

THE RIGHT TREE BOOK

Objectives:

- ◆ Selecting the Right Tree
for the Right Place
- ◆ Planting Correctly
- ◆ Pruning Correctly

Questions? Call Seattle City Light
(206) 386-1902





- A** Meter: accessible
- B** 26 KV Distribution Line: small trees to side or underneath
- C** 240 KV Transmission Line: no trees preferred; small trees to side; pastures and gardens underneath
- D** 120 KV Transmission Line: no trees preferred; small trees to side; pastures and gardens underneath
- E** Underground Vault: accessible

Introduction

All trees are right in their natural environments. Trees are often wronged, however, by the selection of trees and their planting locations in urban situations.

The Right Tree Book is a guide to help choose the best tree for small spaces, and for under or near power lines. This book also provides information on trees. Information presented will aid in selection of species with desired visual effect and adaptability to a site's soil, light, water and other environmental conditions. Although this book does not specifically address street trees, some small trees are highlighted in The Right Tree Book as appropriate for the special requirements of streetside planting.

Important Information:

Many property owners have planted inappropriate trees under or near power lines. As a result, interfering tree limbs and falling trees or branches are the No. 1 cause of power outages in the Seattle metropolitan area. Trees and other plants are also electrical conductors. A tree touching power lines or a transformer can conduct electricity to another electrical conductor: the human body. Climbing trees and building treehouses, decks and other structures near power lines are dangerous activities and should be avoided.

For the public's safety and continuity of service, utility companies are required to maintain minimum clearances around all utility lines. Complying with required clearances and allowing for tree growth means trimming trees back at least 10 feet from electrical distribution lines and 16 1/2 feet from transmission lines. Trees are usually removed from under or near transmission tower and lines.

Trimming trees is an inefficient solution for maintaining safe clearances to power lines. Tree trimming is expensive and temporary. Problem trees must be retrimmed every three years. In addition, corrective tree pruning is often severe, ruining the appearance and sometimes the long-term health of trees.

The best solution is selection of the right trees to plant under or near overhead lines. Safe clearances can be maintained under or near most distribution lines by planting trees with a maximum 25 foot height. Under high-voltage transmission lines, no trees should be planted.

A Special Note:

Vines, shrubs and ground covers also affect utilities. Vines are strictly discouraged on power poles because they interfere with maintenance and cause a variety of hazards, from outages to grounding of electrical currents. Shrubs, by definition, are of relatively low height and are generally compatible with overhead power lines. A few commonly planted shrubs, however, quickly reach heights exceeding 25-30 feet and cause interference problems for utilities. Problem shrubs that should be avoided under or near overhead lines include:

English laurel (*Prunus laurocerasus*)

Hazelnut (*Corylus cornuta*)

Leyland cypress (*Cupressocyparis Leylandii*)

Pyramidal arborvitae (*Thuja occidentalis* 'Pyramidalis').

Plants growing into underground vaults can cause electrical shorts and outages. A chief culprit is the commonly planted English ivy (*Hedera helix*). Simple solutions include planting less-aggressive groundcovers near underground vaults, and keeping ground covers pruned back from vault lids.

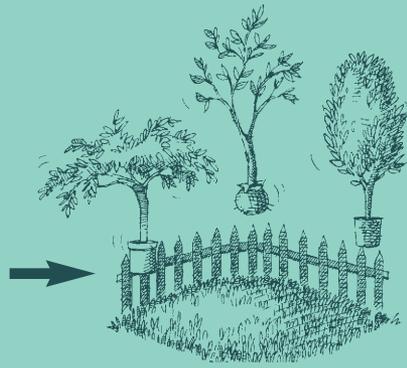
And Remember:

Vault and meters must be physically and visually accessible to utility crews and meter readers. Avoid dense, tall or thorny shrubs that obstruct or obscure addresses, as well as delicate flowerbed plantings that may be harmed by access.

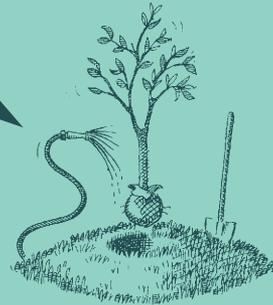
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With The Right Tree Book, Seattle City Light responds to the growing need for information on trees.

The “life cycle” story of the trees begins with wanting and selecting the right trees. The cycle continues through planting, long-term maintenance and pruning. The story’s end is healthy trees and happy homeowners, cities, counties and utility companies.

Pure fiction. Or is it?

Seattle City Light hopes that the information imparted within will help make the story come true for you.

