City of Durango Tree & Shrub Guide







Parks & Recreation

Thanks to the support of the Durango City Council and the Citizens of Durango, the City has been recognized as a Tree City USA since 1980 and through working with the Public Works Department to minimize damage to trees during construction projects, landscape review with the Planning & Community Development Department, and the Christmas Tree Recycling Programs, the City of Durango also has received the Growth Award since 1993.

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PARKS/FORESTRY/CEMETERY OFFICE

Greenmount Cemetery - 900 Cemetery Road - Phone: 970.375.7380

PARKS & RECREATION ADMINISTRATION

2700 Main Avenue (Durango Community Recreation Center) 949 E. 2nd Avenue (Mailing Address) Durango, Colorado 81301 Phone: 970.375.7300 Fax: 970.375.7337

ADMINISTRATIVE OFFICE HOURS : Monday – Friday 8 a.m. – 5 p.m.

Dear Citizens of Durango:

The Management of our urban forest is the responsibility of public and private owners. It involves a combination of property owners, City Forestry Division, private tree care firms, tree nursery providers and others. Optimum management, however, requires a system that considers both the needs of individual trees and the forest as a whole. The Parks and Recreation Director and the City Arborist are given the responsibility for coordinating the management of the urban forest.

Benefits of Community Forest Programs

The urban forest serves a wide variety of functions that promote the health, safety, and general welfare of residents. These functions include:

- Conserving energy, by providing shade and evaporative cooling through transpiration;
- Reducing local and global air pollution by absorbing carbon dioxide and ozone, absorbing particulate matter and producing oxygen;
- Reducing wind speed and directing air flow;
- Providing habitat for birds, small mammals and other wildlife;
- Reducing runoff and the potential for soil erosion;
- Increasing real property values;
- Enhancing visual and aesthetic qualities that attract visitors and businesses and serve as a source of community image and pride; and
- Recreation and relaxation.

All these benefits increase as canopy cover increases. By establishing and maintaining maximum tree cover, the community is able to realize the maximum benefits the urban forest can provide.

In keeping with one of the priorities of the Parks and Recreation Advisory Board is to convey to the citizens of Durango the importance of proper tree pruning and care and also to make them aware of the City's landscape and pruning ordinances, we provide this Tree and Shrub Guide.

We are proud of our urban forest and we want you to be too. Please use this guide as a reference to some of the most used and recommended varieties for the City of Durango. There are many more selections within each variety worth exploring. Please check with your local nursery on other selections available. Feel free to call the City Arborist at 375-7383 if we can answer any of your questions about trees, shrubs or perennials.

Cathy Metz Parks & Recreation Director Matt Besecker City Arborist



THE HISTORY OF ARBOR DAY

The idea for Arbor Day originally came from Nebraska. A visit to Nebraska today wouldn't disclose that the state was once a treeless plain. Yet it was the lack of trees that led to the founding of Arbor Day in the 1800's.

Among pioneers moving into the Nebraska Territory in 1854 was J. Sterling Morton from Detroit. He and his wife were lovers of nature and the home they established in Nebraska was quickly planted with trees, shrubs and flowers.

Morton was a journalist and soon became editor of Nebraska's first newspaper. Given that forum, he spread agricultural information and his enthusiasm for trees to an equally enthusiastic audience. His fellow pioneers missed their trees. But more importantly, trees were needed as windbreaks to keep soil from blowing and for fuel and building materials, as well as shade from the hot sun.

Morton not only advocated tree planting by individuals in his articles and editorials, but he also encouraged civic organizations and groups of every kind to join in. His prominence in the area increased and he became secretary of the Nebraska Territory, which provided another opportunity to stress the value of trees.

On January 4, 1872, Morton first proposed a tree-planting holiday to be called "Arbor Day" at a meeting of the State Board of Agriculture. The date was set for April 10, 1872. Prizes were offered to counties and individuals for planting properly the largest number of trees on that day. It was estimated that more than one million trees were planted in Nebraska on the first Arbor Day.

Arbor Day was officially proclaimed by the young state's Governor Robert W. Furnas on March 12, 1874 and the day itself was observed April 8, 1874. In 1885, Arbor Day was named a legal holiday in Nebraska.

During the 1870's, other states passed legislation to observe Arbor Day and the tradition began in schools in 1882.

Today, the most common date for the state observances is the last Friday in April and several U.S. Presidents have proclaimed a national Arbor Day on that date. But a number of state Arbor Days are at other times to coincide with the best tree-planting weather, from January and February in the south to May in the far north.

Arbor Day has now spread beyond the United States and is observed in many countries of the world. In some countries it is the king and queen who lead the national celebration and in many countries exotic trees not suited to North America are planted in commemoration of the day.

J. Sterling Morton was proud of the success of Arbor Day and noted, "other holidays repose upon the past. Arbor Day proposes for the future." He thought trees are much superior to cold marble as a memorial to persons or events. "How much more enduring are the animated trees of our own planting," he said.

TREECITYUSA

The National Arbor Day Foundation, in cooperation with the U.S. Forest Service and participating Foresters of the National Associaiton of State Foresters, recognizes towns and cities all over America who meet the standards of the Tree City USA program and are effectively managing their tree resources.

Durango, Colorado has met those standards and has been duly recognized annually since 1980.

Each year, typically on the first Friday in May, the Parks and Recreation Department and the Parks and Recreation Advisory Board celebrates Arbor Day with a tree planting ceremony and participation from area schools. During this ceremony, Durango receives its Tree City USA recognition and recognizes those who have planted Memorial or Honorary trees. If you are interested in Durango's Arbor Day celebration, please call the Parks and Recreation Department at 375-7300.





