

**APPROVED STREET AND PARKING LOT TREES
FOR THE CITY OF CHICO**

**A GUIDE TO THEIR SELECTION,
PLANTING AND LONG TERM CARE**

**Approved by the
Bidwell Park and Playground Commission
June 29, 2009**

**Prepared and Revised by
City of Chico General Services Department
Urban Forest Manager
December, 2011**

RECOMMENDED STREET TREES FOR CHICO

This list of recommended street trees for the Chico area contains a general description of each tree species and its space requirements for planting. For ease of use, the list is divided into small, medium and large trees. Small trees are generally less than 30 feet in height; medium sized trees are generally 30 feet to 60 feet in height; large trees are generally 60 feet in height or taller.

The species on this list have characteristics that make them desirable street trees, though many species are suitable for many different planting locations. All of the trees listed have been selected for their resistance to injurious insects or diseases and suitability to the climate in Chico. Use the information accompanying each tree species as a guide for species selection and determination of planting location.

Each block side within the City has a primary and secondary species designated for that street. The designated trees are chosen from this list based upon conditions along the street. Gain approval for planting or pruning from the Park Department prior to proceeding.

The height and spread figures are given for trees at maturity. Species with rapid growth rate can be expected to grow at least two feet per year when young. Those with moderate growth rates will grow between one and two feet per year when young. Slower growing trees will generally grow less than one foot per year when young. Please keep in mind that growth rates are considered in general terms. Soil conditions, water availability, ground cover, and physical injuries will greatly influence the actual growth rate of a tree.

Root growth is listed as shallow, medium or deep. These are relative terms that describe the root system in its natural setting under ideal growing conditions. The majority of a tree's root system is typically within the upper three feet of soil. Actual soil conditions, ground cover, and irrigation patterns on site will ultimately determine the depth of rooting.

Tree roots require air exchange through the soil for healthy growth. Heavily compacted or high clay content soils typically restrict the movement of oxygen to the top few inches of soil. Under such growth conditions, trees will often grow roots near the surface of the soil in order to more easily acquire water. The shallow root structure that develops leaves the tree susceptible to being blown over by strong winds. Proper soil preparation, adequate watering, and mulch ground cover around the base of trees are important for healthy, deep root development, which leads to healthier trees. Encouraging deep root growth will minimize the potential impact to curbs and sidewalks. In areas of compacted Tuscan or Redding clay soils, removal of soil to a depth of thirty inches and replacement with Vina clay loam will be necessary to facilitate tree growth. Compacted Vina loam soils may be scarified to a depth of twenty four inches.

Turf at the base of a young sapling can inhibit the production of new roots, stunting growth. Chemicals secreted by the roots of turf grasses act as a growth inhibitor for tree roots. The easiest way to solve this problem is to remove lawn turf from around the root ball. Experts at the University of California Cooperative Extension recommend creating a circle at least 6 feet in diameter, **or 3' out from the trunk.** Standard Landscape Details LS-1 and LS-2 call for the installation of root barriers. Root barriers will provide a measure of protection for curbing and sidewalk. They do not guarantee the prevention of infrastructure damage. To provide the greatest level of protection, the barriers must be installed properly with at least ½-inch of barrier above final grade. Failure to install the barrier properly may result in roots growing over the top of the barrier, rendering it ineffective.

The majority of the tree species on this list are deciduous. A small number of the trees are either broadleaf evergreens or conifers. Deciduous trees are preferential in urban landscapes because they drop their leaves in fall and allow solar exposure during the winter while providing shade during the summer.

Users of this list should keep in mind that no tree species is perfect. It is important that a selected tree species or cultivar be adaptable to the space available (laterally, horizontally and vertically) while meeting the aesthetic needs of the area.

The final consideration is the availability of trees on the list. Every effort is made to list trees that are commercially available and to work with local nurseries to ensure they are stocked. If the tree is not in stock at a local nursery, ask the salesperson to order the tree and have it shipped in. Substitutions for designated street trees will be made on a case by case basis, with substitutions possessing characteristics as close to the designated tree as possible.

The City's Parking Lot Shade Ordinance requires that parking lots achieve 50% shade coverage within 15 years. Even with good soils, trees in limited soil volumes grow slowly and may not achieve mature size in 15 years. The square footage listed in the following table is the shade footage allowable for development projects, based upon actual measurements of trees in parking lots that have been established 15 or more years.

Questions regarding street tree characteristics may be called into the Urban Forester at the Park Department at (530) 896-7802. Your questions will be answered as soon as possible.

