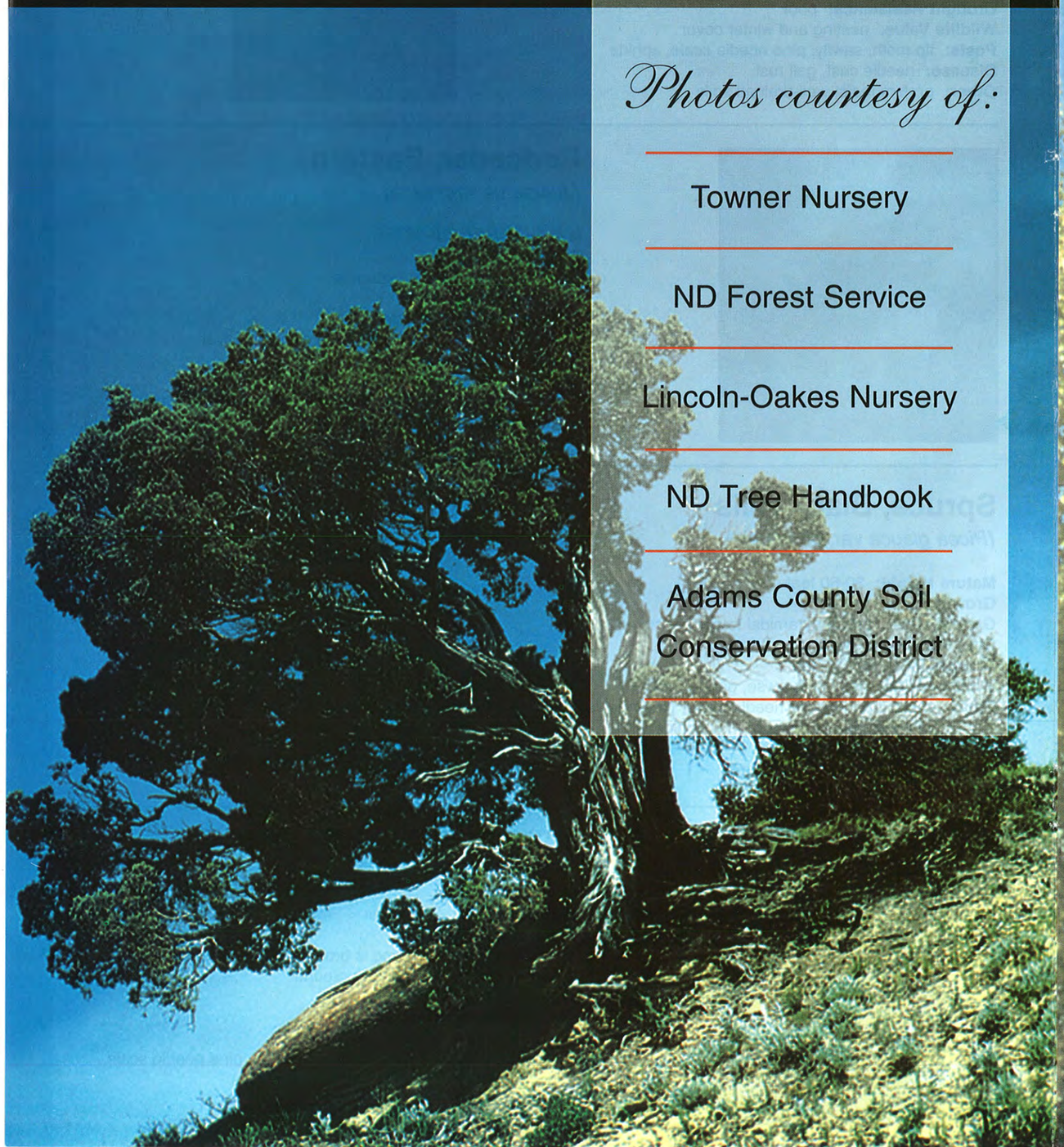
Towner Nursery

ND Forest Service

Lincoln-Oakes Nursery

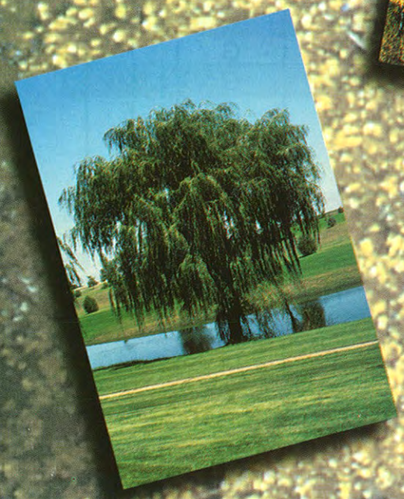
ND Tree Handbook

Adams County Soil Conservation District



Conservation Trees for

NORTH DAKOTA



	Mature Height	Growth Form	Cold Hardiness	Drought Resistance	Alkaline Tolerance	Wildlife Value	Growth Rate*
Deciduous Shrubs							
Russian Almond	3-5	Medium	G	F	F	G	M
Buffaloberry	6-14	Open	G	G	G	E	M
Caragana	6-14	Dense	G	G	G	G	M
Nanking Cherry	6-10	Open	G	G	F	F	M
Chokecherry	12-25	Medium	G	F	F	G	M
European Cotoneaster	8-12	Open	G	F	F	G	M
Golden Currant	3-6	Open	G	F	G	G	M
Redosier Dogwood	7-10	Medium	G	F	F	G	F
Tatarian Honeysuckle	10-12	Medium	G	F	G	G	M
Juneberry	6-15	Medium	G	F	F	E	S
Common Lilac	8-12	Dense	G	G	G	G	M
American Plum	8-10	Open	G	F	F	E	M
Hansen Hedge Rose	4-6	Medium	G	F	G	E	M
Sandcherry	3-6	Open	G	F	F	F	M
Silverberry	5-9	Medium	G	G	G	G	F
Lemonade Sumac	3-8	Open	G	F	F	F	M
Deciduous Trees							
