



Trailing Gazania



33 El Pueblo Road, Scotts Valley, CA 95066

(831) 438-4106

www.ScarboroughGardens.com

## Planting for Erosion Control

The following information was originally compiled by Steve Singer who is currently an erosion control specialist in Santa Cruz County. We've taken his information and added it to, so as to give you more varieties or information that may be helpful. There are other plant choices that may also be suitable for your slopes. Let us assist you in getting this important job successfully completed. We also encourage people in some instances to use erosion control seed, seed starter fertilizer (16-20-0, 16-16-16) topped with straw and netting.

Growth Rate: R=Rapid, M=Moderate, S=Slow

### Groundcovers

| Name   | Description   | Suitability for Problem Situations |                |              |              |            |             |      |            |              |         | Care and Comments |   |
|--|---|------------------------------------|----------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|---|
|  |   | Growth Rate                        | Height/ Spread | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought |                   | Summer Irrigation   |
| <b>California Fuchsia</b><br>( <i>Zauschneria californica</i> )          | A perennial plant with pretty red flowers. Grey foliage. Partly deciduous. Low, trailing growth.                                      | R                                  | 1-3'/<br>1-3'  | X            | X            |            |             | X    | X          |              | X       | ?                 | Full sun, well drained soil required. Tolerates occasional summer water. Good in masses for erosion control.  |
| <b>Carmel Creeper</b><br>( <i>Ceanothus griseus horizontalis</i> )       | Prostrate to low-spreading shrub. Has thick leathery leaves and bright blue-flowers. Does best on coast.                              | R                                  | 1-3'/<br>5-12' |              |              | X          |             | X    | X          |              | X       | X                 | Prefers full sun and good drainage. Not tolerant of clay soils. Variety "Yankee Point" is best for wet soils. Good for slopes.  |
| <b>Creeping Australian Salt Bush</b><br>( <i>Atriplex semibaccata</i> )  | Deep-rooted perennial with grey-green foliage. Forms a dense mat of 1" leaves.  | M-<br>R                            | 1'1-6'         |              |              | X          |             | X    | X          |              | X       |                   | Needs full sun. Tolerant of alkaline soils. Excellent erosion control for dry hillsides. Fire resistant. Plant 3' apart for solid cover.  |
| <b>Dwarf Coyote Brush</b><br>( <i>Baccharis pilularis "Twin Peaks"</i> ) | Low-growing shrub with light green foliage. Makes a dense mat. Roots from stem as it grows. A low-maintenance, dependable bank cover. | R                                  | ½-2'/<br>3-7'  | X            | X            | X          |             | X    | X          | X            | X       | X                 | Tolerates almost all soil and soil moisture conditions. Does not tolerate heavy shade or alkaline soils. Not browsed by deer or livestock. Common pasture invader with overgrazing. Good for steep slopes. Relatively fire resistant. |
| <b>Dwarf Mirror Plant</b><br>( <i>Coprosma kirkii</i> )                  | Spreading and low evergreen shrub. Has small yellow green leaves on stems that slant outward from the base.                           | M                                  | 2-3'/<br>3-5'  | X            | X            |            |             | X    | X          |              | X       | X                 | Tolerates most soils. Grows in sun or partial shade. Fire resistant.  |