Bibliography

Bennie, Sam. 2000. *The Encyclopedia of North American Trees*. Firefly. Buffalo, New York

Dirr, Michael A. 1997. *Dirr's Hardy Trees and Shrubs*. Timber Press. Portland, Oregon

Flint, Harrison L. 1997. *Landscape Plants for Eastern North America, Exclusive of Florida and the Immediate Gulf Coast* 2nd ed. John Wiley & Sons, Inc. New York, New York

Gilman, Edward F. 1997. *Trees for Urban and Suburban Landscapes*. Delmar Publishers. Albany, New York

Harlow, William M., and Ellwood S. Harrar. 1969. *Textbook of Dendrology* 5th ed. McGraw-Hill. New York, New York

Jacobson, Arthur Lee. 1996. *North American Landscape Trees*. Ten Speed Press. Berkeley, California

Images courtesy of: Pat Breen, Oregon State University: <http://oregonstate.edu/dept/ldplants/2plants.htm>

University of Connecticut © Copyright Mark Brand, 1997-2001.
<http://www.hort.uconn.edu/plants/index.html>

Photo Credits: W. Mark and J. Reimer SelecTree. "Magnolia grandiflora 'russet' Brief Tree Record." SelecTree. 1995-2011. Oct 12, 2011. <http://selecttree.calpoly.edu/treedetail.lasso?rid=852>

SMALL TREES

Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
Trident maple <i>Acer buergeranum</i>	25' - 30'	25' 314 sq ft	Moderate	Medium	4'	20' - 25'	<p>A small shade tree with a round shaped crown and small, 3-lobed leaves. The leaves are glossy green turning yellow to red in the fall. This tree must be properly pruned to grow more upright and provide needed pedestrian and vehicular clearance. Somewhat drought tolerant.</p> <p>Image from E. 2nd Ave. and Laburnum</p>	

Chinese maple
Acer truncatum 20' - 25' 20'
 314 sq ft Slow - Moderate Medium 4' 20'

Small round headed tree with leaves similar to liquidambar. Fall colors vary from red to bright yellow. Drought tolerant when established.

Image: very mature specimen on Shoshonee Ave.



Japanese maple
Acer palmatum
 'Emperor 1' 15' - 18' 12' - 15'
 Slow - Moderate Medium 3' 20'

Striking dark purple foliage in spring, turning bright red in autumn. Greater resistance to sunburn than other cultivars. Provide afternoon shade.

Image

Eddie's White
Wonder dogwood
Cornus x
'Eddie's White
Wonder'

30'

15' - 20'

Moderate

Medium

3'

20' - 25'

A hybrid between the Eastern and Pacific dogwoods. This cultivar can bloom twice in one year. Very large bracts. Bright red fall color. Other cultivars with similar characteristics are 'Pink blush' and 'Cream Cup'.

Provide afternoon shade.

Image is from the 'Diamond Alley' between 3rd and 4th streets next to the downtown parking structure.



Forest Pansy
redbud
Cercis x 'Forest
Pansy'

20' - 25'

20'

314 sq ft

Moderate

Medium

3'

20' - 25'

A cultivar of Eastern redbud, the tree has purple foliage. Good for small spaces. Provide afternoon shade..

Image: web: Pat Breen, Oregon State University



Korean dogwood
Cornus kousa

20' - 30'

20' - 30'

314 sq ft

Moderate

Medium

4'

20' - 25'

Small vase shaped tree for limited space. Requires summer watering. Showy fall color. Moderate resistance to anthracnose.

Image: web: [Pat Breen, Oregon State University](#)



Starlight
dogwood

*Cornus kousa x
nuttalii*

20' - 25'

30'x 20'

314 sq ft

Slow

Medium

4'

20'

Large white flowers, more drought
tolerant than other dogwoods. Native
cross.

Image: web: [Pat Breen, Oregon State
University](#)



Common Name
Scientific Name

Height

**Spread /Max
Parking Lot
SQ Footage**

**Growth
Rate**

**Root
Growth**

**Minimum
Planter
Width**

**Optimum
Spacing**

Description

Image

Hybrid Crepe
myrtles
*Lagerstroemia
indica X fauriei*

176 sq ft
All Varieties

Slow

Deep

3'

20'

Small trees for areas with space limitations. Profuse flowers in the summer. Yellow to red fall colors. Names hybrids are mildew and aphid resistant. *L. indica* cultivars are not an acceptable substitute for this hybrid.

Images are from varied locations within Chico



'Osage'	15'	8'				Pink blossoms
'Dynamite'	20'	15'				Red blossoms

'Tuscarora' 20' 15'

Pink/Red blossoms



'Miami' 20' 16'

Coral pink blossoms



'Muskogee' 25' 15'

Purple blossoms



'Natchez' 30' 18'

White blossoms



'Choctaw' 30' 20'

White/Pink blossoms



Saratoga laurel
Laurus 'Saratoga' 20' - 25' 15' - 20'
176 sq ft

Moderate Medium 4' 20'

Small evergreen for areas with limited space. Deep rooted tree suitable for Mediterranean climates. .

Little Gem
magnolia
*Magnolia
grandiflora*
'Little Gem'

20' - 25'
20'
176 sq ft

Slow -
Moderate Medium 4'

20' - 25'

A good magnolia of small stature.
Evergreen. Like all evergreen
magnolias, this tree has the potential
to produce litter all year long.

Image from the median of West East
Ave.



Saucer magnolia
Magnolia
soulangiana

20' - 25'

15' - 20'
314 sq ft

Moderate

Deep

4'

25'

Large pink or purple blossoms in early spring prior to leaf emergence. Generally pest free.

Image from Vallebrosa east of Arbutus



American hop-hornbeam
Ostrya virginiana 25' - 35' 25' - 35'
 176 sq ft Slow - Moderate Deep 4' 25' - 30'

Good tree for small areas. Light green elm-like leaves. Bright yellow fall color. Interesting planar-type growth habit. Available in bare-root stock from Oregon growers.