Siberian Crabapple	15-25	Medium	G	F	F	G	M
Arnold Hawthorn	15-20	Dense	G	G	F	G	M
Amur Maple	15-20	Medium	G	F	P	F	M
Russian-olive	15-25	Medium	G	G	E	G	F
Green Ash	35-45	Open	G	G	G	F	M
Boxelder	30-40	Medium	G	F	F	F	F
Cottonwood	50-100	Open	G	P	G	F	F
Siberian Elm	25-40	Medium	G	F	G	F	F
Hackberry	40-50	Open	G	F	F	G	M
Silver Maple	40-50	Medium	F	P	P	F	F
Bur Oak	40-60	Medium	G	G	F	G	S
Poplar	40-60	Open	F	P	F	G	F
Black Walnut	35-45	Open	P	P	F	G	M
Golden Willow	40-55	Medium	F	P	F	G	F
Conifers							
Eastern Redcedar	30-35	Dense	G	G	G	E	S
Rocky Mt. Juniper	20-30	Dense	G	G	G	E	S
Ponderosa Pine	50-70	Medium	G	G	G	F	M
Scotch Pine	25-50	Medium	F	F	G	F	M
Black Hills Spruce	30-60	Dense	G	F	F	G	M
Colorado Blue Spruce	30-65	Dense	G	F	F	G	M

E-Excellent • G-Good • F-Fair • P-Poor * F-Fast • M-Medium • S-Slow

All programs and services are offered on a nondiscriminatory basis in regards to race, color, national origin, sex, religion, age, disability, political beliefs, and marital or family status.