## Groundcovers (cont.)

| Name   | Description  | Suitability for Problem Situations |                 |              |              |            |             |      |            |              |         | Care and Comments |   |
|--|--|------------------------------------|-----------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|---|
|  |  | Growth Rate                        | Height/ Spread  | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought |                   | Summer Irrigation   |
| <b>Ivy Geranium<br/>(Pelargonium peltatum)</b>         | Trailing perennial or subshrub. Has bright green ivy-like leaves.  | R                                  | ½-1'/<br>2-3'   | X            |              |            |             |      |            |              |         | X                 | Plant in 3/4 - full sun in well-drained fertile soil. Short-lived. Fire resistant. Needs summer water. Not cold hardy.                        |
| <b>Point Reyes Ceanothus<br/>(Ceanothus gloriosus)</b> | Low growing, dense groundcover that has dark green, spiny-toothed leaves. Normally restricted to the immediate coast, and does best there. | M-<br>R                            | 1-2'/<br>4-9'   |              |              | X          |             | X    | X          |              | X       | X                 | Full sun or half shade. Tolerant of sandy soils but not clay. Needs good drainage. Few or no problems. Good erosion control for steep slopes. |
| <b>Purple Sage<br/>(Salvia leucophylla)</b>            | A much-branched greyish white shrub. Has light purple flowers borne in clusters. Leaves drop in dry seasons.                               | R                                  | 2-6'/<br>2-6'   |              | X            | X          |             |      |            |              | X       |                   | Needs full sun. Prefers gravelly, well drained soils. Very drought tolerant. Do not water in summer. Consider also Salvia clevelandii.        |
| <b>Trailing Gazania<br/>(Gazania uniflora)</b>         | Trailing perennial with silvery-grey foliage. Attractive 3" flowers.   | R                                  | ½-1'/<br>2-3'   | X            | X            |            |             |      | X          |              | X       | X                 | Needs 3/4 - full sun. Tolerates most soils. Short lived. Fire resistant. Prefers summer water, but some drought tolerance.                    |
| <b>Wild Ginger<br/>(Aarum caudatum)</b>                | Lush groundcover with large dark green leaves. Flowers hidden below foliage.   | M                                  | ½-1'/<br>4-8'   | X            |              |            | X           |      |            | X            |         | X                 | Requires 3/4-full shade. Needs moisture during summer. Prefers rich soil with humus. Recommended for shady areas under trees.                 |
| <b>Wild Strawberry<br/>(Fragaria chiloensis)</b>       | Forms low, compact mats of glossy green leaves. Has large white flowers in Spring. Spreads by runners.                                     | M-<br>R                            | ½-1'/<br>Varies | X            | X            | X          |             | X    | X          |              | X       | X                 | Plant in full sun or partial shade. Drought resistant on coast and will grow in coastal sand dunes. Good erosion control on steep slopes.     |
| <b>Winter Creeper<br/>(Euonymus fortunei)</b>          | Trailing, shrubby groundcover with rooting branches. Dark green leaves (1"). Cold hardy.   | M                                  | 1-1 ½'/<br>4-8' | X            | X            |            | X           |      |            | X            |         | X                 | Plant in full sun or heavy shade. Fairly drought tolerant once established. Good hillside erosion control on most soils.                      |