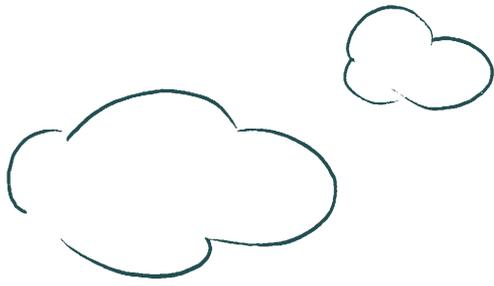
Recommended trees for planting under or around power lines are listed in The Right Tree List of Small Trees. Only trees that stay below the 25-30 foot maximum height over a 25-40-year period are described.



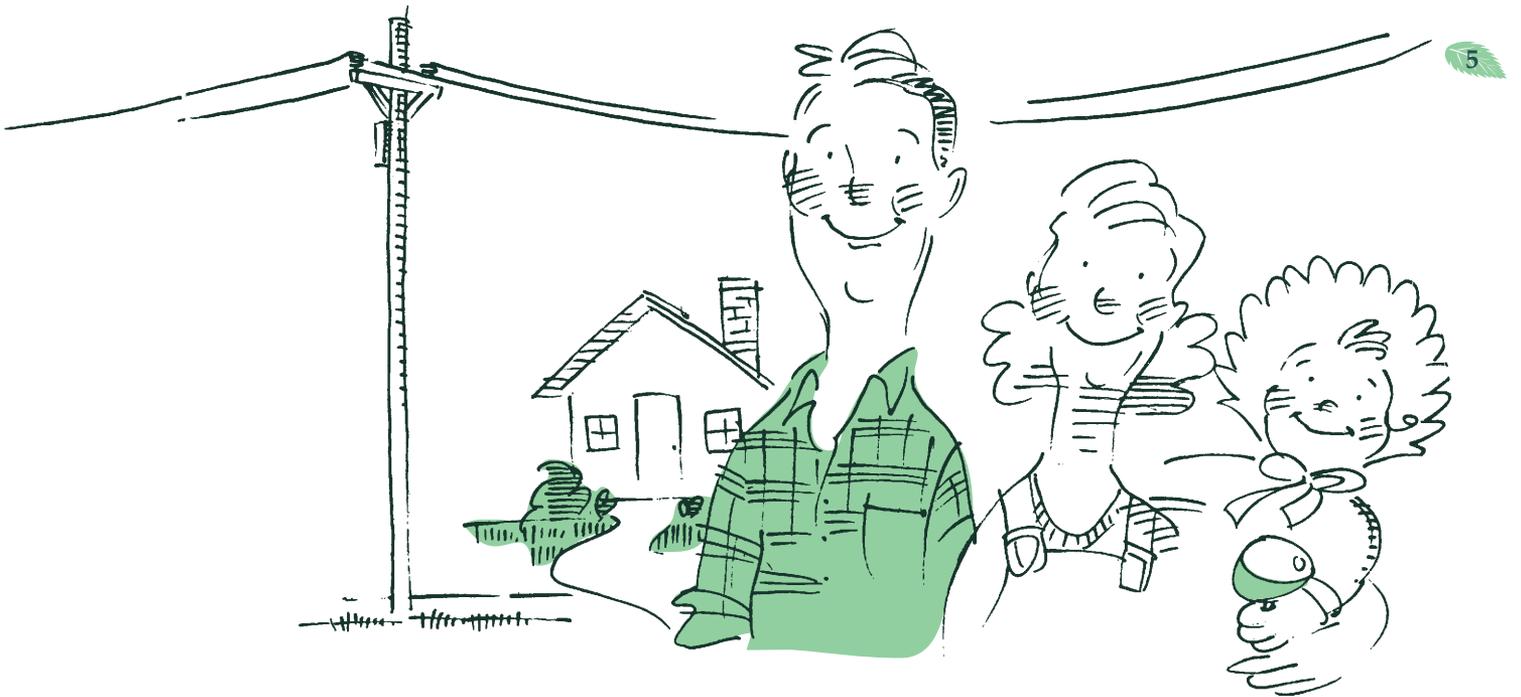
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Meet Larry and Lucy; baby Carrie makes three. They're in a new home and they want to plant trees.



How to Start Thinking About the Right Tree Planting the right tree starts with thinking and planning. To legally, safely, and properly plant trees:

1. LOOK at desirable planting locations, above and below ground.

- To judge limits on tree size, look up and around. What are the restrictions?