Pine, Scotch

(Pinus sylvestris)

Mature Height: 25-50 feet
Growth Rate: medium
Growth Habit: rounded and open
Cold Hardiness: fair
Drought Resistance: poor
Wildlife Value: nesting and winter cover
Pests: tip moth, sawfly, pine needle scale, aphids
Disease: needle cast, gall rust
Other: prefers moist well-drained soils

Redcedar, Eastern

(Juniperus virginiana)

Mature Height: 30-35 feet
Growth Rate: slow
Growth Habit: dense pyramidal
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: excellent food, nesting and cover
Pests: spider mites
Disease: cedar-apple rust, tip blight
Other: should not be planted near crabapples, juneberries, or hawthorns

Spruce, Black Hills

(Picea glauca var. densata)

Mature Height: 30-60 feet
Growth Rate: medium
Growth Habit: broad pyramidal to conical crown
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: nesting, browse, good cover
Pests: spider mite, spruce needle miner, pine needle scale, yellow-headed spruce sawfly, aphids
Disease: needle blight
Other: grows best on moist loams

Spruce, Colorado Blue

(Picea pungens)

Mature Height: 30-65 feet
Growth Rate: medium
Growth Habit: branching is broad and dense, branches extending to ground
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: nesting site
Pests: spider mites, spruce needle miner, pine needle scale, yellow-headed spruce sawfly, aphids
Disease: needle cast, canker, needle blight
Other: performs best on moist, well-drained loams

Walnut, Black

(Juglans nigra)

Mature Height: 35-45 feet
Growth Rate: medium
Growth Habit: oval to rounded crown
Cold Hardiness: poor
Drought Resistance: poor
Wildlife Value: good food and cover
Other: prefers deep, well-drained, fertile, loamy soils, valuable timber tree, plant in protected sites

Willow, Golden

(Salix alba 'Vitellina')

Mature Height: 40-55 feet
Growth Rate: fast
Growth Habit: large, spreading to round crown
Cold Hardiness: fair
Drought Resistance: poor
Wildlife Value: provides cover, browse
Pests: aphids
Other: branches shed easily

Juniper, Rocky Mountain

(Juniperus scopulorum)

Mature Height: 20-30 feet
Growth Rate: slow
Growth Habit: dense pyramidal, upward reaching branches
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: excellent food, nesting, and cover
Pests: spider mites
Disease: cedar-apple rust, tip blight
Other: should not be planted near crabapples, juneberries, currant or hawthorns

Pine, Ponderosa

(Pinus ponderosa)

Mature Height: 50-70 feet
Growth Rate: medium
Growth Habit: pyramidal when young
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: food and nesting for birds
Pests: tip moth, sawfly, pine needle scale, aphids
Disease: needle cast, gall rust
Other: tolerates saline and alkaline soils

Almond, Russian

(Prunus tenella)

Mature Height: 3-5 feet
Growth Rate: slow
Growth Habit: upright, suckering
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: very good browse and cover
Flowers: abundant pink to rose
Other: prefers loamy soils, bears ovoid nut

Buffaloberry

(Shepherdia argentea)

Mature Height: 6-14 feet
Growth Rate: medium
Growth Habit: loosely branched thorny shrub
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: ideal cover, nesting, and browse; good late winter food source
Disease: stem decay, branch canker
Other: well-adapted to dry, moderately alkaline, and saline soils; berries used for jellies

Caragana

(Caragana arborescens)

Mature Height: 6-14 feet
Growth Rate: medium
Growth Habit: erect, oval shrub
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: used for nesting
Flowers: small showy yellow
Pests: blister beetles
Disease: stem decay, leaf spot and branch cankers
Other: produces pods with multiple seeds

Cherry, Nanking

(Prunus tomentosa)

Mature Height: 6-10 feet
Growth Rate: medium
Growth Habit: upright, semi-spreading
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: fruit for songbirds, browse
Flowers: small pink
Disease: branch cankers
Other: prefers loamy soils, short-lived, excellent fruit for pies and jellies

Chokecherry

(Prunus virginiana)

Mature Height: 12-25 feet
Growth Rate: medium
Growth Habit: oval to rounded, suckering
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: excellent for food and cover
Flowers: creamy-white
Pests: prairie tent caterpillar
Disease: "western" x-disease, black knot, stem decay, shothole canker
Other: purple leaf selections for landscaping, adapted to wide variety of soils, fruits for jellies