## Shrubs

| Name   | Description   | Suitability for Problem Situations |                                  |              |              |            |             |      |            |              |         | Care and Comments |  |
|--|---|------------------------------------|----------------------------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|--|
|  |   | Growth Rate                        | Height/ Spread                   | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought |                   | Summer Irrigation  |
| <b>Blue Blossom Ceanothus (Ceanothus thyrsoiflorus)</b>  | A large, rounded shrub with glossy dark green leaves and small blue flowers.  | R                                  | 6'-20'/<br>6'-20'                |              |              | X          |             | X    | X          |              | X       | X                 | Dense rooting shrub. Requires half to full sun. Prefers good drainage. Good erosion control. Enriches soil, with nitrogen-fixing roots.  |
| <b>'Julia Phelps' (Ceanothus x 'Julia Phelps')</b><br><b>'Joyce Coulter' Ceanothus (Ceanothus x 'Joyce Coulter')</b> | A medium-sized Ceanothus with dark green wrinkled leaves and small cobalt blue flowers.   | M-R                                | 6-8'/<br>8-10'<br>3-5'/<br>8-10' | JP<br>X      | X            |            |             |      |            |              | X       | X                 | These are Ceanothus hybrids. Both require full sun and good drainage. "Julia Phelps" will tolerate any soil but "Joyce Coulter" should not be planted in clay.                             |
| <b>'Ray Hartman' Ceanothus (Ceanothus arboreus "Ray Hartman")</b>  | Big shrub or small tree. Has large dark green leaves that are grey underneath. Bright blue flowers in 3-5 inch spikes.  | M-R                                | 10-15'/<br>15-20'                | X            |              | X          |             |      |            |              | X       | X                 | Ceanothus hybrid. Requires 3/4 to full sun. Prefers good drainage. Tolerates any soil. Easily shaped.  |
| <b>Brewer's Salt Bush (Atriplex lentiformis breweri)</b>   | A dense, erect, semi-evergreen shrub with grey-green foliage. Not spiny.  | M                                  | 3-7'/<br>6-8'                    | X            | X            | X          |             | X    | X          |              | X       |                   | Needs full sun. Good in alkaline, dry, infertile soils. Needs good drainage. Sow seed at any time of the year. Provides food for wildlife. Fire resistant.                                 |
| <b>Bush Lupine (Lupinus arboreus)</b>  | Erect or spreading shrub with greyish leaves divided like fingers into many leaflets. Has yellow flowers. A legume.   | M                                  | 5'-8'/<br>3'-8'                  |              |              | X          |             | X    | X          |              | X       | X                 | Short-lived. Needs full sun and good drainage. Roots make nitrogen and enrich the soil. Good for coastal dunes or inland sand hills. Poisonous. Container stock rare, but seeds available. |
| <b>California or Evergreen Huckleberry (Vaccinium ovatum)</b>  | Erect shrub with shining althrough small dark green leaves. Bears small edible black berries in the Fall.   | S                                  | 3-6'/<br>2-5'                    | X            | X            |            | X           |      |            | X            | X       | ?                 | Prefers partial shade and some summer water in dry locations. Requires acid soil. Recommended for forested areas.  |
| <b>Coast Silk Tassel (Garrya elliptica)</b>  | Elliptical, wavy-edged leaves to 2" long are dark green above with gray and wooly undersides. Clustered flower tassels appear in winter. Excellent foliage plant, use as a screen, informal hedge, or specimen. | M-R                                | 10-20'/<br>10-20'                |              | X            | X          |             |      |            |              | X       |                   | Full sun to partial shade. Evergreen shrubs. Both sexes of plant have to be present for females to reproduce their grapelike clusters of fruit. Plant can be trained as small tree.        |