Seattle City Light requires the following safe clearances underneath and to sides of overhead power lines: 10-foot clearances from 26,000-volt distribution lines; and 16.5 foot clearances from 120,000-volt and 240,000-volt transmission lines.

Trees are discouraged under or near transmission lines and towers. Overhanging branches are removed above any lines.

Seattle City Light encourages questions prior to planting. For information regarding electrical utilities in your area, call Seattle City Light at (206) 386-1733.

- Call before digging to see what's in the ground.

Underground utilities, particularly within street planting strips and utility easements, may include natural gas, sewer, water, and underground electrical, cable TV and telephone lines.

Call-Before-You-Dig at 1-800-425-5555, for free underground utility location services.

- For streetside planting, special considerations are found.

Street trees must have branching habits that are compatible with both pedestrians and cars. Thus, most street trees are single-trunked with upright or high branches that clear sidewalks and streets.

Street trees must also be adaptable to stressful conditions, pollution, compacted soil and exposed conditions. City officials can help with your street tree decisions.

2. APPLY for a permit at county or town.

Cities and counties may require permits for tree planting, pruning or removal, particularly in street rights-of-way. Call your local city or county for permit requirements. Phone numbers are listed in the Tree Information and Permit Directory at the end of The Right Tree Book.

3. LEARN about trees; sources of information and references abound.

Visit public libraries or bookstores to find reference books on trees. Suggested references are listed in the bibliography at the end of The Right Tree Book.

The Miller Library at the University of Washington's Center for Urban Horticulture is the most complete horticulture reference library in the Northwest. The Miller Library is located at 3501 NE 41st Street, Seattle. Its hours are 9 a.m.-5 p.m., Monday-Friday, or call (206) 543-0415.

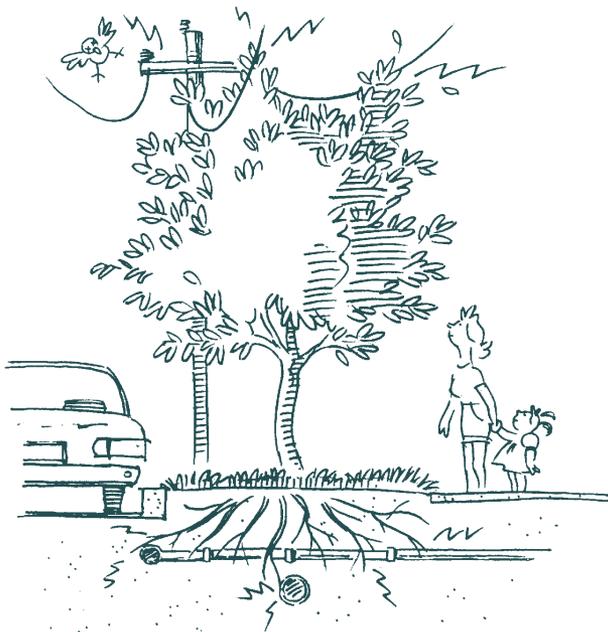
Visit local nurseries and garden centers to see what's available. Ask questions about trees.

Other sources of information include:

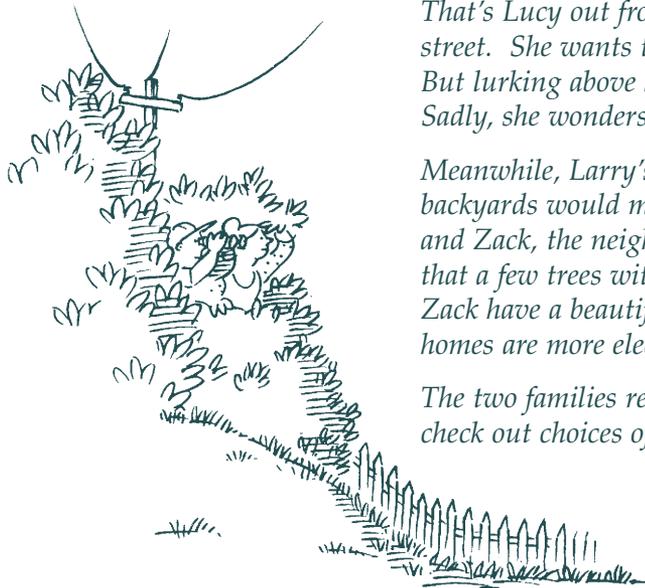
A City Among the Trees, An Urban Forestry Resource Guide, published by City of Seattle. This manual addresses Seattle's recommended street trees.

Planting Trees, published by Puget Sound Power Energy.