Cotoneaster, European

(Cotoneaster integerrimus)

Mature Height: 8-12 feet
Growth Rate: medium
Growth Habit: spreading, open and upright arching branches
Cold Hardiness: good
Drought Resistance: poor
Wildlife Value: fruit attracts birds
Flowers: pinkish-white
Pests: pear slug
Disease: fireblight
Other: showy red berries, not adapted to alkaline or saline soils, should not be planted near crabapples

Currant, Golden

(Ribes odoratum)

Mature Height: 3-6 feet
Growth Rate: medium
Growth Habit: upright, spreading
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: roosting, loafing, nesting and browse
Flowers: fragrant golden-yellow
Pests: currant worm
Disease: anthracnose, leafspots, white pine blister rust host
Other: berries used fresh and for jelly

Dogwood, Redosier

(Cornus sericea)

Mature Height: 7-10 feet
Growth Rate: fast
Growth Habit: loose and rounded, many stems
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: dense cover and food source
Flowers: creamy
Disease: twig blight
Other: dark, blood-red bark provides winter color

Hackberry

(Celtis occidentalis)

Mature Height: 40-50 feet
Growth Rate: medium
Growth Habit: single trunk, broadening crown
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: fruit for birds and mammals
Pests: commonly damaged by browsing rodents, rabbits and deer
Other: good replacement for the elm because of its similar form and adaptability, somewhat tolerant to alkaline soils

Maple, Silver

(Acer saccharinum)

Mature Height: 40-50 feet
Growth Rate: fast
Growth Habit: upright with strong spreading branches
Cold Hardiness: fair
Drought Resistance: poor
Wildlife Value: browse, fair cover
Other: not adapted to saline/alkaline soils, very subject to iron and manganese chlorosis in alkaline soils, sensitive to phenoxy herbicides, plant in protected sites

Oak, Bur

(Quercus macrocarpa)

Mature Height: 40-60 feet
Growth Rate: slow
Growth Habit: stout branches, informal spreading to rounded
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: excellent food and cover
Pests: commonly damaged by rodents, rabbits and deer
Disease: leaf and twig anthracnose, leaf curl, stem decay
Other: long lived tree with deep taproot

Poplar, Hybrid

(Populus hybrids)

Mature Height: 40-60 feet
Growth Rate: fast
Growth Habit: upright spreading branches
Cold Hardiness: fair
Drought Resistance: poor
Wildlife Value: browse
Pests: poplar borer, aphids, gall mite, leaf beetles, rodents, deer
Disease: leaf rust, leaf spot, canker, wetwood, stem decay
Other: requires a moist site, lacks cold and drought hardiness of the native cottonwood

Ash, Green

(Fraxinus pennsylvanica)

Mature Height: 35-45 feet
Growth Rate: medium
Growth Habit: single trunk, oval to elliptical crown
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: nesting site
Pests: cankerworms, ash borers, ash plant bugs
Disease: stem decay, branch and twig cankers, anthracnose, leaf rust, ash yellows
Other: can withstand flooding for short periods of time

Boxelder

(Acer negundo)

Mature Height: 30-40 feet
Growth Rate: fast
Growth Habit: short crooked trunk, commonly divides into several stout and widespreading branches
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: food and cover
Pests: boxelder bugs
Disease: stem decay
Other: grows best on well-drained moist soils, highly sensitive to phenoxy herbicides

Cottonwood

(Populus deltoides)

Mature Height: 50-100 feet
Growth Rate: fast
Growth Habit: upright, branches spread to form a large open crown
Cold Hardiness: good
Drought Resistance: poor
Wildlife Value: browse
Pests: aphids, gall mite, leaf beetles
Disease: leaf rust, leaf spot and canker, wetwood, stem decay
Other: requires a moist site

Elm, Siberian

(Ulmus pumila)