## Shrubs (cont.)

| Name   | Description  | Suitability for Problem Situations |                                    |              |              |            |             |      |            |              |         | Care and Comments |  |
|--|--|------------------------------------|------------------------------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|--|
|  |  | Growth Rate                        | Height/ Spread                     | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought |                   | Summer Irrigation  |
| <b>Coffeeberry</b><br>( <i>Rhamnus californica</i> )   | Round, upright or spreading tall shrub with large berries that turn orange-red then black in Fall.   | M-R                                | 6-10'/<br>8-12'                    | X            | X            | X          | X           | X    | X          |              | X       | ?                 | Plant in full sun or partial shade. Tolerates heavy soils or rocky soils. Prefers good drainage and no summer water. Few or no problems.   |
| <b>Dwarf Coyote Brush</b><br>( <i>Baccharis pilularis</i><br>'Twin Peaks')                             | Low-growing shrub with light green foliage. Makes a dense mat. Roots from stem as it grows. A low-maintenance, dependable bank cover.  | R                                  | ½-2'/<br>3-7'                      | X            | X            | X          |             | X    | X          | X            | X       | X                 | Tolerates almost all soil and soil moisture conditions. Does not tolerate heavy shade or alkaline soils. Not browsed by deer or livestock. Good for steep slopes. Relatively fire resistant.                 |
| <b>Dwarf Mirror Plant</b><br>( <i>Coprosma kirkii</i> )  | Spreading and low evergreen shrub. Has small yellow green leaves on stems that slant outward from the base.  | M                                  | 2-3'/<br>3-5'                      | X            | X            |            |             | X    | X          |              | X       | X                 | Tolerates most soils. Grows in sun or partial shade. Fire resistant.   |
| <b>Flannel Bush</b><br>( <i>Fremontodendron californicum</i> )<br>( <i>Fremontodendron mexicanum</i> ) | Broad-crowned shrub with dark green foliage. Has a profusion of large yellow flowers in Spring. Beautiful.   | R                                  | 3-12'/<br>5-18'<br>5-20'/<br>5-18' |              |              | X          |             | X    |            |              | X       |                   | Requires well drained soil and 3/4 to full sun. Intolerant of summer water.  |
| <b>Hollyleaf Cherry</b><br>( <i>Prunus ilicifolia</i> )  | A dense, large shrub or small tree shrub with green holly-like leaves and dark red berries. Long-lived.  | M-R                                | 6-15'/<br>6-10'                    |              | X            | X          |             | X    | X          |              | X       | X                 | Full sun or light shade. Tolerates any soil with good drainage. Relatively free of pests and diseases.   |
| <b>Italian Buckthorn</b><br>( <i>Rhamnus alaternus</i> )   | Multi-stemmed shrub with bright shiny green leaves. Bears blue-black berries in Fall. Taller than Coffeeberry.   | R                                  | 12-20'/<br>10-15'                  | X            |              | X          |             | X    | X          |              | X       | X                 | Mediterranean relative of coffeeberry. Very similar but faster growing and more tolerant of summer water. Easily trained.  |
| <b>Japanese Tobria</b><br>( <i>Pittosporum tobria</i> )  | Whorls of leathery, narrowly elliptical, shiny dark green leaves to 5" long. In early Spring, creamy white flowers with fragrance of orange blossoms are borne at branch tips. | M-R                                | 6-15'/<br>6-15'<br>(rarely to 30') | X            | X            | X          |             | X    | X          |              | X       | X                 | Full sun or partial shade. You can remove limbs from older plant to make a small tree. Good screen, tall hedge, multi-stemmed specimen of interesting, irregular form. Makes good hedge or foundation plant. |
| <b>Lemonade Berry</b><br>( <i>Rhus integrifolia</i> )  | Large shrub with leathery dark green leaves. Spreads wide and grows low in windy areas.  | M-R                                | 3-10'+/<br>3-10'                   |              | X            | X          |             | X    | X          |              | X       | X                 | Prefers full sun, occasional summer water and good drainage. Any soil. Good seashore plant with some protection. Freeze damaged in cooler areas.   |