Washington State Cooperative Extension Service publications. For practical information on trees as well as tree planting, problems, pests, call (206) 296-3986.



Thinking about the Right Tree



That's Lucy out front, dreaming of trees by her front door and along the street. She wants trees with flowers, and some shade to beat summer heat. But lurking above her is a tangle of electric, cable TV and telephone lines. Sadly, she wonders, "Will any tree fit under those overhead wires?"

Meanwhile, Larry's in back thinking that a few screening trees between backyards would make both yards more private. He talks with Mildred and Zack, the neighbors living uphill and directly behind. They all agree that a few trees with evergreen leaves would be fine. But Mildred and Zack have a beautiful view that big trees will hide. And halfway between homes are more electrical lines.

The two families realize it takes careful planning to plant the right tree. To check out choices of available trees, they head to a nearby nursery.

Checklist for Selecting the Right Tree

 To choose the right tree, you must know your desires in tree type, shape and role. Is flower, fruit, bark, or leaf interest your goal? Observing your yard for sun, wind, and water conditions reveals what environmental tolerances your trees need. Check your soil. What is it like and what's its fertility? Until you consider all of your needs and site demands, it's tough to choose appropriate trees.

The following checklist will help guide your selection process.

TYPES OF TREES

- broadleaf evergreen, like a holly
- deciduous, like a maple
- needle-leafed evergreen, like a fir

TREE FUNCTIONS

- for accent
- for screening
- for shade

TREE SHAPES

- cone-shaped or pyramidal
- horizontal or wide-spreading
- round
- upright or narrow
- vase-shaped
- weeping

INTERESTING CHARACTERISTICS

- flowering
- fruiting
- interesting leaf color or texture
- interesting bark color or texture

Tolerances to environment or site include heat, cold, drought, wet or dry soils, pollution, sun, shade, wind, and salt spray, to name a few. What conditions does your site have?

SUN

- sun
- shade
- partial shade

WIND

- windy
- sheltered

SOIL

- sandy
- clay
- something in between _____
- usually moist
- usually dry
- poor draining
- fast draining

POLLUTION

- near busy street
- near other pollution sources _____

SPECIAL ENVIRONMENT

- street tree
- near saltwater
- other special conditions _____



Selecting the Right Tree



At the nursery, Lucy, Larry, Carrie, Mildred and Zack see SO many trees, they have anxiety attacks. There are round ones and skinny ones, short ones and tall, weeping ones, spreading ones, some spring-flowering, and others bright colored in fall. The choices are vast. So overwhelming, in fact, they realize how much information they lack.

They see a salesperson to ask for advice, who asks in return, "What would you like?" And that makes them think twice. They prefer trees for screening and flowers, explaining that all must fit under utility wires. But what else to consider, they haven't a clue.

The nursery person gives the families a **Right Tree Book** and says, "Here is a tool to use in selecting trees to meet your needs." This handy book helps guide their choice of the best and right trees.



Steps for Planting the Right Tree

Planting steps listed below reflect current horticultural information on proper planting techniques.

- 1 Plan locations for trees before digging holes in the ground.
- 2 Dig hole to same depth as root ball or container, and twice as big around.

Current recommendations suggest digging planting holes to same or no more than two inches shallower depth as that of root ball or container. This practice prevents trees from settling to lower level than originally grown. Planting hole width should be twice that of root ball or container.

- 3 Rough up sides and bottom of pit. If pit walls are smooth, roots cannot penetrate and trees grow stunted or topple in winds.
- 4 Remove trees from containers, including root balls wrapped in burlap.
- 5 Lower tree in hole with care, handling only by earth ball. Roots can be damaged by pulling on a tree by its trunk.
- 6 Prune dead or broken roots and slice through those roots circling the ball.
- 7 Remove all wire, twine, and plastic wrap. Fold natural burlap cloth back from trunk.
- 8 Keep tree at same level where it was originally growing. For best tree growth and function, follow this instruction.
- 9 Backfill hole with uncompacted soil left in natural state. Topsoil amendments, such as peat moss, sawdust, sand, manure, or special topsoil mixes, are not recommended.
- 10 When hole is half-full, flood it with water and let it soak.
- 11 Finish filling pit, without compacting backfill earth. Create shallow saucer of soil around trunk, to hold water and quench tree's thirst.
- 12 A watering tube may be installed as an option, allowing for deep soaking in dry summer months.

- 13 Fertilizer is unnecessary for the first year and optional after that. Fertilize tree with balanced mix of N-P-K. Apply as directed on top of ground, and water will carry it down.