Image from the Internet, University of Connecticut

© Copyright Mark Brand, 1997-2001.



Akebono cherry
Prunus X yedoensis
 'Akebono' 30' 30' - 35'
 176 sq ft Moderate - Fast Medium 5' 25' - 30'

This particular variety has true pink blossoms lasting 1 ½ to 2 weeks and no fruit. Bright yellow-red fall color. May be subject to borers on poor sites.

Planted around chess table on west side of downtown City Plaza.

Image from the Internet, University of Connecticut

© Copyright Mark Brand, 1997-2001.



Japanese
snowbell
Styrax japonicus

20' - 30'

15' - 20'
314 sq ft

Moderate

Medium

4'

20'

Small rounded umbrella shaped tree. Beautiful spring flowers and showy fall color. This tree needs moist, well drained soil.

Image from Terrace Lane



Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
--------------------------------	--------	--	----------------	----------------	-----------------------------	--------------------	-------------	-------

Golden chain tree
Laburnum x
watereri 'Vossii'

20' - 25'

15' - 20'
314 sq ft

Slow

Medium 3'

25'

Long hanging clusters of yellow flowers. Requires afternoon shade. A new addition to Chico's street tree list. Not fully tested in Chico.

Image: web: [Pat Breen, Oregon State University](#)



Goldenrain tree
*Koelreuteria
paniculata*

20' - 30'

15' - 20'
314 sq ft

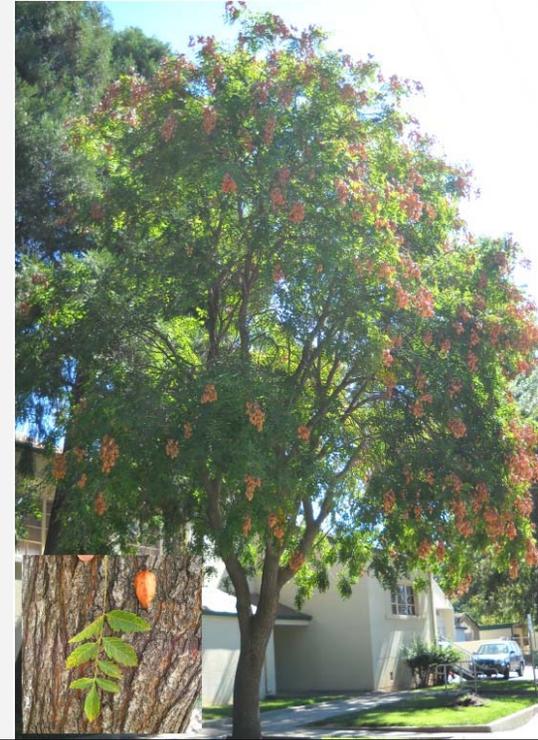
Medium
- Fast

Medium 3'

25'

Dramatic purplish red emerging leaves, turning bright green in summer and golden yellow in autumn. Flowers are 1/2" wide, bright yellow, grow in clusters 12-15" long, bloom in early summer.

Image from Arbutus Ave. and E. 3rd Ave.



Eastern redbud
Cercis canadensis

20' - 30'

25' - 30'

314 sq ft

Slow -
Moderate

Medium
- Deep

3'

20' - 25'

Small tree similar to Western redbud. Good tree for small places. Red flowers. May have caterpillar problems. Located on Cussick between Cromwell and Grafton Park. Image: web: [Pat Breen, Oregon State University](#)



Strawberry tree
Arbutus unedo

15' - 30'

10' - 15'

Slow

Medium

3'

20' - 25'

Trunks and large branches of mature trees become twisted and gnarled in appearance. Tolerant of a variety of growing conditions, including full sun, shade, and drought. No serious pest or disease problems. Produces edible reddish-orange fruit. Located along East 8th Street

Image: web: [Pat Breen, Oregon State University](#)



Chitalpa
x Chitalpa

20' - 25'

10' - 15'

Fast

Deep

3'

20' - 25'

A relatively new tree created by hybridizing desert willow and catalpa trees. Highly tolerant of drought, wind, and poor soils. Produces large clusters of light pink flowers. Because they are hybrids, chitalpa are sterile and do not create seeds or seed pods. A new addition to Chico's street tree list. Not fully tested in Chico.

Image: Chico's downtown plaza park at the veterans memorial



Spring Flurry
serviceberry
Amelanchier
laevis

35'

20'

176 sq ft

Fast

Medium

4'

30' - 35'

Strong central leader. White blossoms, small blue fruit. Shade tolerant.

Image: web: Pat Breen, Oregon State University



MEDIUM TREES

Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
--------------------------------	--------	--	----------------	----------------	-----------------------------	--------------------	-------------	-------

Summershade
maple
Acer
plantanoides
'Summershade'

45'

40'

706 sq ft

Moderate

Medium

6'

30' - 35'

This upright growing Norway maple was selected for its ability to withstand dry summer conditions. Leaves turn golden yellow in autumn. Prone to sunburn from afternoon sun. Plant in areas with afternoon shade.

Image taken on 8th St. between Salem and Broadway.