TREE & SHRUB ORDINANCE

The following is a summation of the major points included in the Tree and Shrub Ordinance, primarily as they relate to private citizens. A copy of the complete ordinance may be obtained at the Parks and Recreation Department or Planning and Community Development Department.

Purpose

This ordinance provides for the care of trees and shrubs on public right-of ways and aids in the proper growth of a landscape program to enhance the beauty of the City. Voluntary compliance is sought as the prime means of enforcement of certain provisions if the objective of City beautifications are to be met.

The ordinance provides for a controlled, planned and consistent tree care program on public right-of-ways which will provide a demonstration of proper tree and shrub care.

Major Provisions

- 1. License, examination and certification is required for any person, firm or corporation engaged in tree trimming. The license is issued from the City Clerk and examination and licensing are the responsibility of the Director of Parks and Recreation and the City Arborist.
- 2. Specialty license fees are payable in addition to the general business license fee. Tree trimmers' fees are \$75 per year. Before any license may be issued, the applicant shall be examined for the purpose of licensing. Corporations may submit applications for licensing for more than one employee. Prior to licensing, proof of insurance for personal injury and property damage, including damage to trees, must be filed with the City Clerk in the amounts of not less than twenty-five thousand dollars (\$25,000) for each person, fifty thousand dollars (\$50,000) property damage and aggregate limits of one hundred thousand dollars (\$100,000) for each incident or occurrence. The City shall be named as an additional insured on any such policies and the licensee shall agree to indemnify the City against any loss, liability, or damage resulting from the operations of the licensee.
- 3. The Director of Parks and Recreation and the City Arborist are responsible for the safety of the public in connection with the manner of operation of tree trimmers. Rules and regulations pertaining to licensed Arborists are subject to review by the Parks and Recreation

Advisory Board and approval by City Council.

- 4. The Director of Parks and Recreation and the City Arborist are the enforcing authority for planting, location and replacing all trees on public streets and other public property, as well as their trimming and removal. The Parks and Recreation Board serves in an advisory capacity.
- 5. All trees in the public parks and all trees along the public streets have been inventoried as to location, species and condition.
- 6. Hedges and shrubs within 10' of curb at a corner must be trimmed and stand no higher than 36" above sidewalk.
- 7. Any property within the city limits may be inspected for diseased plant material. The Director of Parks and Recreation or the City Arborist will notify the property holder in writing to correct the situation. If there is no compliance, the City will correct the situation and assess the property owner.
- 8. Trees on private property should not provide a menace to public travel and must be trimmed for 14' clearance above streets and 8' clearance above sidewalks. Tree roots may not cause upraised sidewalk slabs. Any tree causing a hindrance or endangering the public may be declared a public nuisance by the Director of Parks and Recreation and/or the City Arborist. If the condition is not corrected by the owner following written notification, the Director of Parks and Recreation and the City Arborist will see that the nuisance is corrected and the owner billed for the cost.
- 9. Appeals are filed with the City Clerk and heard by the Parks and Recreation Advisory Board.



STREETTREES

In 1982, the City Council passed an ordinance placing all responsibility for street trees which are in the public right-of-way on the Durango Parks and Recreation Department/Forestry Division. This is the area most commonly referred to as being between the curb and the sidewalk. In areas of town where there are no curbs and sidewalks, please contact our office and we will give you an exact measurement of potential city right-of-way.



It is hereby prohibited for anyone to remove, prune, spray or hang anything on any tree listed in the boundaries mentioned above. The responsibility is placed on the City for removals, pruning, and spraying of all trees in the public right-of-way.

Any questions on this section or items you may deem an emergency or in need of immediate attention, please call the Parks and Recreation Department at 375-7300.

THE RIGHT TREE FOR THE RIGHT PLACE

A trees' purpose is the function you want it to serve for you. Some of the most common factors to consider should be:

Shade

Plant for where you want the shade during the hottest time of the year and the time of day you desire the shade. High, wide-crowned trees with deciduous leaves are the best providers of shade.

Aesthetics

Trees invariably add beauty to the home landscape, but with some planning this purpose can be served even better. One good principle is to avoid locating a tree where it will split your lot or a view into equal halves. Another is to use your trees to enhance the house and lot. For example, to give the lot an appearance of greater depth, plant on a diagonal line outward from the front corners of the house. This is called framing. Trees planted behind the house and to the side will provide background. Trees can also add visual appeal to a patio, pool or play area or they can be used to separate spaces and provide space enclosures.

Accents

A tree with color or some other showy feature can be used as an accent point in your landscaping picture.

Windbreaks and screens

Low-branching conifers that hold their foliage are most effective for screening unsightly areas and providing privacy. Noise is best reduced by tall, densely planted trees with fleshy, broad leaves. If combined with conifers, some noise reduction can be extended throughout the year. Dust can also be filtered by such a combination. Windbreaks can be made most effective through a dense, step-like arrangement of both conifers and deciduous trees. However, for protection on south and east sides of a house, deciduous species work best because they allow incoming solar radiation in Winter.

Boundaries

Trees can help to visually delineate your property. Small, narrowcrowned species will do the job while not invading your neighbor's space.



SIZE AND LOCATION

Available space is probably the consideration most often overlooked or misunderstood when deciding what tree to plant. Even for professionals, it is often difficult to envision the planting site 5, 10, or even 20 years in the future. Yet this is essential. Before planting, know what the tree will look like as it nears maturity. Consider its height, crown spread and root space.

The character of tree crowns and the form or shape of trees varies among species as much as leaf shapes or bark patterns. Shape is another clue to how well a tree will fit the space you have available, what problems might occur, and how well it will help meet the goals you have for your property.



Pyramidal Full-crowned Vase Fountain





DURANGO HARDINESS ZONE

Please Note: Your zone can vary between zone 4 – 6, depending where you are located in relationship to Durango.

