# Tree/Shrub Recommendations for New Castle Colorado

Prepared by

The New Castle Environmental Advisory Committee

### **Large Shade Trees-**

Shade is a major concern during the hot summer months on the Western Slope of Colorado. Unfortunately we are not given the best soils or growing conditions to establish large shade trees. Many may be tempted to plant the more rapid growing trees to help compensate for this. However, this guide is intended to provide a list of trees that will help make more water conscious decisions and provide a lasting urban forest into the future. Some additional recommendations include Hackberry, Ohio Buckeye, English Walnut, Elms, and Kentucky Coffee Tree.

Catalpa speciosa Catalpa, Western Mature Height: 40-60' Mature Spread: 30-50' Water Requirements: Low

Flower Color: White Flower Season: Late Spring - Early Summer Sun: Full Sun

A fast growing drought tolerant tree with large heart-shaped leaves. Large tubular white flowers in late June. Fruit is a long brown pod. This plant grows well in hot, dry locations.

Tilia americana 'Redmond' Linden, Redmond Mature Height: 40-50' Mature Spread: 30-40' Water Requirements: Medium

Flower Color: Pale Yellow Flower Season: Early Summer Sun: Sun

A broad pyramidal tree with spreading branches. Large, heart-shaped, deep green leaves fade to yellow in fall. Loose hanging clusters of small, flowers with a sweet fragrance appear in summer followed by dangling, rounded fruits.

Fraxinus pennsylvanica 'Patmore' Ash, Patmore Mature Height: 40-50' Mature Spread: 30-40' Water Requirements: Medium Sun: Sun

A symmetrical, conical to rounded tree with ashy-gray bark that becomes deeply ridged in a cross-checked, diamond-like pattern as it ages. Large, oblong-oval leaflets are a glossy deep green, changing to golden-yellow in fall, does not bear seeds. There are many varieties of Ashes that are available, including the popular Autumn Purple Ash, most of which will tolerate New Castles environment and soils.

Quercus bicolor Oak, Swamp White Mature Height: 40-60' Mature Spread: 40-60' Water Requirements: Low

Sun: Sun to Filtered Shade

Reddish-brown to gray bark sheds in ragged, papery flakes when young, aging to thick, dark gray-brown. Low branches create a broad conical to rounded crown. Shallow, round-lobed, dark leaves become golden with orange and red in fall. Oaks in general are a very good choice for New Castles expansive soils and dry conditions. Other choices include Burr Oak, Northern Red Oak, Overcup Oak, and Shummard Oak.

Gleditsia triacanthos inermis 'Shademaster' Honeylocust, Shademaster Mature Height: 40-50' Mature Spread: 30-40' Water Requirements: Low Sun: Sun

An open, rounded tree with thornless, slightly arching branches turning upward at the ends. Rich green, small, oval leaflets make up the light textured leaves, becoming lemon yellow during autumn. Seedless.

#### **Ornamental Trees and Shrubs-**

There are a number of small trees and shrubs that can be successfully established in New Castle. The list which follows is in no way all inclusive. Considerations that are not listed such as Siberian Pea Shrub, Spirea, Junipers, Roses, Silver Buffalo Berry, Cotoneaster, Burning Bush, Three-leaf Sumac, Ninebark, Apache Plum, Mountain Mahagony, Serviceberry, Chokecherry, Amur/Tartarian/Bigtooth Maples, and many others are also strong choices for our area. Additionally, there are numerous fruit and nut trees which have proven to be good choices in addition to those listed consideration should be given to Peaches, Apples, Apricots, Hazelnuts, Almonds, and Plums.

### **Small Trees or Large Shrubs-**

Prunus Americana Plum, American Mature Height: 10-20' Mature Spread: 8-12' Water Requirements: Low Flower Color: White Flower Season: Mid- to Late Spring Sun: Sun

A broad rounded shrub with a suckering habit. Single white flowers in small clusters mingle amongst oblong, dark green leaves. Autumn color is warm yellow. Small reddish plums with yellow flesh ripen from mid- to late summer. This native to the western slope is the first to bloom on nearby hillsides.