Superform maple
*Acer
plantanoides*
'Superform'

50'

40'

706 sq ft

Moderate

Medium

6'

35'

Similar to Summershade, this maple has a rounder canopy. It can also tolerate dry conditions. The fall color is yellow. This cultivar can be used in place of Summershade.

Image from the Internet, University of Connecticut

© Copyright Mark Brand, 1997-2001.



Red Sunset maple
Acer rubrum
'Franksred'

45'

35'

706 sq ft

Moderate

Shallow
-
Medium

7'

30' - 35'

This is a vigorous growing tree with a strong branching habit. The green foliage turns shades of red and orange-red in the fall. May suffer from manganese deficiencies in some Chico soils. Use root barriers to minimize the potential for infrastructure damage.

Image: web: [Pat Breen, Oregon State University](#)



Redpointe maple

45'

30'

Moderate

Shallow

5'

30' -35'

Broadly pyramidal, with a strong

<i>Acer rubrum</i> 'Redpointe'		452 sq ft		- Medium			central leader. Brilliant reddish-orange fall color. Red flower clusters emerge prior to leaves. A good lawn tree.
Armstrong red maple <i>Acer rubrum</i> 'Armstrong'	50'	35' 706 sq ft	Moderate	Medium	7'	30' - 35'	Narrow form. Foliage emerges bright red, turning dark green through summer. Vibrant red color in fall. Long petioles give the fruit a distinctive appearance.
Autumn splendor maple <i>Acer saccharum</i> 'Autumn Splendor'	45'	40' 707 sq ft	Moderate	Shallow - Medium	5'	30' -35'	Drought tolerant cultivar of sugar maple. Resistant to heat.

October Glory maple <i>Acer rubrum</i> October Glory	50'	35' - 45' 707 sq ft	Rapid	Shallow - Medium	7'	35' - 40'
--	-----	------------------------	-------	------------------------	----	-----------

This cultivar was developed for its dark green foliage and crimson red fall color. Manganese deficiencies are not as much of a problem. Use root barriers to minimize the potential for infrastructure damage.

Image from Main St. between 6th and 7th Streets.



Norwegian
Sunset maple
*Acer truncatum X
platanoides*
'Keithsform'

35'

25'

314 sq ft

Moderate

Medium

6'

25' - 30'

Cultivar between Chinese and Norway maple. Heat tolerant. Excellent fall color. Needs early developmental pruning.

Image: web: Pat Breen, Oregon State University



Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
--------------------------------	--------	--	----------------	----------------	-----------------------------	--------------------	-------------	-------

Red
horsechestnut
Aesculus X
carnea

35'

30'

314 sq ft

Moderate

Medium

6'

25' - 30'

Medium sized shade tree for avenues and gardens. Dark green palmate foliage. Red flowers in May. This tree needs summer water or leaf scorch may occur. Use only in areas with deep well drained alluvial soil.

Image from 57 Oak Drive



Heritage birch
Betula nigra
'Dura Heat'

40"

30'

314 sq ft

Fast

Medium 5'

30' - 35'

Glossy dark green foliage with yellow fall color. Resistant to bronze birch borer.

Image from the South end of North Ave.



Heritage birch
Betula nigra
'Heritage'

40' - 50'
35' - 45'
314 sq ft

Moderate Medium 7'

30' - 35'

An excellent substitute for white birches. This is the most deeply rooted and drought tolerant of all the birches. Resistant to bronze birch borer and less likely to be bothered by aphids. Bark has a bronze-salmon color to it.

Image is from the entrance to the Aspen Glen neighborhood.



European hornbeam
Carpinus betulus

40' - 60'
35' - 45'
707 sq ft

Moderate Medium 7'

30' - 35'

Medium sized shade tree with dark green birch-like leaves. Strong wood with good branch attachment. Narrow as a juvenile - broadens with age. Do not confuse with the columnar form.

Image: web: [Pat Breen, Oregon State University](#)



Columnar
hornbeam
Carpinus betulus
'Fastigiata'

45'

15'

177 sq ft

Moderate

Medium

7'

15' - 20'

Similar to the parent species. Retains the narrow juvenile form as an adult. Good for narrow spaces.

Image: 4th St. at the municipal parking lot.



Giant dogwood
*Cornus
controversa*

40'

30'

177 sq ft

Moderate

Medium

7'

30' - 35'

One of the larger species of dogwoods, it provides a fairly large canopy. Provide afternoon shade or protect the bark of this tree with white latex paint until the canopy begins to grow.

Image from Penstemon Way at Alamo Ave.



Autumn Purple
ash
Fraxinus
americana
'Autumn Purple'

45' - 55'
40'
707 sq ft

Moderate Medium 7'

35' - 40'

An upright oval shaped seedless ash noted for its outstanding deep purple fall color. Its branch structure is far superior to 'Raywood ash', which has a tendency to split easily.

Image taken from Filbert near Madrone



Summit ash
Fraxinus pennsylvanica lanceolata
 'Summit'

45' - 55' 35'
 707 sq ft

Moderate Medium 7'

30' - 35'

A vigorous, straight growing green ash selection. The narrow foliage turns bright yellow in the fall. This cultivar is seedless. Early formative pruning needed to ensure a strong structure.