2006 arborday.org Hardiness Zones Map



TREE & SHRUB SPECIES DESCRIPTIONS

EVERGREEN TREES

Evergreens are not allowed in the City Public Right-of-Way



FIR

Douglas Fir/Native

Pseudotsuga menziesii Mature Height: 50 – 80' Mature Spread: 15 – 25' Water Requirement: Adaptable Exposure: Sun to Filtered Shade Altitude: 10,000' Horizontal, down swept branches with short, flat bright green needles form a narrow, soft textured pyramidal crown.

JUNIPER

Cologreen Juniper

Juniperus scopulorum "Cologreen" Mature Height: 15-20' Mature Spread: 4 – 6' Upright branches arch slightly outw Water Requirement: Adaptable-Dry Exposure: Sun Altitude: 8,500'

Upright branches arch slightly outward to form a columnar to pyramidal juniper.

Rocky Mountain Juniper/Native

Juniperus scopulorum Mature Height: 20 – 30' Mature Spread: 8 – 12' Water Requirement: Adaptable-Dry Exposure: Sun Altitude: 10,000' A pyramidal to upright, rounded juniper

A pyramidal to upright, rounded juniper with stiff spreading branches and shredding, reddish-brown bark. Scaly foliage ranges from green to gray.



Wichita Blue Juniper

Juniperus scopulorum 'Wichita Blue' The Wichita Blue has bright, Mature Height: 15 – 20' Mature Spread: 4 – 6' Water Requirement: Adaptable - Dry branches that flare outward **Exposure: Sun** Hardy to: 8,500'

silvery-blue foliage, on densely arranged, upright, spreading creating a broad, pyramidal juniper.

PINE

Austrian Pine

Pinus nigra Mature Height: 40 - 60' Mature Spread: 30 – 40' Water Requirement: Adaptable – Dry **Exposure: Sun** Altitude: 8,000' A broad, pyramidal to oval ev-

ergreen with thick plated, dark brown bark and wide spreading branches. Moderately long needles are dark, shiny green.





Bristlecone Pine/Native Pinus aristata Mature Height: 20 – 40' Mature Spread: Varies Greatly Water Requirement: Adaptable - Dry

Exposure: Sun – Filtered Shade Altitude: 9,500'

A rounded to pyramidal, often shrubby evergreen with scaly, dark gray bark and irregularly spreading branches. Short, dark green needles with specks of white resin that form on the undersides.



Mugo Pine Pinus mugo Mature Height: 5 – 20' Mature Spread: 5 – 20' Water Requirement: Adaptable - Dry Exposure: Sun - Filtered Shade Altitude: 8,500'

Stout, spreading branches sweep upward from the ground, with deep green needles to form a dense, broad, round to conical crown.

Pinon Pine/Native

Pinus cembroides edulis Mature Height: 20 – 30' Mature Spread: 10 – 20' Water Requirement: Adaptable – Dry Exposure: Sun – Filtered Shade Altitude: 7,500' Spreading branches sweep upward to create a bushy, broadly rounded evergreen with scaly, orangish-brown bark. Stiff, flattened needles are deep green.

Ponderosa Pine/Native

Pinus ponderosa Mature Height: 60 – 80' Mature Spread: 30 – 40' Water Requirement: Dry Exposure: Sun Altitude: 9,000'

Long, slender, light green, often yellowish needles are loosely arranged on open, spreading branches to form a large pyramidal crown. Thick plated bark is cinnamonred to dark brown.



Scotch Pine Pinus sylvestris Mature Height: 30 – 50' Mature Spread: 20 – 30' Water Requirement: Adaptable Exposure: Sun – Filtered Shade Altitude: 6,500'





Distinctive, heavily plated, yellowish-orange bark and layered and spreading branches create an interesting conical to rounded evergreen. Short, twisted needles are bluish-green.

State Tree of Colorado

SPRUCE

Colorado Spruce/Native

Picea pungens Mature Height: 40 – 60' Mature Spread: 20 – 30' Water Requirement: Adaptable

Exposure: Sun – Filtered Shade Altitude: 10,000'



horizontal branches clothed by short, stiff needles ranging from green to silvery-blue create a dense, broad pyramidal conifer.

Southwestern White Pine/Native

Pinus strobiformis Mature Height: 40 – 50' Mature Spread: 20 – 30' Water Requirement: Adaptable–Dry Exposure: Sun Altitude: 9,000'





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.

Evergreens are not allowed in the City Public Right-of-Way

DECIDUOUS SHADE TREES

There are many selections available within each variety. Check with local nurseries on other choices available for your landscape needs. The following deciduous trees are approved for planting in the Public Right-of-Way.

BIRCH

Weeping Birch

Betula pendula Mature Height: 30 – 40' Mature Spread: 30 – 40' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Gold



The Weeping Birch has round, draping leaves and white bark.

HACKBERRY

Western Hackberry Celtis occidentalis Mature Height: 50 – 60' Mature Spread: 40 – 50' Water Requirement: Adaptable Exposure: Sun Altitude: 9,000' Fall Color: Yellow

Upright branches arch to create a high canopy of rounded habit. Blocky bark is light gray with knobby ridges. The bright green, serrated leaves turn yellow in autumn.



HONEYLOCUST

Imperial Honeylocust

Gleditsia triacanthos inermis Imperial' Mature Height: 30 – 40' Mature Spread: 30 – 40' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Yellow A graceful tree with spreading, thornless branches forming a tight rounded crown. Leaves consist of small, oval, bright green leaflets fad-

ing to soft yellow in fall. Seedless.