N=Nitrogen, P=Phosphorus, and K=Potassium are essential basic ingredients of all commercial fertilizers. A balanced mix will have equal proportions of each or be slightly higher in nitrogen.

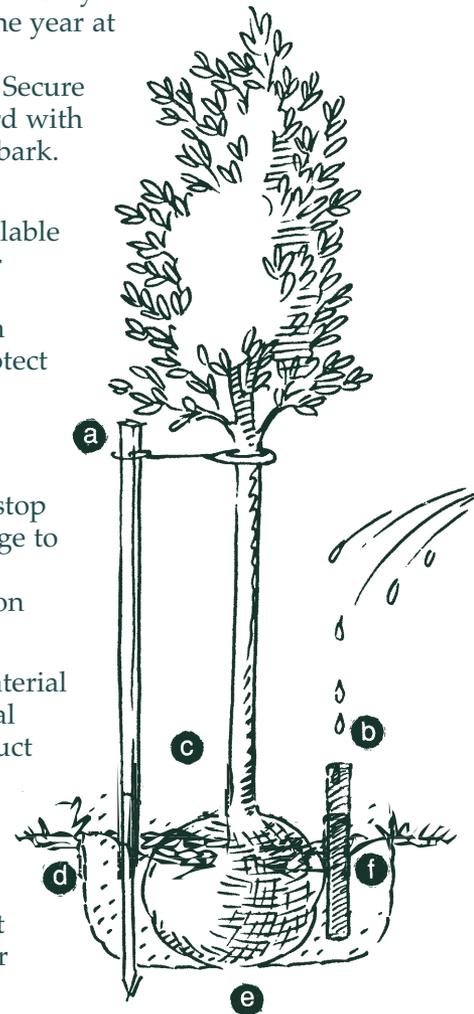
- 14 Mulch around tree with two or three inches of sawdust, leafmold or bark, but do not pile against trunk to prevent crown or root rot.
- 15 Stake to support tree only if needed, and for one year at most. Place stake upwind of trunk. Secure at tree's lower third with a tie that protects bark.

Tie may be commercially available tree tie material or heavy-gauged galvanized wire in rubber hose to protect trunk.

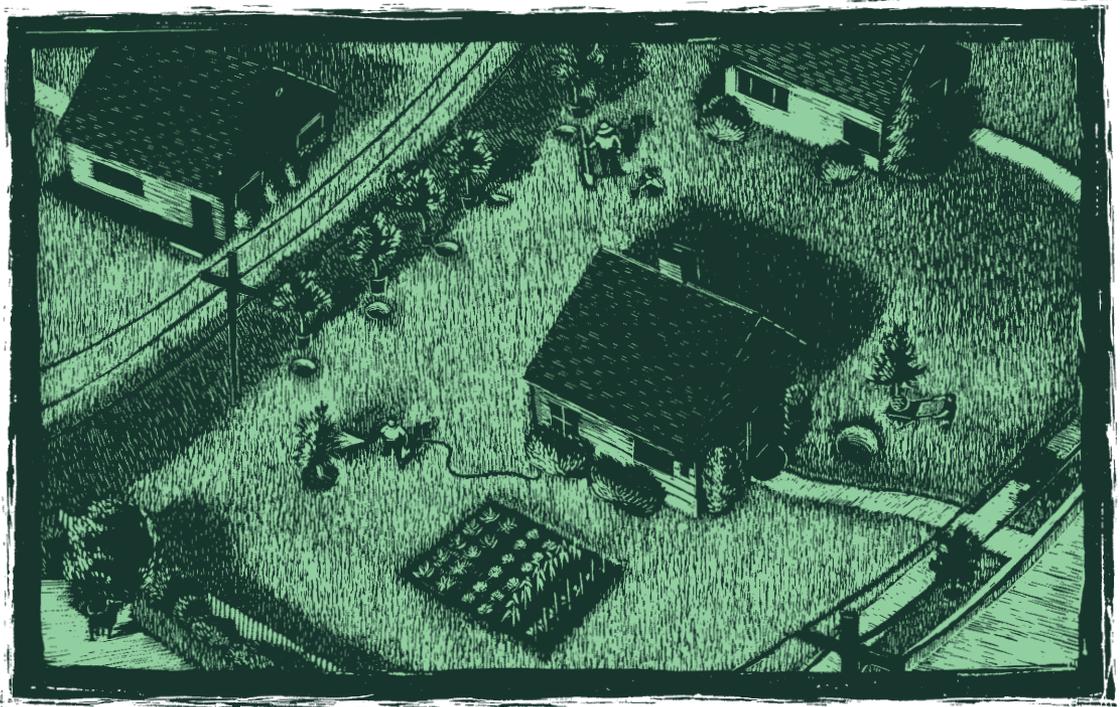
- 16 Wrapping tree trunks is not needed, but does stop freeze-thaw damage to young, thin-barked trees on cold, sunny days.