## Shrubs (cont.)

| Name  | Description   | Suitability for Problem Situations |                   |              |              |            |             |      |            |              |         | Care and Comments |  |
|---|---|------------------------------------|-------------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|--|
|   |   | Growth Rate                        | Height/Spread     | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought |                   | Summer Irrigation  |
| <b>Lemon Bottle Brush</b><br>( <i>Callistemon citrinus</i> )  | Most commonly grown bottlebrush. 3" long leaves are coppery when new, maturing to vivid green. Long-lasting flowers are a good hummingbird attractant. Bright red 6" long brushes appear in waves through the year. Full sun. | M-R                                | 10-15'/<br>10-15' | X            | X            | X          |             | X    |            | X            |         | X                 | With staking and pruning in youth it can be trained to be a nice narrow shrub. Bruised leaves smell lemony.                                      |
| <b>'Howard McMinn' Mazanita</b><br>( <i>Arcostaphylos densiflora</i><br>'Howard McMinn')                            | Densely spreading bush with smooth reddish bark and small bright green leaves. Branches will root as they grow outward.   | M                                  | 1-3'/<br>4-7'     |              |              | X          |             | X    |            |              | X       | ?                 | Full sun or partial shade. Prefers light, well drained soils. Few or no problems. Restrict summer irrigation to once a month or less frequently. |
| <b>Monterey Manzanita</b><br>( <i>Arctostaphylos hookeri</i> )  | Forms a dense mound of bright green, glossy leaves. Beautiful smooth red-brown bark.  | S                                  | 1-4'/6'           |              | X            | X          |             | X    | X          |              | X       | X                 | Requires 3/4 to full sun. Tolerates any soil even sand but needs good drainage. Good for inland sand hills or coastal sand dunes.                |
| <b>Orchid Rockrose</b><br>( <i>Cistus purpureus</i> )   | Compact shrub with 1-2" dark green leaves. Has beautiful 3" purple flowers with a red spot at the base of each petal.   | R                                  | 4-5'/<br>4-5'     | X            | X            | X          |             | X    | X          |              | X       | X                 | Tolerant of summer irrigation only if in well drained soil. Needs full sun. Good hillside erosion control.                                       |
| <b>Oregon Grape</b><br>( <i>Mahonia aquifolium</i> )<br><b>California Holly Grape</b><br>( <i>Mahonia pinnata</i> ) | Erect or semi-erect shrub with spiny-toothed leaflets. Has blue-black berries. Several varieties available.   | M-R                                | 2-6'/<br>3-5'     | X            |              |            | X           |      |            |              | X       | X                 | Best in partial shade and well drained soil. Tolerates clay soils. Spreads by rhizomes. California Holly Grape will also tolerate sandy soils.   |
| <b>Pacific Wax Myrtle</b><br>( <i>Myrica californica</i> )  | Densely-foliaged, small tree or large shrub. Multi-trunked. Aromatic dark green leaves with bayberry smell. Neat appearance.  | S-M                                | 10-30'/<br>10-20' | X            | X            | X          | X           | X    | X          | X            |         | X                 | Prefers moist, rich soil. Needs summer water. Grows in sun or shade. Tolerates seashore if given some protection.                                |
| <b>Pink Flowering Currant</b><br>( <i>Ribes sanguineum</i><br>var. <i>glutinosum</i> )                              | Erect shrub with deep, rose-red flowers and maple like leaves. Flowers in late Winter or early Spring - before new leaves appear.   | M-R                                | 4-12'/<br>3-5'    |              | X            | X          | X           |      |            | X            |         | X                 | Plant in 1/4 to 3/4 sun. Requires moist, light soils. Few or no problems.  |
| <b>Purple Sage</b><br>( <i>Salvia leucophylla</i> )   | A much-branched greyish white shrub. Has light purple flowers borne in clusters. Leaves drop in dry seasons.  | R                                  | 2-6'/<br>2-6'     |              | X            | X          |             |      |            |              | X       |                   | Needs full sun. Prefers gravelly, well drained soils. Very drought tolerant. Do not water in summer. Consider also <i>Salvia clevelandii</i> .   |