Shademaster Honeylocust

Gleditsia triacanthos inermis Mature Height: 40 – 50' Mature Spread: 30 – 40' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Yellow

This thornless tree is an open, rounded tree with arching branches that turn upward at the ends. The rich green, small oval leaflets make up the light textured leaves that become lemon yellow in the fall.



HYBRID ELMS

Accolade Elm

Ulmus (japonica X wilsoniana) "Morton" Mature Height: 60' Mature Spread: 45 - 50' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Yellow

This single trunk, large shade tree has an upright spreading crown, is resistant to the Dutch Flm Disease and is a seedless. This



specimen makes an excellent street tree and is the choice tree to replace the American Elm.



LINDEN

Greenspire Linden

Tilia cordata `Greenspire' Mature Height: 30 – 40' Mature Spread: 25 – 35' Water Requirement: Adaptable Exposure: Sun Altitude: 6,000' Fall Color: Yellow Slender, upturned branches create a

dense, uniform crown with a conical outline. Small, rounded, to heart-shaped green leaves turn yellow in the fall. The aromatic, tiny flowers hang in loose clusters and appear in summer.

Legend American Linden Tilia americana `Wandell' Mature Height: 40 – 60' Mature Spread: 30 – 40'

Water Requirement: Adaptable Exposure: Sun – Filtered shade Altitude: 6,500' Fall Color: Golden yellow

Smooth, grayish bark becomes grooved with long, narrow ridges. Low, sweeping branches create a broad pyramidal, to rounded, canopy. Enormous, green heart-shaped leaves change to golden in the fall. The sweetly fragrant flowers appear in summer.

Little Leaf Linden

Tilia cordata Mature Height: 40 – 50' Mature Spread: 40 - 50' Water Requirement: Adaptable **Exposure: Sun** Altitude: 6,500' Fall Color: Yellow

Greenspire and Glenleven Linden trees and like them, the Little Leaf is an erect pyramidal tree with a dense canopy.

Sterling Silver Linden

Tilia tomentosa `Sterling Silver' Mature Height: 40 – 50' Mature Spread: 20 – 35' Water Requirement: Adaptable - Dry **Exposure: Sun** Altitude: 6,500' Fall Color: Yellow This tree is the parent tree to Large, broadly heart-shaped leaves

that are dark green with silvery undersides produce a thick cover on this pyramidal to upright-oval tree. Fragrant, yellowish-white blossoms are produced in late spring to early summer.

MAPLE

Green Mountain Sugar Maple

Acer saccharum 'Green Mountain' Mature Height: 40 – 50' Mature Spread: 30 – 40' Water Requirement: Adaptable **Exposure:** Sun Altitude: 6,500' Fall Color: Orange-Red Tolerant of heat and drought, this tree has an upward sweeping crown shape. This makes for a good street tree selection.





Silver Maple Acer saccharinum Mature Height: 40 - 60' Mature Spread: 40 – 60' Water Requirement: Adaptable **Exposure:** Sun Altitude: 6.500' Fall Color: Yellow



The Silver Maple has an open spreading crown and makes for a shapely tree. It is one of the older maple tree species planted in Durango.



Deborah Maple Acer platanoides Mature Height: 40' Mature Spread: 40' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Bronze



The Deborah Maple has a broad, round dense canopy.

Sensation Boxelder

Acer negundo Mature Height: 30 – 40' Mature Spread: 25 – 30' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Orange to Red



Broad round branch structure with compound leaf canopy. Small to medium tree. Insect and disease resistant. Fall color a brilliant orange to red.



OAK

Bur Oak

Quercus macrocarpa Mature Height: 50 – 60' Mature Spread: 50 – 80' Water Requirement: Adaptable - Dry Exposure: Sun Altitude: 6,500' Fall Color: Golden yellow – Brown

A massive trunk, that is deeply grooved supports corky ridged twigs on wide spreading branches to create a majestic broad rounded canopy. Large, heavy textured, blunt lobed leaves are dark green and turn yellow to brown in fall.

English Oak

Quercus robur Mature Height: 40 – 60' Mature Spread: 40 – 60' Water Requirement: Adaptable Exposure: Sun Altitude: 6,000' Fall Color: Golden yellow



Stately, spreading branches form a broad, conical to irregularly rounded crown. Smooth, dark brown bark develops deep grooves becoming dark gray as it ages. Dark green, lobed leaves turn golden-yellow in the fall, with dry leaves persisting through winter.



Red Oak

Quercus rubra Mature Height: 40 – 60' Mature Spread: 40 – 60' Water Requirement: Adaptable Exposure: Sun Altitude: 6,000' Fall Color: Bronze to Wine Red Wide plated, shallowly grooved bark is ashy-gray, sometimes black. Well balanced branches sweep upward to form a globular canopy. Sharply lobed, dark green leaves turn to bronze and winered in the autumn.

Shumard Oak

Quercus shumardii Mature Height: 50 – 60' Mature Spread: 40 – 60' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Orange-Red

The bark is a smooth light green when young



and becomes furrowed and dark gray-brown as the tree matures. Deeply lobed green leaves turn orange-red in the fall. This makes an outstanding street tree section and also works well in any landscape setting.

White Oak

Quercus alba Mature Height: 40 – 60' Mature Spread: 40 – 60' Water Requirement: Adaptable Exposure: Sun – Filtered Shade





Hardy to Altitude: 6,000' Fall Color: Wine Red

This is a picturesque tree with thick, horizontal branches forming a broad rounded canopy. Light ashy-gray bark is divided into narrow rectangular blocks. Deeply lobed leaves are dark green with a bluish cast in summer and turn wine red in fall.

SYCAMORE

Sycamore Platanus Mature Height: 50' Mature Spread: 40 – 50' Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Yellow The Sycamore has a broad spreading crown.