Mature Height: 25-40 feet
Growth Rate: fast
Growth Habit: open with several ascending branches
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: nesting sites
Pests: cankerworm
Disease: canker, wetwood
Other: highly sensitive to phenoxy herbicides brittle wood which is subject to breakage

Honeysuckle, Tatarian

(Lonicera tatarica)

Mature Height: 10-12 feet
Growth Rate: medium
Growth Habit: spreading
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: nesting and food
Flowers: yellow-pink
Other: plant only Russian aphid resistant cultivars

Juneberry

(Amelanchier alnifolia)

Mature Height: 6-15 feet
Growth Rate: slow
Growth Habit: upright
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: high quality cover and food
Flowers: white
Other: nutritious fruit used fresh, frozen or processed

Lilac, Common

(Syringa vulgaris)

Mature Height: 8-12 feet
Growth Rate: medium
Growth Habit: upright, leggy, suckering
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: little value for fruit or browse, songbird nesting
Flowers: white to purple, fragrant and showy
Pests: lilac borer
Disease: powdery mildew

Plum, American

(Prunus americana)

Mature Height: 8-10 feet
Growth Rate: medium
Growth Habit: round-headed crown, suckers freely
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: important for nesting, loafing, browse and food
Flowers: white
Pests: prairie tent caterpillar
Disease: stem decay, branch cankers, black knot, plum pockets
Other: thorny, winter-hardy, thicket-forming tall shrub with edible fruit

Rose, Hansen Hedge

(Rosa species)

Mature Height: 4-6 feet
Growth Rate: medium
Growth Habit: stems upright, semi-weeping
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: excellent food source, nesting and cover
Flowers: showy pink
Other: fruit referred to as a rose hip and a source of Vitamin C

Sandcherry

(Prunus besseyi)

Mature Height: 3-6 feet
Growth Rate: medium
Growth Habit: open, spreading shrub
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: good loafing, food source and browse
Flowers: white
Disease: leaf curl, black knot, fireblight
Other: relatively short-lived, fruit for pies and jellies

Silverberry

(Elaeagnus commutata)

Mature Height: 5-9 feet
Growth Rate: medium
Growth Habit: narrow, upright, suckers profusely
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: dense thickets and food source
Pests: subject to damage by rabbits
Disease: branch cankers
Other: silver-white leaves

Sumac, Lemonade

(Rhus trilobata)

Mature Height: 3-8 feet
Growth Rate: medium
Growth Habit: ascending, new branchlets hairy
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: fall and winter food for birds
Flowers: light yellow
Other: scented leaves

Crabapple, Siberian

(Malus baccata)

Mature Height: 15-25 feet
Growth Rate: medium
Growth Habit: round to spreading
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: fair cover, good fruit and browse
Flowers: white
Pests: cankerworm, apple maggot
Disease: fireblight, cedar-apple rust, apple scab, canker
Other: needs a well-drained, moist soil; should be protected from girdling or browsing; should not be planted near juniper, cedar or cotoneaster

Hawthorn, Arnold

(Crataegus arnoldiana)

Mature Height: 15-20 feet
Growth Rate: slow
Growth Habit: upright to horizontal
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: nesting, food and browse
Flowers: white with a disagreeable odor
Other: tolerates the soot and grime of cities, large thorns

Maple, Amur

(Acer ginnala)

Mature Height: 15-20 feet
Growth Rate: medium
Growth Habit: multi-stemmed
Cold Hardiness: good
Drought Resistance: fair
Wildlife Value: browse, fair cover
Other: adaptable to a variety of soils, except alkaline, sensitive to phenoxy herbicides, outstanding bright reddish fall colors

Russian-olive

(Elaeagnus angustifolia)

Mature Height: 15-25 feet
Growth Rate: fast
Growth Habit: branches random and spreading
Cold Hardiness: good
Drought Resistance: good
Wildlife Value: excellent
Disease: branch and stem cankers
Other: tolerates saline/alkaline soils, may invade unmanaged bottomlands and moist pastures, thorny, silver leaf color