Image from Flume St. near East 3rd St.



Autumn Gold ginkgo
Ginkgo biloba
 'Autumn Gold'

50' - 60' 35'
 707 sq ft

Slow Deep 7'

30' - 35'

Native to China and one of the oldest living trees. This selected male strain produces spectacular golden yellow fall color. May revert to female trees that produce extremely smelly fruit.

This cultivar has a tendency for the main trunk to bend at about a 25 degree angle.

Image from E. 2nd Ave. and Laburnum Ave.



Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
Princeton Sentry ginkgo <i>Ginkgo biloba</i> ‘ Princeton Sentry’	60'	30' 707 sq ft	Slow	Deep	7'	25' - 30'	<p>A narrower male cultivar of ginkgo developed at Princeton University.</p> <p>An upright, tree with a strong central leader.</p> <p>Image from Vail Dr.</p>	

Saratoga ginkgo
Ginkgo biloba
 'Saratoga'

60'

45'

707 sq ft

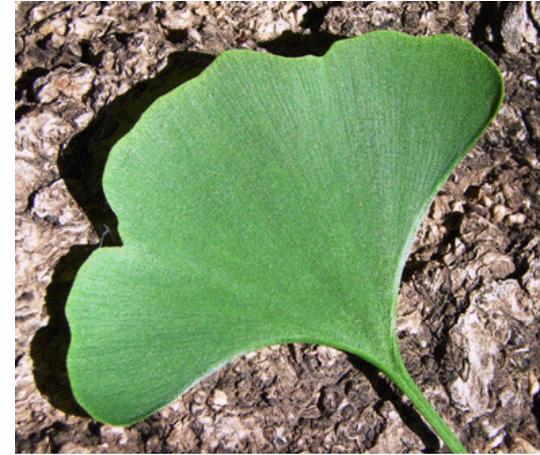
Slow

Deep

7'

30' - 40'

A dense, compact tree with ascending branches and a distinct central leader developed by the Saratoga Horticultural Foundation.



Kentucky Coffee Tree
Gymnocladius dioicus

50'

35'

707 sq ft

Fast

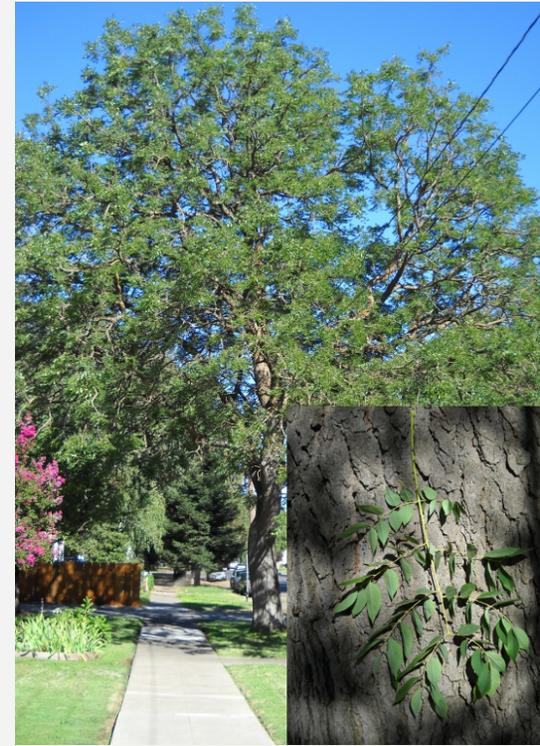
Deep

6'

30' - 40'

Deciduous. Upper arching branches, yellow fall color. Dramatic limb structure visible in winter.

Picture is from a tree at 5th Ave. and Laburnum Ave.



Russett magnolia
Magnolia grandiflora
'Russett'

60'

40'

707 sq ft

Moderate
- Fast

Shallow
Medium

7'

30' - 35'

Smaller magnolia cultivar. This disease resistant tree has fragrant blossoms. Leaf litter may be objectionable. One of the deeper rooted cultivars.

Image from the web: SelecTree

Photo Credits:
W. Mark and J. Reimer



Tupelo
Nyssa sylvatica

25' - 50'

20' - 35'

490 sq ft

Slow -
Moderate

Medium
- Deep

5'

25' - 30'

Tupelo is a very adaptable tree species. It can grow on moist or dry sites. The growing conditions dictate the ultimate height of the tree. Great fall color.

Image taken at the entrance to Chico Municipal Airport on Airpark Blvd at Fortress St.