DECIDUOUS ORNAMENTAL TREES

HAWTHORN

Thornless Cockspur Hawthorn

Crataegus crusgalli inermis Mature Height: 15 - 25' Mature Spread: 15 - 20' Flower Color: White Flower Season: Spring Water Requirement: Adaptable Exposure: Sun Altitude: 8,000'



Fall Color: Bright Orange to Bronze-Red

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.



LILAC

Japanese Tree Lilac

Syringa reticulata Mature Height: 15 - 25' Mature Spread: 15 – 20' Flower Color: White Flower Season: Late Spring Water Requirement: Adaptable

Exposure: Sun – Filtered Shade Altitude: 6,500' Fall Color: Golden Yellow

Rigid branches form a small tree or large shrub with a rounded crown. Broadly ovate leaves are deep green and change to golden-yellow in the fall. Large, pyramidal clusters of small flowers emit a slight frangrance during the late spring.

MAPLE

Amur or Ginnala Maple

Acer ginnala Mature Height: 15 - 20' Mature Spread: 15 – 20' Flower Color: Greenish-Yellow Flower Season: Mid-Spring Water Requirement: Adaptable Exposure: Sun Altitude: 8,500' Fall Color: Scarlet-Red

This is a dense, finely branched, large shrub or small tree with an irregular, rounded habit. The three-lobed leaves are bright green and turn to scarlet-red in the fall.

Rocky Mountain Maple/Native

Acer glabrum Mature Height: 10 – 22' Mature Spread: 10 – 15' Flower Color: Greenish-Yellow Flower Season: Early to Mid-Spring Water Requirement: Adaptable Exposure: Sun Altitude: 9,000' Fall Color: Yellow with Rose Tints



Smooth ashy-gray branches and five-lobed, dark green leaves form a small tree or large shrub with an upright, oval crown. Fall foliage turns rich yellow with rose highlights. Green winged seeds turn to rose in the late summer.

CRABAPPLE

Spring Snow Crabapple

Malus "Spring Snow" Mature Height: 15 - 20' Mature Spread: 15 - 20' Flower Color: White Flower Season: Spring Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Fall Color: Yellow



Open crown structure with mature rounded outline. Single white flowers in the spring and oval green leaves, turning yellow in the fall. Non fruit bearing.

OAK

Gambel Oak/Native

Quercus gambelii Mature Height: 8 - 20' Mature Spread: 6 - 12' Flower Color: Insignificant Flower Season: n/a Water Requirement: Dry Exposure: Sun – Filtered Shade

Exposure: Sun – Filtered Shade Altitude: 9,000' Fall Color: Yellow – Red



Gamble Oak is a large shrub or small tree that often occur in dense thickets. The branches are stout and spread irregularly. Shiny, dark green leaves have rounded lobes of irregular depths.



PEAR

Chanticleer Pear

Pyrus calleryana `Chanticleer' Mature Height: 20 - 30' Mature Spread: 15 – 20' Flower Color: White Flower Season: Spring

Water Requirement: Adaptable Exposure: Sun Altitude: 6,000' Fall Color: Maroon

Strong, upright branches create a narrow, pyramidal tree with a uniform outline. Flat-topped clusters of single, white blooms open in spring. Wide, egg-shaped leaves are glossy dark green and change to maroon in the fall. This is a fruitless tree.

PLUM

Krauter Vesuvius Plum

Prunus cerasifera `Krauter Vesuvius' Mature Height: 15 - 18' Mature Spread: 12 - 15' Flower Color: Pink Flower Season: Spring Water Requirement: Adaptable Exposure: Sun Altitude: 6,500' Foliage: Purple



This species has a non-spreading, upright oval crown and is a non-fruit bearing tree.

SHRUBS

There are many selections available within each variety. Check with local nurseries on other choices available for your landscape needs.

Amur Maple Shrub Form

Acer ginnala Mature Height: 15 - 20' Mature Spread: 20 – 25' Shape: Spreading, irregular A graceful shrub with spreading, slender branches and fragrant flowers.



This shrub can take sun or part shade, is adaptable to many soil types and is extrememly hardy.

Arnold Red Honeysuckle

Lonicera tatarica `Arnold Red' Mature Height: 6 - 8' Mature Spread: 6 - 10' Shape: Upright





This has the darkest red blossom of any honeysuckle and has a profuse flower display. Fragrant pink-white flowers in May followed by a brilliant show of large bright red berries through June and July. This shrub likes sun or partial shade, is easy to grow in reasonably well drained soil and makes a good border.

Ash Leaf Spirea

Sorbaria sorbifolia Mature Height: 6 - 8' Mature Spread: 5 - 10' Shape: Erect

Formerly called Spiuraea sorbifolia, Ural Falsespirea, this spirea has large plumes of creamy white flowers in June and prefers moist, well-drained, organic soil.



Blue Mist Caryopteris

Caryopteris x clandonensis Mature Height: 2' Mature Spread: 2 - 3' Shape: Mounded

This blue flowering shrub is compact, low growing and is valued for it's extended flowering season from late July until frost. The shrub dies back to the ground in winter, but flowers on new growth.





Blueberry Elder Sambucus caerulea Mature Height: 15 - 25' Mature Spread: 15' Shape: Upright, spreading This large shrub or small tree, is valued for it's attractive blue berries in August.

Butterfly Bush

Buddleia davidii Mature Height: 4 – 6' Mature Spread: 4 – 5' Shape: Upright

This is a vigourous growing, multistem plant for the perennial border. Large flower spikes emerge on new growth from July through September. The flowers are good for cutting and are attractive to butterflies. This shrub likes sun, is easy to grow and takes little care.