## Shrubs (cont.)

| Name  | Description  | Suitability for Problem Situations |                                |              |              |            |             |      |            |              |         |                   | Care and Comments |  |
|---|--|------------------------------------|--------------------------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|-------------------|--|
|   |  | Growth Rate                        | Height/ Spread                 | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought | Summer Irrigation |                   |  |
| <b>Red Elderberry</b><br>( <i>Sambucus callicarpa</i> )<br><br><b>Blue Elderberry</b><br>( <i>Sambucus mexicana</i> ) | Shrub or small tree clusters of small white flowers later turning into either red or blue berries.   | M-<br>R                            | 6-20'/<br>3-5'                 | X            | X            |            |             |      |            |              |         | SM<br>X           | X                 | Full sun or partial shade. Tolerates clay soils. Red Elderberry is only moderately drought tolerant. Good erosion control. Very limited supply of container stock.   |
| <b>Rockrose</b><br>( <i>Cistus villosus</i> )   | Oval 1-3" leaves are densely covered with down. Purplish pink flowers, 2-2½" wide. Often planted in fire hazard areas. If plants become woody and sparse after several years, it is often easiest to replace them.                 | R                                  | 3-5'/<br>3-5'                  | X            | X            | X          |             | X    | X          |              |         | X                 |                   | Full sun. Little or no water. Do best in dry summer climate. Care free shrub bearing a profusion of showy flowers from spring to early summer. Sun loving, fast growing, and tolerant aridity. Good erosion control for banks. |
| <b>Rockspray Cotoneaster</b><br>( <i>Cotoneaster microphylla</i> )  | Low shrub with trailing branches and very small needle-like dark green leaves. Has white flowers followed by rose-red berries that hold all winter.  | M                                  | 2-3'/<br>6'+                   | X            | X            | X          |             |      |            |              |         | X                 | X                 | Tolerates any soil. Mostly problem free. Prefers good drainage. Good for slopes. Other Cotoneaster are also good varieties. Full sun to medium shade.  |
| <b>Snowberry</b><br>( <i>Symphoricarpos albus</i> )<br>( <i>Symphoricarpos mollis</i> )                               | Erect or trailing low-growing shrub with white berries in Fall. Native to shady, cool streamside areas.  | M-<br>R                            | ½-6'/<br>3-5'<br>½-3'/<br>3-8' | X            | X            |            | X           |      |            | X            |         | X                 | ?                 | Sun or shade but prefers at least partial shade. Requires moisture. Tolerates clay soil. Rhizomes and dense roots make this a good erosion control plant.  |
| <b>Strawberry Bush</b><br>( <i>Arbutus unedo</i> )  | Large shrub or small tree. Trunk and branches have red-brown shreddy bark. Dark green leaves with bright red "strawberries" in winter.   | S-<br>M                            | 8-35'/<br>5-30'                | X            |              | X          |             |      |            |              |         | X                 |                   | Plant in full sun or partial shade. Cannot tolerate alkaline soils.  |
| <b>Sugar Bush</b><br>( <i>Rhus ovata</i> )  | Upright or spreading habit. Glossy, leathery leaves are - 1 ½-3" long, somewhat trough shaped, pointed at tips. Dense clusters of white or pinkish spring flowers are followed by small, hairy fruit coated with sugary secretion. | M                                  | 4-10'/<br>4-10'                |              | X            | X          |             | X    |            |              |         | X                 |                   | Evergreen shrub. Native to dry slopes in California. Full sun. Little to moderate water. Takes well to pruning. Thrive in almost any soil as long as drainage is good.   |
| <b>Toyon</b><br>( <i>Heteromeles arbutiflora</i> )  | A long-lived attractive large shrub with dark green leaves and masses of bright red berries in the winter.   | R                                  | 6-10'/<br>5-8'                 |              | X            | X          |             | X    |            |              |         | X                 | X                 | Plant in full sun or partial shade. Best in dry soil but tolerates some summer water. Sometimes has pest or disease problems.  |