Chinese pistache
*Pistacia
chinensis*

50'

40'

1256 sq ft

Slow -
Moderate

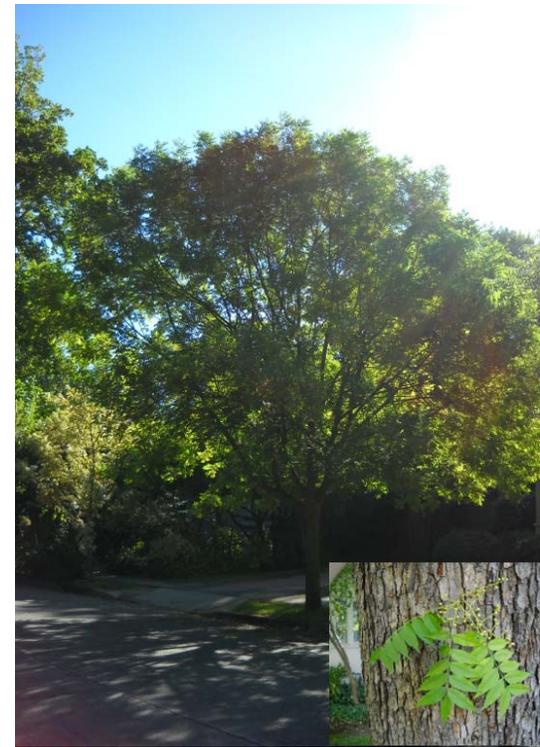
Medium
- Deep

6'

30' - 35'

One of the most attractive fall coloring trees and over planted in Chico. This tree is relatively pest free. Due to its uneven growth habit, it needs pruning early on to develop a good form. 'Keith Davey' is a seed free male cultivar.

Image from Woodland Ave.



Sawtooth oak
Quercus
acutissima

40'- 60'

30' - 40'
707 sq ft

Moderate

Deep

7'

35'

Simple serrated leaves. Dense, broad canopy. Pyramidal structure exhibited by younger trees. Holds its leaves as a juvenile in Chico's climate.

Image from Shearwater Court near Idyllwild Cir.



Holly oak
Quercus ilex

45' - 50'

30' - 40'
707 sq ft

Moderate

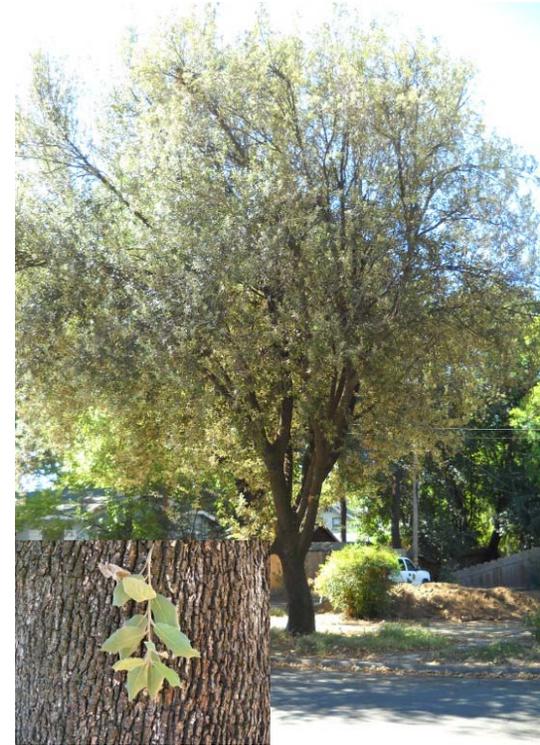
Medium

7'

30' - 35'

Evergreen oak, dark foliage and dense shade.

Image: on Oleander near E. 1st Ave.



Willow oak <i>Quercus phellos</i>	50'	35' 707 sq ft	Moderate - Rapid	Deep	7'	35'	<p>This street tree is a graceful oak with its slim, willow-like leaves. The fall color is bright yellow. Holds its leaves as a juvenile in Chico's climate.</p> <p>Image from Greenhaven Lane at Woodminster Ct.</p>
--------------------------------------	-----	------------------	---------------------	------	----	-----	---



Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description
--------------------------------	--------	--	----------------	----------------	-----------------------------	--------------------	-------------

Water oak <i>Quercus nigra</i>	70'	40' 707 sq ft	Moderate	Medium	7'	35'	<p>A good species for streets and parks because of its dense shade. Adaptable to moist growing sites. Transplants well.</p> <p>Image from the corner of Vallombrosa Ave. and Sheridan Ave.</p>
-----------------------------------	-----	------------------	----------	--------	----	-----	--



Little Leaf linden
Tilia cordata
 'Redmond',
 'Gleiven', or
 'Greenspire'

50' 35'
 707 sq ft Moderate Medium 6' 35'

Fragrant flowers on bracts in July.
 Yellow fall color. Flowers attract
 honey bees.
 Image form E. 7th St. at Poplar St.



LARGE TREES

Common Name Scientific Name	Height	Spread / Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
--------------------------------	--------	---	----------------	----------------	-----------------------------	--------------------	-------------	-------

Blue Atlas cedar <i>Cedrus atlantica</i> 'Glauca'	80'- 100'	50' 707 sq ft	Moderate	Deep	8'	35' - 45'
---	--------------	------------------	----------	------	----	-----------

Distinctive canopy form with bluish foliage. This Mediterranean species thrives in the Chico climate and is very drought tolerant. Use where space is adequate.

Image is from the City Of Chico's downtown plaza.



Deodar cedar	80'-	45'				
<i>Cedrus deodara</i>	100'	707 sq ft	Fast	Deep	8'	35' - 45'

This conifer produces a graceful form with gray-green foliage. The “weeping” top is characteristic of this species. Use this tree in place of Coastal redwood. Like Blue Atlas cedar, this species requires ample space.

Image from the corner of 4th St. and Flume St.