Cheyenne Privet Ligustrum vulgare `Cheyenne' Mature Height: 4 –5' Mature Spread: 5 - 6' Shape: Upright



The Cheyenne Privet has white flowers and is hardy.

Common Purple Lilac

Syringa vulgaris Mature Height: 12 - 15' Mature Spread: 8 - 12' Shape: Upright, vase shaped. This shrub has delicate, fragrant, purple flowers in May and makes for a perfect, informal hedge.





Common Snowball Viburnum Viburnum opulus 'Roseum' Mature Height: 10 - 12' Mature Spread: 10 - 12' Shape: Rounded This showy plant blooms profusely with large, double white flowers in April – May, which make it a very popular shrub. It is also known as Viburnum opulus 'sterile'.

Goldmound Spirea

Spirea x 'Goldmound' Mature Height: 18 - 24" Mature Spread: 2 - 3' Shape: Low, mounded

Goldmound Spirea was introduced in 1980. This bushy plant likes sun and has pink flowers in June and July. Makes an outstanding small colorful foliage plant for accent or contrast as a foundation planting or shrub border.





Hedge Cotoneaster Cotoneaster lucidus Mature Height: 8 – 10' Mature Spread: 4 – 5' Shape: Upright Black fruits. Fine hardy hedge. Free from insects and disease.



Lynwood Gold Forsythia

Forsythia x intermedia `Lynwood Gold' Mature Height: 5 – 7' Mature Spread: 7' Shape: Upright

Deep golden yellow flowers cover the branches in April. A dense growing

Jackmann Potentilla/Native

Potentilla fruticosa `Jackmannii' Mature Height: 3 - 4' Mature Spread: 3 - 4' Shape: Rounded The flowers are deep yellow, 1 ½' in size and blooms well all summer.



plant with an upright habit. Tolerates city conditions well. May experience die back of flower buds in zone 4. Sun or light shade.



Red Twig Dogwood

Cornus Mature Height: 8 – 10' Mature Spread: 8 – 10' Shape: Rounded This excellent red stem dogwood is beautiful in the winter. It has porcelain-blue fruits, is shade tolerant and is very adaptable.

Staghorn Sumac Rhus typhina Mature Height: 10' Mature Spread: 12 - 15' Shape: Wide spreading

This shrub has branches that are covered with dense velvety hair, greenish



flowers, in dense terminal panicles and crimson berry clusters in the fall. The Staghorn tolerates most soil types and is a xeriscape plant.



Variegated Weigela

Weigela florida 'Variegata' Mature Height: 4 – 6' Mature Spread: 6 – 8' Shape: Rounded, compact This compact grower has pink flowers and green leaves that are edged in colors of pale yellow and cream.

Western Sand Cherry/ Native

Prunus besseyi Mature Height: 5 – 6' Mature Spread: 5 – 6' Shape: Rounded



This shrub has single white flowers in May and in summer, great quantities of ³/₄" purple-black sweet fruits, which are used for preserves. This xeriscape plant is very hardy and tolerates hot, dry soil, but prefers well drained soil.





Winged Euonymus

Euonymus alatus Mature Height: 10' Mature Spread: 8 – 12' Shape: Rounded

This shrub has corky bark, yellow flowers in May to June and has long lasting fall color. It likes full sun, is a xeriscape plant and is good for borders and screens.



TREE PLANTING

Planting is probably the most important stage in a tree's life. Proper handling and care before planting and proper planting procedures are essential to survival and growth.



Time to Plant

Early spring, when the frost leaves the soil, is the best time to plant trees. In Colorado, this is usually by March 15. Mid summer plantings are more hazardous because of higher temperatures and greater water loss from fully leafed plants; transplanting at that time will usually result in some top die-back if not death because the root system cannot provide needed water. Fall plantings are also troublesome because of variable fall and winter weather. A tree transplanted in the fall may not have sufficient root growth before a hard freeze and might not be able to take in needed moisture. If at all possible, try to conduct tree plantings in early spring.

How to Plant

There are three steps to proper tree planting: soil preparation, tree placement and backfilling.

1. Tree Placement. Placement of the tree in a proper sized hole should be the first step. The width of the hole should be two times the size of the ball or container, or eight to twelve inches of open space around the ball. This will allow space for proper backfilling. Bare root trees require a hole large enough so roots are spread out and not bent. All holes should be dug with straight sides. The hole should be dug so the top of the root ball will be two inches above ground level. This will allow for settling in the hole. In heavy clay soils, the ball's top should remain two to four inches above ground level to allow for water run-off and root aeration.

2. Soil Preparation. Soil preparation before planting will affect the tree's growth for many years. Knowing the soil type is important in determining preparation needed.

Colorado soils vary widely from sand to heavy clay. A heavy clay soil does not have pore space large enough to provide air to the tree's root system, particularly under moderate watering. Water will fill the small pore space of clay, thus eliminating air to the roots and suffocating the tree. Coarse peat moss or other organic matter such as thoroughly decomposed compost can be used to amend a heavy clay soil. Do not use fine peat such as native mountain peat or fresh manure. Fine peat will fill up pore space in clay and fresh manure or other fertilizers may burn newly planted tree roots. One or two shovels of the recommended organic matter should be thoroughly worked into the soil you remove from the planting hole.

Sandy soils usually act the opposite of clays. Loose sand that has been tilled will be extremely porous, having large pore spaces which result in lack of water holding capability. This allows water to penetrate so fast that plant roots cannot benefit. Coarse peat or other organic amendment can be added to sand to increase water retention ability. Intermediate soils such as sandy loam clay will need little, if any amending.