Prunus cerasus 'Montmorency' Cherry, Montmorency Mature Height: 15-20' Mature Spread: 12-15' Water Requirements: Medium Flower Color: White Flower Season: Spring Sun: Sun to Filtered Shade

Firm, bright red fruits ripen during summer, following single flowers produced in spring. Oblong-oval, deep green leaves change to a rich blend of yellows, oranges, and reds in the fall. Slender branches form a dense, rounded crown. There are many varieties of cherry, and other fruit trees that are well adapted to New Castles climate and soils.

Malus 'Spring Snow' Crabapple, Spring Snow Mature Height: 20-25' Mature Spread: 20-25' Water Requirements: Medium Flower Color: White Flower Season: Spring Sun: Sun

A dense, upright oval tree with bright green, oblong-oval leaves turning to yellow in the fall. Fragrant, single white flowers occur during midspring. Considered sterile meaning there should be little to no fruit cleanup in the fall.

Crataegus crus-galli inermis Hawthorn, Thornless Cockspur Mature Height: 15-25' Mature Spread: 15-20' Water Requirements: Low Flower Color: White Flower Season: Spring Sun: Sun

Thornless horizontal branches form a small tree or large shrub with a globular habit. Single flowers in flat-topped clusters appear shortly after the dark green, oblong leaves have unfolded. Dark red fruits ripen in summer and persist into late fall. Many other hawthorns are available and are suitable for the New Castle area, however, the stout thorns of these varieties are generally not desirable.

Chrysothamnus nauseosus Rabbitbrush, Dwarf Blue Mature Height: 1-4' Mature Spread: 1-4' Water Requirements: Very Low Flower Color: Golden Yellow Flower Season: Mid to Late Summer Sun: Sun

A compact shrub with a rounded form consisting of gray to light green stems and linear, bluish-gray leaves. Tight, flat-topped clusters of small golden yellow flowers appear from mid- to late summer, which will help maintain year round color in the garden.

Potentilla fruticosa Potentilla, Shrub Mature Height: 2-3' Mature Spread: 2-3' Water Requirements: Low Flower Color: Yellow Flower Season: Early to Late Summer Sun: Sun

Irregular, arching branches create an open, rounded shrub producing fine textured leaves consisting of rich green, oblong leaflets. Single yellow flowers are produced throughout the summer.

Prunus besseyi Cherry, Western Sand Mature Height: 4-6' Mature Spread: 4-6' Water Requirements: Low Flower Color: White Flower Season: Late Spring Sun: Sun

Grayish-green, oval leaves on spreading, upright branches form a rounded shrub with profuse, loosely grouped, pure white, single flowers during late spring followed by globular, purplish-black fruit in late summer. Fall foliage is reddish.

Syringa vulgaris Lilac, Common Purple Mature Height: 10-20' Mature Spread: 8-12' Water Requirements: Low Flower Color: Purple Flower Season: Early to Mid-Spring Sun: Sun

Stout branches form an upright, vase-shaped shrub producing fragrant, purple flowers in large, pyramidal clusters in mid-spring. Leaves are thick and heart-shaped, with a lustrous, bluish-green color. Many varieties are available, with colors ranging from white and pink to lavender and purple. Dwarf varieties are also available.

Prunus tomentosa Cherry, Nanking Mature Height: 6-10' Mature Spread: 6-12' Water Requirements: Low Flower Color: White Flower Season: Early to Mid-Spring Sun: Sun

A broad, upright spreading shrub with slender branches and peeling bark. Finely toothed, elliptic leaves are fuzzy and dark green. Small, pinkish buds open to white, fragrant flowers followed by small, bright red edible cherries.