Tree-wrapping material may be commercial plastic wrap product or burlap/cotton cloth in 4-6-inch wide strips.

- 17 Avoid trimming at planting except for dead or broken branches.



Planting the Right Tree



Lucy, Larry, Mildred and Zack buy nine trees. One is a pine; three are flowering; and five are broadleaf evergreens for a screen. Some come in containers, and some are balled in burlap. Now, how to plant all their right trees without a mishap?

They follow recommended steps for planting. Completing all steps carefully insures that they'll have healthy trees.

- a** stake (optional)
- b** watering tube (optional)
- c** soil around base of tree shaped into saucer
- d** depth of hole same as depth of root ball
- e** width of hole two times width of root ball
- f** uncompacted native soil

Ingredients for Maintaining a Healthy Tree 🌿 Water and soil fertility, adjusted to a tree's specific requirements, are the basic ingredients for tree growth and health. Tree care also includes pest and disease control. But above all, good tree health begins with proper tree choice and planting location.

WATER

Deep soaking for first 3-5 years, or until tree is well established, is best. During drought, mature trees may need water as well.

Trees have different water needs. Some trees are more drought-tolerant than others. Judge your trees' needs individually and apply water accordingly.

SOIL

Soils differ in natural fertility. Clay soil is often richer in nutrition than sand.

You may top dress with a balanced formula fertilizer in fall or early winter. This practice insures slow release of nutrients as rainfall soaks fertilizer into the ground.

Avoid Weed and Feed fertilizer which can kill young trees.

When applying fertilizers, consult package label to find recommended amount for size of tree. Nitrogen is the major limiting nutrient. A top dressing of compost, manure, blood meal or other organic fertilizer is recommended.

OTHER INGREDIENTS

In addition to water and earth, watch out for signs of disease or pests. Chemical sprays are poisons to apply only with caution. Pests can also be stopped with effective organic solutions or biological controls. Call Washington State University Cooperative Extension Service or Master Gardener Program at (206) 296-3986 for answers regarding tree pests, diseases and their proper treatments.

Pruning Tips 🌿 Through proper and restrained pruning, trees attain their true height and form. Prune only weak, dead, broken or conflicting branches. This advice is now the norm.

With sharp saw or blade, trim limbs at their start, just above branch collar (see illustration on page 13).

FIRST CUT is on underside of the branch to prevent tearing.

SECOND CUT is from above to remove bulk of weight.

THIRD CUT is clean slice just above thickened collar of bark.

After cutting is done, don't dress or paint the wound. Painting is only cosmetic and may be detrimental to the health of trees.

Late winter or spring are good times to prune.

Desires for special shaping or hedging may exist. Only use trees that can withstand intensive pruning techniques such as hedging, topiary or pollarding, and seek professional advice. Topping trees is destructive pruning that weakens trees and makes them susceptible to disease and rot.

DO NOT TOP TREES.

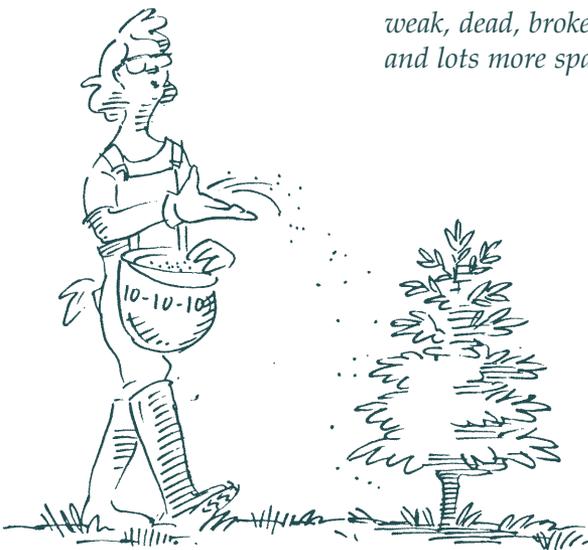


Maintaining and Pruning the Right Tree



The families grow older and are very pleased that their plantings are healthy, maturing trees. Through trial and error, they've acquired some skill in nurturing trees. They have learned that basic ingredients of water and soil fertility are key in maintaining a long-lived and flourishing tree.