## Trees

| Name   | Description   | Suitability for Problem Situations |                        |              |              |            |             |      |            |              |         |                   | Care and Comments  |  |
|--|---|------------------------------------|------------------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|--|--|
|  |   | Growth Rate                        | Height/ Spread         | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought | Summer Irrigation |  |  |
| <b>Bigleaf Maple</b><br>( <i>Acer macrophyllum</i> )         | Native to stream banks, moist canyons to foothills of California. Large 3-5-lobed leaves are 6-15" wide, sometimes bigger on young vigorous sapling growth. Leaves turn from medium green to yellow in Fall.  | R                                  | 30-75'/<br>30-50'      | X            |              |            | X           |      |            |              | X       |                   | X  | Resistant to Oak Root fungus. Blooms are yellow in spring. Too big for small garden or street tree. Seeds hang in long chain like clusters after flower bloom. Spectacular in cool areas.  |
| <b>Black Cottonwood</b><br>( <i>Populus trichocarpa</i> )    | Heavy-limbed tree with furrowed dark gray bark, very brittle wood. Leaves are 3-5" across, deep green above and distinctly silver beneath. Good golden yellow fall color.   | R                                  | 30-<br>100'/<br>25-30' | X            |              |            |             | X    |            |              |         |                   | X  | Deciduous tree. Trees have aggressive surface roots that crowd out other plants, heaves pavement, and clog sewer and drainage lines. Best suited to rural areas and fringes of large properties. Subject to many pests and diseases. |
| <b>California Bay</b><br>( <i>Umbellularia californica</i> ) | In forests, tree will grow to be 75' tall to 100' wide. In gardens it tends to grow about 1' per year. Lance-shaped 2-5" long leaves are medium to deep green and glossy above, dull light green beneath. Clusters of tiny yellowish flowers give plant a yellowish cast in Spring. | M-<br>R                            | 20-25'/<br>20-25'      | X            |              | X          | X           | X    | X          |              |         | X                 | Will grow in deep shade and then become a shade maker after some time. Blossoms are followed by olive like purplish, inedible fruit. |  |
| <b>California Black Walnut</b><br>( <i>Juglans hindsii</i> ) | Single trunk native to scattered localities in northern California. Leaves 15-19 leaflets 3-5" long. Leaves have featherlike appearance. Bear oval or round nuts enclosed in a fleshy tusk. Nuts of these species typically contain little meat.                                    | M-<br>R                            | 30-60'/<br>30-60'      |              |              | X          |             |      |            |              |         | X                 | Widely used as a rootstock for English Walnut in California. Deciduous tree. Walnuts are not edible, or at least taste bad.          |  |
| <b>California Buckeye</b><br>( <i>Aesculus californica</i> ) | Often multi-trunk native to dry slopes and canyons below 4,000' elevation. New foliage is pale, apple green. Mature leaves have 5-7" rich green, 3-6" long leaflets. Fragrant in Spring. Cream colored flower, very striking plumes in candelabra shape.                            | M                                  | 10-20'/<br>30+'        | X            | X            |            |             |      |            |              |         | X                 | X  | Seeds are slightly toxic if ingested. Big pear shaped fruits split to reveal shiny brown seeds favored for dry flower arrangements. Seedlings make unusual bonsai subjects.  |

**Trees (cont.)**

| Name  | Description   | Suitability for Problem Situations |                        |              |              |            |             |      |            |              |         | Care and Comments |  |
|---|---|------------------------------------|------------------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|--|
|   |   | Growth Rate                        | Height/ Spread         | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought |                   | Summer Irrigation  |
| <b>California Sagebrush</b><br>( <i>Artemesia californica</i> ) | Evergreen shrub. Finely divided grayish white foliage. Drought tolerant but will drop leaves in extreme drought. Native to coastal region from northern California to Baja California.  | M                                  | 1 ½–5'/<br>4–7'        |              | X            | X          |             | X    | X          |              | X       | X                 | Provide good drainage. Cut non-woody stemmed perennials to ground in fall to rejuvenate. Prune back woody perennials and shrubs before first flush of Spring growth. Divide in spring or fall. Propagate shrubs by cuttings. |
| <b>Coast Live Oak</b><br>( <i>Quercus argifolia</i> )           | Evergreen Tree. Round headed and densely foliated. Conical acorns ¾–1 ½" long. Drops old leaves in early Spring. Handsome tree for shade or as street tree. Can be sheared to made hedge 10–12' high.   | M                                  | 20–70'/<br>20–80'      |              | X            | X          |             |      |            |              | X       |                   | Best in full sun. Subject to oak moth caterpillar infestations and sudden oak death. Best with a little to no summer water after first 2 years.  |
| <b>Coast Redwood</b><br>( <i>Sequoia sempervirens</i> )         | Evergreen Tree. Symmetrical pyramid of soft-looking foliage. Small ½–1 ½" roundish brown cones. Red brown fibrous-barked trunk.   | R                                  | 70–<br>350'/<br>15–30' | X            |              |            | X           | X    | X          | X            | X       | X                 | Grow singly or in groves spaced 7ft apart. Can also be hedged by planting 3-4' apart. Can be planted near lawns. Needs regular moisture.   |
| <b>Douglas Fir</b><br>( <i>Pseudotsuga menziesii</i> )          | Popular Christmas trees. Evergreen tree. Conical growth habit. Reddish brown, 3 inch, oval cones are pendent. Sweet aromatic needles when crushed.  | R                                  | 80–<br>160'/<br>20–30' | X            | X            | X          |             | X    |            |              | X       |                   | Tolerates wind and grows in all soils except soils that stay wet in warm months. Best planted on large properties away from homes and structures.  |
| <b>Mountain Mahogany</b><br>( <i>Cercocarpus betuloides</i> )   | Attractive open structure and branching pattern. Native to California. Can form small tree with wide spreading crown of arching branches to 20'. Wedge-shaped ½ to 1" leaf cluster on short spears. Leaves are dark green to pale underneath. | M                                  | 5–12'/<br>5–12'        |              |              | X          |             |      |            |              | X       |                   | Full sun. Little or no water. Evergreen shrub or tree.   |
| <b>Olive Tree</b><br>( <i>Olea europea</i> )                    | Evergreen tree. From the Mediterranean. Willow like foliage is a soft gray-green. Trunks and branches become gnarled and picturesque in age. Take temperatures down to 15 degrees F. Withstands heavy pruning.                                | S                                  | 25–30'/<br>25–30'      |              | X            | X          |             | X    | X          |              | X       |                   | Begin trailing early. For single trunk, prune out or shorten side branches below point where you want to begin. Cut off basal suckers. For multiple trunks, stake lower branches to continue growth at desired angles.       |