3. **Backfilling.** Backfilling is a simple step, but if done improperly will hinder tree growth. Remove all twine around trunk and top 2/3 of wire, burlap and ropes from balls and containers before backfilling. Begin backfilling the hole while making sure the tree is upright and straight. Fill up the hole with soil, then fill with water. Allow the water to soak in, then proceed to fill the remainder of the hole with soil. Soak the tree with water to settle the backfill, but do not tamp. Fill in around the root ball to ground level and leave rough soil surface around the tree to act as a mulch.

Mulching can be extremely helpful in stabilizing soil temperature within the root ball. Woodchips, cedar bark mulch or other coarse organic material should be spread on the surface of your planting soil three to four inches deep. This mulching will help control weeds, conserve moisture and prevent sudden freezing and thawing of the soil.

TREE PLANTING DETAIL

Corrective Pruning

Dead or damaged wood ONLY, to be completed immediately after planting. DO NOT CUT LEADER



Trunk Protection

Wrap trunk for first winter and remove in spring.

Canvas webbing or approved equal.

Tree Staking

#10 guy wire; attach to grommets in straps.

Steel posts or approved equal.

Remove guy wires and posts after one growing season.

Planting

Plant root ball 2" above existing grade

Roughen side of planting pit.

Specified backfill mix.

Remove all twine around trunk and top 2/3 of wire around ball.

For more tree-planting tips and information, visit **arborday,org**.

Source: (Arbor Day Foundation

UNSUITABLE TREES For the Durango Area

The trees listed below are not planted in Durango because of one or more of the following undesirable characteristics: Prolific seed -

production, invasive habits, fruit, pods, thorn bearing, weak limbs and/ or structure and insect and disease problems.

Russian Olive Elaeagnus angustifolia This species is noxious and inva- sive to native species in the area and is banned from being sold in Colorado. This species is listed for eradication.	Tamarix (Salt Cedar) Tamarix ramosissima This species is noxious and inva- sive to native species in the area. This species is listed for eradica- tion.
Siberian Elm	Boxelder Acer negundo
Ulmus puimla	Except "Sensation Boxelder". The
This species is prolific in seed pro-	female trees of this species is pro-
duction, is invasive, prone to weak	lific in seed production, is invasive
limbs, insect and disease prob-	and prone to weak limbs, insect
lems.	and disease problems.
Crabapple (malus) All varieties, except "Spring Snow Crabapple". Abundant fruit pro- duction and are highly susceptible to disease problems.	Evergreens Spruce, Pine and Fur varieties are not allowed in public right of way.
Aspen	Cottonwood (populus)
Populus tremuloides	All varieties
This species is short lived and very	This species has a weak limb struc-
susceptible to Canker Disease and	ture, is desease and insect prone
insect prone.	and is a poor street tree selection.
Willow (Salix)	Autumn Blaze Maple
All varieties	Acer x freemani
Willows are fast growing, but have	This species' trunk splits as the tree
a weak limb structure and are short	matures and color is prone to pre-
lived. They are also susceptible to	mature change.

Green & White Ash

many insects and diseases.

Fraxinus pennsylvanica & americana

Thse species are susceptible to Emerald ash borer infestations, which girdles the trunk and is fatal to the species; insect prone.

TREEMAINTENANCE

Little maintenance is needed on young trees, except for irrigation and fertilization. Irrigate only when needed and then thoroughly soak the soil. A tree will need watering when the soil is dry two to three inches below the surface.

After the first growing season, it may be necessary to fertilize. This can be accomplished by applying fertilizer such as 10-20-10 to the ground surface in spring and watering well. Do not use "Weed and Feed" fertilizers around root zones of trees and shrubs. Use a root feeder for aerating only, or if for fertilization, extend probe only ten to twelve inches into the soil. Trees will probably need fertilization every three to five years depending on the site and amount of lawn fertilization.

The best tree care is preventative maintenance. This can be initiated by a routine inspection. Check for insect and disease damage or potential and check for pruning needs of the trees. A schedule of maintenance can then be developed.

Remember, proper pruning and care will prolong tree life and provide for public safety.

PRUNING

Tree pruning is one of the most important, yet most misunderstood maintenance practices we do to our trees. Properly pruning your tree will maintain the natural form, improve health, reduce insect and disease problems, and increase your trees' life span. Improper pruning can destroy the trees' natural form, create large wounds allowing disease to enter and may weaken the tree.

The old technique of "flush cutting" (cutting the branch as close to the trunk as possible) is no longer the recommended method of pruning. Instead, leave a very slight stub and avoid cutting into the swollen area where branch meets the main stem, known as the branch collar. The branch bark ridge (that furrowed area in the branch crotch) should also be left uncut.

Proper Pruning Principles



Thanks largely to the work of Dr. Alex L. Shigo and other scientists at the USDA Forest Services' Northeastern Forest Experiment Station in Durham, NH, much is now understood about a tree's natural system of defense against infections from wounds. Based on this knowledge, these methods of making pruning cuts are recommended to help work with rather than against a tree's natural tendency to wall off injured tissues and prevent the spread of decay. In these illustrations, final cuts should be made from points C to D. Do not cut along line C-X, which is simply an imaginary vertical line to help you locate C - D

Pruning Evergreens

Conifers normally require very little pruning except where double leaders occur or when a change in branch density is desired. Removing the terminal bud on side branches will not only slow outward growth, but also help to make the plant more bushy. If the tree develops two leaders, remove the less desirable leader early in the spring.

Pruning Shrubs

Shrub pruning follows many of the same guidelines and techniques as trees. One note is that often shrubs receive little or no attention after planting until they are too large for their allotted space. By then, inside and lower foliage has probably been weakened by shade and pruning efforts leave a sparse, unattractive plant. To help rejuvenate old "leggy" shrubs (i.e. lilac) prune to encourage lower leaves and new stems. Pinching the tips of vigorous shoots periodically will keep the shrub compact and symmetrical. As with shrubs, to help rejuvenate old "leggy" hedges prune to encourage lower leaves and new stems.