Forsythia x 'Northern Sun' Forsythia, Northern Sun Mature Height: 6-8' Mature Spread: 8-10' Water Requirements: Medium Flower Color: Yellow Flower Season: Early Spring Sun: Sun

Rough, rigid stems form a rounded shrub producing a multitude of bright yellow flowers in early spring before the appearance of the dark green, serrated leaves. The bold yellow flowers are one of the first to be displayed in the spring.

## **Evergreens-**

Evergreens provide shelter from harsh winter winds, and can help provide shade in the summer. Many of the trees on this list are native to our region and may not be the best suited to provide shade, but will provide shelter from winter winds, create excellent privacy screens, and acts as food sources for local wildlife. Additional considerations are Eastern or Western Red Cedar, Arborvitae, European, Siberian or Western Larch (all deciduous), Dawn Redwood (deciduous), Austrian Pine, Scotch Pine, and Black Hills Spruce.

Juniperus scopulorum Juniper, Rocky Mountain Juniper, Mature Height: 20-30' Mature Spread: 8-12'

Water Requirements: Very Low Sun: Sun

A pyramidal to upright rounded juniper with stiff spreading branches and shredding, reddish-brown bark. Scaly foliage ranges from green to gray. Globular, waxy, dark blue fruits consist of a sweet tasting pulp.

Pinus edulis Pine, Pinon Mature Height: 20-30' Mature Spread: 10-20' Water Requirements: Very Low Sun: Sun to Filtered Shade Spreading branches sweep upward to create a bushy, broadly rounded evergreen with scaly, dark gray bark. Stiff, flattened needles are deep green. Reddish-brown cones are blunt and rounded in shape, with dark brown edible nuts. This tree can easily be lost to a native pine beetle which has seen an increase in numbers both locally and in the desert southwest region in general.

Pinus strobiformis Pine, Border Mature Height: 40-50' Mature Spread: 20-30' Water Requirements: Low Sun: Sun

A conical to rounded crown with layered, spreading branches clothed by slender, soft textured, bluish-green needles. Ashy gray bark becomes rough, blackish-gray as it ages. Oval, light brown cones are distinguished by the curled lip of each scale.

Pinus ponderosa Pine, Ponderosa Mature Height: 60-80' Mature Spread: 30-40' Water Requirements: Low Sun: Sun

Long, slender, light green, often yellowish needles are loosely arranged on open, spreading branches to form a large pyramidal crown. Thick plated bark is cinnamon red to dark brown. Broad, ovoid cones are shiny, reddish-brown, and prickly.

Pinus flexilis Pine, Limber Mature Height: 30-50' Mature Spread: 20-30' Water Requirements: Low Sun: Sun

Pyramidal, with smooth gray bark when young, becoming broad rounded with ridged, black bark as it matures. Generally a high elevation tree, however it should do well in our area.

#### Trees/Shrubs to Avoid

There are several trees that are capable of growing in the New Castle area, yet don't make the best choice from a long range water use standpoint or from the inherent deficiencies of the species. Some of these include:

Colorado Blue Spruce- Requires well drained soils with profuse amounts of water to truly thrive.

Cottonwoods- Requires large amounts of water, and have a reputation for easily being overcome by decay.

Boxelder- Tend to be rather softwooded and the abundance of seeds may create unwanted colonies of trees.

Willow- Related to the cottonwood and thus many of the same concerns. Many of the shrub forms require high amounts of water.

Birch- Tend to require high amounts of water and may suffer annual dieback from winter drought.

Russian Olive- A noxious weed that is prohibited to plant or sell in the state of Colorado.

Tamarisk- A noxious weed that is prohibited to plant or sell in the state of Colorado.

Poplar- Also related to the cottonwood these fast growing trees have been known to damage foundations and self-destruct.

Aspen- At New Castles lower elevations these trees struggle to defend themselves from the numerous insects that attack it.

Red-osier Dogwood- This native to Colorado rivers, streams, and other wetland areas requires large amounts of water to thrive.

Silver Maple- Although recently more difficult to find in nurseries this weak wooded swap tree should be avoided.

Thinleaf Alder- Another native to Colorado streams and wetlands, and again requires significant amounts of water.