**Trees (cont.)**

| Name   | Description   | Suitability for Problem Situations |                   |              |              |            |             |      |            |              |         | Care and Comments |   |
|--|---|------------------------------------|-------------------|--------------|--------------|------------|-------------|------|------------|--------------|---------|-------------------|---|
|  |   | Growth Rate                        | Height/ Spread    | Clay Hardpan | Shallow Soil | Sandy Soil | Heavy Shade | Wind | Salt Spray | Excess Water | Drought |                   | Summer Irrigation   |
| <b>Red Willow</b><br>( <i>Salix laevigata</i> )<br><b>Other Willows</b><br>( <i>Salix</i> spp.)          | A medium-sized tree with narrow oblong leaves. Has small yellow flowers that occur on catkins. When young, grows in clumps.   | R                                  | 10-45'/<br>10-25' | X            | X            | X          |             |      |            | X            |         | X                 | Shallow rooted tree. Needs constant water. Good erosion control where groundwater is a problem. Little or no commercial availability. Propagate by cuttings.                            |
| <b>Western Red Bud</b><br>( <i>cercis occidentalis</i> )   | Shrub or small tree. Native to California. Usually produces several trunks from base. Provides all year interest. Magenta flowers bloom in spring. Handsome blue-green 3" leaves, notched or rounded at tip. Foliage turns light yellow or red in Fall. | R                                  | 10-18'/<br>10-18' |              |              | X          |             |      |            |              | X       |                   | Best floral display comes in areas with some winter chill. Resistant to Oak Root Fungus. Very drought tolerant. Excellent for seldom-watered banks. Deciduous. Full sun to light shade. |
| <b>White Alder</b><br>( <i>Alnus Rhombifolia</i> )   | Native among streams throughout most of California's foothills, except along coast. Branches spread out then droop at tips. Coarsely toothed 2½-4½ in leaves are dark green above, paler green underneath.  | R                                  | 50-90'/<br>40'    | X            | X            |            |             |      |            |              | X       | X                 | Very tolerant of heat and wind. Susceptible to tent caterpillars and borers in it's native range.   |
| <b>White Birch</b><br>( <i>Betula alba</i> )<br>( <i>Betula pendula</i> )<br>( <i>Betula verrucosa</i> ) | An upright tree with weeping side branches and lacy green foliage. Bark is white or golden. Bears persistent 1 inch catkins throughout winter.  | R                                  | 30-40'/<br>15-20' | X            | X            | X          |             | X    | X          | X            |         | X                 | A deep rooted small tree. Widely used for landscaping around homes. Requires summer irrigation. Requires some protection at seashore.   |