But the families wonder if their trees need trimming. They've spotted dead growth and few broken limbs. Since the foursome bought trees for their untouched outline, they follow current recommendations to prune only weak, dead, broken or conflicting branches. It means much less pruning and lots more spare time.



List of Small Trees

Function A=Accent Sc=Screen S=Shade *=Not suitable as street trees
 Shape C=Cone H=Horizontal R=Round U=Upright V=Vase W=Weeping
 Interest B=Bark F=Flower Fo=Foliage Fr=Fruit

Deciduous Trees

- Vine Maple**A V Fo
Acer circinatum
- Amur Maple**S V Fo
Acer ginnala
- Paperbark Maple**S V Fo
Acer griseum
- Japanese Maple**S V Fo
Acer palmatum
- Globe Norway Maple** ...S R Fo
Acer platanoides 'Globosum'
- Serviceberry**A V F
Amelanchier x grandiflora
- Eastern Redbud**A R F
Cercis canadensis
- White Fringetree**A R F
Chionanthus retusus
- Kousa Dogwood**A V F
Cornus kousa
- Cornelian Cherry**A R F
Cornus mas
- Smoke Tree**A R Fo
Cotinus obovatus
- Washington Hawthorn** .A H F
Crataegus phaenopyrum
- Leprecaun Ash**S R Fo
Fraxinus pennsylvanica 'Johnson'
- Golden Ash**S R Fo
Fraxinus oxycarpa 'Golden Desert'
- Witchhazel**A V F
Hamamelis x intermedia
- Hardy Hibiscus**A V F
Hibiscus syriacus

- Golden Raintree**A R F
Koelreuteria paniculata
- Golden Chain Tree**A V F
Laburnum x waterei
- Crapemyrtle**A R F
Lagerstroemia indica
- Amur Maackia**S V Fo
Maackia amurensis
- Flowering Magnolia** ...A R F
Magnolia kobus
- Crabapples**A H F
Malus cultioars
- Sourwood**A C Fo
Oxydendrum arboreum
- Purple Plum**A V Fo
Prunus cerasifera 'Purple Pony'
- Flowering Cherry**A U F
Prunus serrulata
- Staghorn Sumac**A* V Fo
Rhus typhina
- Globe Locust**S R Fo
Robinia pseudoacacia 'Umbraculifera'
- Mountain Ash**A V Fr
Sorbus 'Red Cascade'
- Stewartia**A U F
Stewartia pseudocamellia
- Japanese Snowbell**A H F
Styrax japonica
- Japanese Tree Lilac**A V F
Syringa reticulata

Broadleaf Evergreens

- Strawberry Tree**Sc* R Fo
Arbutus unedo
- California Lilac**Sc* R F
Ceanothus 'Ray Hartman'
- Glossy Privet**Sc R Fo
Ligustrum lucidum
- Evergreen Magnolia** ...Sc R F
Magnolia grandiflora 'Little Gem'
- Pacific wax myrtle**Sc* R Fo
Myrica californica
- Fraser Photinia**Sc* R Fo
Photinia x fraseri
- Rhododendron**Sc* R F
Rhododendron sp
- Leatherleaf viburnum** .Sc* R Fo
Viburnum rhytidophyllum

Needle-leaved Evergreens

- Dwarf Hinoki Cypress** .Sc* C Fo
Chamaecyparis obtusa
- Japanese Cedar**Sc* C Fo
Cryptomeria japonica 'Elegans'
- Bristlecone Pine**Sc* C Fo
Pinus aristata
- Lacebark Pine**Sc* C Fo
Pinus bungeana
- Tanyosho Pine**Sc* V Fo
Pinus densiflora 'Umbraculifera'
- Umbrella Pine**Sc* C Fo
Sciadopitys verticillata



Years Later...



Carrie's in college; Mildred and Zack are retired. A happy end to this story transpires. The families reminisce about planting around their homes. How their nine trees have flourished; the good memories have grown. The beauty came easily. Tree troubles were few. Most of the work came when their plantings were new.

The trees all stayed perfect in size, shape, and health. And they've added a wealth of enjoyment to the families. County, city and power crews are pleased as well that those trees grew in sync with utilities.

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The story continues with each day anew, hoping all your right tree dreams happily come true.

The End

Key to Small Trees

Deciduous Broadleaf Trees



AMERICAN SMOKETREE

Cotinus obovatus

Outstanding foliage interest beginning in early spring with pinkish-bronze expanding leaves, becoming a dark green on bronze. Brilliant red and orange fall color. Ornamental scaly bark. Drought tolerant. Best in full sun. Prefers limey, alkaline soils of pH near 7.0.