Canary Island
pine
Pinus canariensis

90'

25'

707 sq ft

Fast

Deep

8'

35' - 45'

A good street tree species because of its tolerance to a variety of soil types and its deep root growth. 7-10" long needles grow in clusters of 3. Requires full sun. May burn after a hard frost, but the trees generally respond.

Image taken on Raley Blvd.



Black oak
Quercus kelloggii

80'

40'

1256 sq ft

Moderate

Deep

7'

35' - 40'

This stately tree is native to the foothills and mountains of California. Tolerant of hot summer conditions and some irrigation. Large leaves with yellow fall color. Acorns favored by natives in northern California.

Image from the N.W. corner of 22nd St. and Normal Ave.



Chinkapin oak
Quercus muehlenbergii

70'

40'
1256 sq ft

Moderate Deep 7'

35' - 40'

Leaves are dark greenish-yellow on top, whitish on underside. Autumn color ranges from yellow and orange to brown. Relatively disease resistant. Prefers rich alkaline soils.

Image from Oleander Ave.



Cork oak
Quercus suber

50'

40'
1256 sq ft

Moderate Medium 7'

35' - 40'

Similar in leaf pattern and growth to the Holly oak, this broadleaf evergreen oak has a characteristic corky bark. Leaves are shed mainly in the late spring, although leaf drop occurs all year long. May be subject to mite infestations. Does not tolerate over watering.

Image from the 2000 block of the Esplanade



English oak
Quercus robur 80' 50'
1256 sq ft Moderate Deep 7' 35' - 45'

Good tree for large landscaping areas such as parks and campuses. Native to Europe. Requires full sun; pH tolerant. Susceptible to mildew.

Image take on the Esplanade at MacDonald Ave.



Valley oak
Quercus lobata 90' 60'
1256 sq ft Moderate - Rapid Deep 8' 35' - 45'

A California native common in the Chico area. This species formed oak savannas that extended over the entire Sacramento Valley. Subject to limb drop in its older age. Use along riparian areas and single loaded greenway streets.

Image from Eaton and Cohasset



Common Name Scientific Name	Height	Spread / Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
Scarlet oak <i>Quercus coccinea</i>	65' - 80'	40' 1256 sq ft	Moderate	Deep	7'	35' - 40'	<p>An outstanding shade tree with spectacular fall color. The oak is relatively fast growing and pest free. Fall color is a brilliant scarlet-red. Its only drawback is the potential to hold leaves as a juvenile.</p> <p>Image from Oak St. near W. 2nd St.</p>	

Shingle oak
Quercus imbricaria

50' - 60'

30' - 40'
707 sq ft

Moderate Deep 7'

30' - 35'

Shingle oak is similar in form to Willow oak. Fall color is russet. This species holds its leaves as a juvenile in Chico's climate.

Image from Citrus Ave. at West 8th Ave.



Shumard oak
Quercus shumardii

80'

35'

707 sq ft

Moderate

Deep

6'

35'

Similar to pin oak in every way, except one. This species holds its leaves as a juvenile in Chico's climate. Strong upright form with deep green leaves and good fall color.

Image from Idyllwild Cir.



Evergreen elm
Ulmus parvifolia

70'

35'

1256 sq ft

Fast

Medium

7'

30' - 35'

Not a true evergreen in our climate, this elm performs well in harsh urban conditions. This cultivar has more of a vase shape than the parent tree, Chinese Evergreen elm.

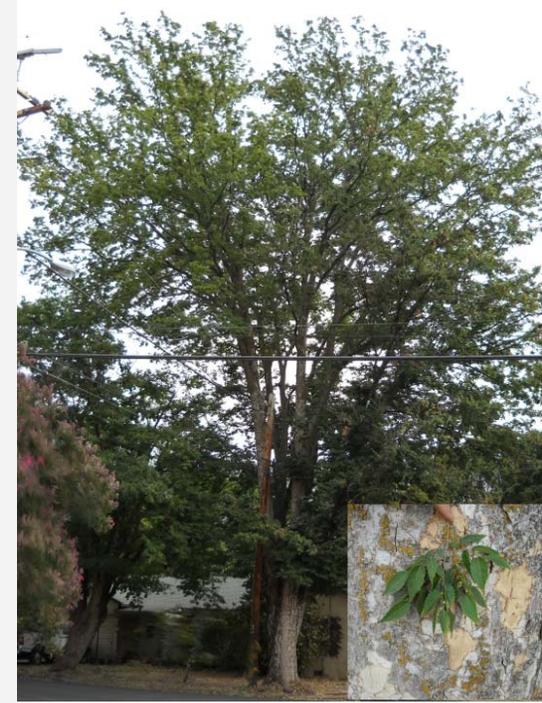
Image is of a Chinese Evergreen on 7th St. near Main St.



Japanese zelkova
Zelkova serrata 60' - 80' 60'
 707 sq ft Fast Medium 7' 30' - 35'

Related to the elm, zelkovas produce a vase-shaped tree with many ascending branches. With age, the bark turns a gray mottling. Fall colors range from yellow to russet.

Image is from 6th Ave. at Citrus Ave. a perfect example of the Zelkova is on Citrus between 6th and 8th on the west side of the street.