Pruning Hedges

To maintain low foliage, shear a hedge so that it is wider at the base than at the top. When a hedge has become too tall or too wide, prune approximately one-third of the old stems to stimulate new branching and dense growth.

Pruning Fruit Trees

Pruning fruit trees is one of the most important steps in producing high quality fruit. Objectives are to permit entry of sunlight and remove unproductive, weak or crowded branches. Generally four to nine main scaffold branches are selected when the tree is young and maintained. The central leader is removed after the scaffold branches are selected to encourage lateral growth instead of height growth. Continue to prune undesirable branches to maintain the basic scaffold-branch structure to allow maximum light penetration for fruit production.

ASSISTANCE IN TREE SELECTION AND CARE

This publication provides general guidelines, information and ideas for tree and shrub selection and care. Additional knowledge and assistance can be obtained from the Durango Parks and Recreation Department, Parks and Recreation Advisory Board, Colorado State Forest Service (247-5250) and commercial arborists and nurseries.

LOCALNURSERIES

Below is a list of local nurseries:

Bayfield Gardens Greenhouses

1715 C.R. 216 Bayfield, CO 81122 (970) 884-0616

James Ranch Trees

33444 Hwy 550N Durango, CO (970) 749-7795

High Plains Nursery

900 C.R. 331 Allison, CO 81137 (970) 883-4600

Durango Nursery & Supply

271 Kay Cee Lane Durango, CO (970) 259-8800

Native Roots Garden Center Inc.

1271 S. Camino del Rio Durango, CO (970) 258-5111

Four Seasons Greenhouse & Nursery

26650 Road P, Dolores, CO (970) 565-8274

LANDSCAPING REGULATIONS

The following is a summation of the major provisions concerning landscaping with primary emphasis on the provisions relating to private citizens. A complete copy of the regulations may be obtained from the Parks and Recreation or Planning and Community Development Departments.

Purpose

The purpose and intent of the landscaping regulations is to provide for a well-designed landscaped treatment of development within the City of Durango. Emphasis is directed toward the treatment of exterior spaces which noticeably improves the overall quality of the development, strives toward preservation of mature and healthy trees and shrubs which are not in conflict with logical building needs and provides for consistency in design and standards for landscaping of public right-of way. The regulations further emphasize restoration of areas subject to cuts and scarring, particularly when such scarring is on a hill side and subject to public view.

Applicability

The landscaping provisions which pertain to public right-of-way apply to all development which is subject to a city development review. In addition, certain provisions of the ordinance pertain to landscaping on private property and apply to all zoning districts within the City with few exceptions.

Major Provisions

- 1. Landscaping plans pertaining to public right-of-way and proposed in conjunction with new development or redevelopment are to be susbmitted as part of the requisite development review documentation. Such plans are subject to review by the Director of Parks & Recreaiton and City Arborist to assure conformity in compliance with existing landscaping regulations.
- 2. Landscaping plans which pertain to private property are to be submitted together with site development plans to the Planning Department and will be processed with the site plan. These will also be subject to review by the Director of Parks & Recreation and City Arborist.

- 3. The Land Use and Development Code sets forth the detailed requirements in conjunction with landscaping plan specifications and reference should be made that document for such requirements. The landscaping plan specification must reflect for example, lot boundaries, location or existing and proposed improvements, location of existing and proposed structures, parking areas, pedestrian ways and landscaping areas, a statement pertaining to proposed landscaping and disposition of existing vegetation and an identification of proposed landscaping showing the location, size, species and spacing of trees and shrubs and the identification of the type of groundcover or ground treatment in all areas not covered by buildings or pavement.
- 4. Design Standards

All vegetation areas shall be provided with an automatic sprinkling or drip system. Isolated trees on private property or within the public right-of-way shall be provided with a drip or bubbler irrigator.

The following standards shall be met in the preparation of the plan and the installation of the landscaping materials.

- 4.1. The following plant sizes shall be installed
 - 4.1.a. Standard deciduous trees (2 inch caliper)

4.1.a.1. Business, Commercial, Industrial Areas, Public Parks and Rights-of-Way, Residential (2 inch caliper)

- 4.1.b. Small ornamental and flower trees non-fruit bearing (2 inch caliper)
- 4.1.c. Evergreen trees (not allowed in public rights-of-way) (6 feet)
- 4.1.d. Shrubs (adequate size to be consistent with design intent) which size must be measured in inches and not by container size.
- 4.2. All plant material shall meet specifications of the American Association of Nurserymen for Number 1 grade. All trees shall be balled and burlapped or equivalent. Caliper shall be measured six inches above the root ball.
- 4.3. Trees planted in the public rights-of-way shall be at intervals no greater than forty (40) feet on center for shade trees and thirty (30) feet for ornamental trees.

- 4.4. Ground cover planted on exposed cut areas shall include various species which shall be selected for their ability to stabilize the slope and prevent erosion.
- 5. Landscaping shall be installed in accordance with the landscaping plan and any financial security agreement prior to the issuance of an occupancy permit for the project, or part thereof if a phased project. If the landscaping for the project cannot be completed due to the season of the year, an amendment of the development schedule may be considered by the Department.
- 6. Enforcement of the landscaping regulations is vested in the City of Durango. Landscaping plans must be approved prior to the issuance of any building permit for new construction and once approved, all landscaping must be installed in accordance with the landscaping plan or satisfactory arrangements must be made for such installation prior to the issuance of any occupancy permit for improvements within the proposed development.
- 7. Appeals from the provisions of the landscaping regulations may be made in accordance with the requirements and procedures set forth in the Land Use and Development Code.