Village Green
 Japanese zelkova
Zelkova serrata
 'Village Green' 80' 60'
 707 sq ft Fast Medium 7' 30' - 35'

A variety of Japanese zelkova with a rounded vase branching habit and dark green leaves. Fall colors are typically rusty-red.

Image from the Internet, University of Connecticut

© Copyright Mark Brand, 1997-2001.



FOOTHILL ROADWAY TREES

Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
--------------------------------	--------	--	----------------	----------------	-----------------------------	--------------------	-------------	-------

Black oak
Quercus kelloggii

80'

40'
1256 sq ft

Moderate

Deep

7'

35' - 40'

This stately tree is native to the foothills and mountains of California. Tolerant of hot summer conditions and some irrigation. Large leaves with yellow fall color. Acorns favored by natives in northern California.

Image from the N.W. corner of 22nd St. and Normal Ave.



Blue oak
Quercus douglasii

15' - 40'

20' - 50'
707 sq ft

Slow

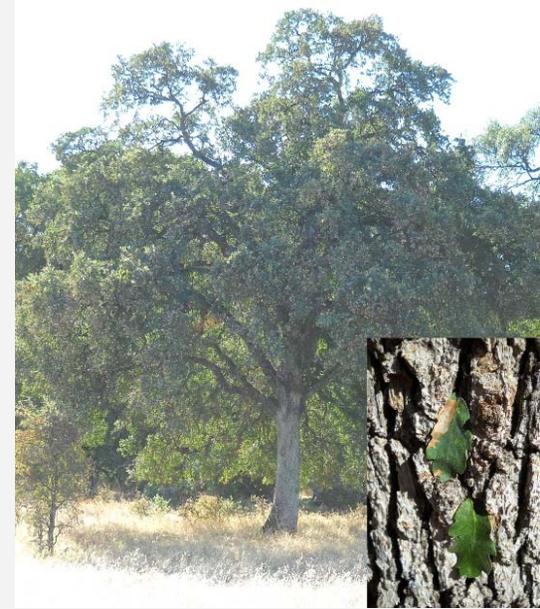
Deep

5-6'

Variable

Native to the foothills, this species grows on a variety of soil types. The deeper the soil, the larger the tree. On poor sites, a six-inch diameter tree can be over one-hundred years old. Plant as a seedling during the winter months and water weekly during the first year or two.

Image from the entrance to Upper park on the south side of Upper Park Rd.



Interior Live oak
Quercus wislizenii

20' - 35'

15' - 30'
707 sq ft

Slow

Deep

6'-8'

Variable

Similar to Blue oak except it is evergreen. In natural situations, this tree can be multi-trunked. Plant as a seedling during the winter months and water weekly during the first year or two.

Image is of a recently pruned private tree in the area of Yosemite



Bay laurel
Umbellularia californica

30' - 50'

25' - 50'
707 sq ft

Slow

Medium

8'

Variable

An evergreen tree for sites receiving some summer water. Litter can be a problem.

Image: web: [Pat Breen, Oregon State University](#)



NEW SPECIES FOR THE ADVENTUROUS

Common Name Scientific Name	Height	Spread /Max Parking Lot SQ Footage	Growth Rate	Root Growth	Minimum Planter Width	Optimum Spacing	Description	Image
Wireless zelkova <i>Zelkova serrata</i> 'Wireless'	24'	36' 707 sq ft	Fast	Medium	5'	30' - 35'	A variety of Japanese zelkova with a rounded vase branching habit and dark green leaves. Fall colors are typically rusty-red. The tree has been bred for its short nature to grow underneath high voltage transmission lines.	
Emerald Flair Elm <i>Ulmus parvifolia</i> 'JFS-Barrett'	40'	35' 707 sq ft	Fast	Medium	5'	30' - 35'	A smaller elm with excellent dark green foliage. Broadly vase shaped, with arching branches. Good red fall color.	
Emerald Sunshine Elm <i>Ulmus parvifolia</i> 'JFS-Barrett'	35'	25' 707 sq ft	Fast	Medium	5'	30' - 35'	A smaller elm with excellent fresh green foliage and neat appearance. Yellow fall color. Resistant to Elm Leaf Beetle, and hot urban environments.	

Celebration
Maple
Acer fremannii
'Celzam'

50'

35'

707 sq ft

Fast

Medium

5'

30' - 35'

Bright green summer color with leaves similar to silver maple. Yellow foliage with orange highlights. Strong branch structure, tolerant of urban soils.

Image: web: [Pat Breen, Oregon State University](#)



Streetspire Oak
Quercus robur X
alba 'JFS-
KW1QX'

45'

15'

256 sq ft

Medium

Medium

3'

30' - 35'

Dark green leaves, columnar form. Resistant to mildew. Wide branch attachments despite narrow form. Turns red in fall and does not hold foliage through the winter.

Giant Dogwood
Cornus
controversa 'June
Snow'

30'

40'

314 sq ft

Fast

Medium

3'

30' - 35'

Fast growing and wide spreading, good for small planting strips, but will need to be pruned up for clearance. Flat topped large white flowers. Excellent fall color – orange red. Black fruit. Needs afternoon shade to prevent sunburn. Grows on Black Walnut Street, north of East Avenue.

Image: web: [Pat Breen, Oregon State University](#)