AMUR MAACKIA

Maackia amurensis

Unusual round-headed tree with dark olive green compound leaves and white summer flowers. Older trees develop a bronze colored bark, which peels into loose curls. Performs best in well-drained soils.

AMUR MAPLE

Acer ginnala

Dark green summer foliage. Spectacular scarlet autumn foliage. Yellowish spring flowers followed by colorful red fruit. Fast growth to mature height. Excellent pollution, salt, and drought tolerance. Tolerates many soils. Sun or shade. Native to eastern Eurasia.

CORNELIAN CHERRY

Cornus mas

Surprising display of yellow flowers in late winter followed by crop of edible red fruits of wildlife and culinary value. Beautiful, multi-colored flaking bark. Leaves small and glossy, often turning reddish in autumn. Tolerates some drought, but prefers partial shade and well-drained, fertile soils. Native to Europe. Japanese cornel (*C. officinalis*) is similar.

CRABAPPLES

Malus species and cultivars

Numerous species and cultivars provide a wide variety of growth forms, foliage and flower colors, fruit and autumn interest. All require full sun. Some of the most disease-resistant ornamental crabapples for the Pacific Northwest are:

'ADIRONDACK'

Late white bloomer with a densely upright growth habit and bright red 1/2" fruit.

'GOLDEN RAINDROPS' TM

Star-like white flowers, distinctive cut-leaf foliage and small golden fruit make this one of the best all-season crabapples. Upright vase shape.

'PRAIRIEFIRE'

Bright pinkish-red flowers and reddish-maroon summer foliage helps this crabapple stand out in a green landscape. Spreading, rounded form.

'SENTINEL'

Narrow and upright, showy red buds open to pink-tinged white flowers and very persistent small bright red fruits.

'SUGAR TYME' TM PP.7062

Masses of brilliant white fragrant flowers develop into red fruit that hang like jewels through the winter. Upright and oval.

MALUS X ZUMI 'CALOCARPA'

Vigorous, dense small tree with profuse white flowers and showy red fruit. Rounded and spreading.

CRAPEMYRTLE

Lagerstroemia species

Small trees with late blooming clusters of white, pink, red or lavender flowers. May take time to develop in the cool Northwest climate. Beautiful patchwork bark is a handsome asset in the winter.

EASTERN REDBUD

Cercis canadensis

Rosy flowers in early spring before foliage. Heart-shaped leaves attractive in summer, later turning clear yellow. Requires well-drained, fertile soils. Similar to Judas tree (*C. siliquastrum*) but less drought tolerant and more cold hardy. Native to eastern North America.

'LEPRECAUN' ASH TM

Fraxinus Pennsylvanica 'Johnson'

Nice handsome formal tree with round-headed shape that stays round with no pruning. Good yellow fall color. Prefers full sun.

FLOWERING MAGNOLIA

Magnolia kobus var. loebneri

Large, white, fragrant flowers in early spring before leaves. Distinct, dense branching with silver-grey bark. Requires moist soils and full sun. Best in protected sites. Native to Japan. Star magnolia (*M. k. var. stellata*) is similar but shrubby.

GLOBE LOCUST

Robinia pseudoacacia 'Umbraculifera'

The name describes it; a rounded umbrella shaped tree that gives a quick effect with fast growth. Survives the toughest condition.

GLOBE NORWAY MAPLE

Acer platanoides "Globosum"

A dwarf form of Norway maple. Wide-spreading crown. Excellent drought, heat and pollution-tolerant. Acer 'Crimson Sentry' is another small maple, with purplish leaves which retain their color through the season.

GOLDEN CHAIN TREE

Laburnum x watereri

An upright oval tree with golden yellow chains of flowers that look like yellow wisteria flowers. This is tolerant of poor soil and drought. Unfortunately, all parts are toxic.

GOLDEN ASH

Fraxinus oxycarpa 'Golden Desert' TM

Small, round-headed tree with golden foliage and twigs from spring to fall. Tolerant of city conditions. *Fraxinus excelsior* 'Globosum' or Globe Ash is similar in form, but has green leaves and brown twigs.

GOLDEN RAIN TREE

Koelreuteria paniculata

Large flowers in bold midsummer clusters. Persistent light-brown, lantern-like fruits. Coarse-textured foliage and branching. Bright yellow fall color. Heat, drought, and pollution tolerant. Tough urban plant. Native to China and Korea. 'September' has late summer flowers.

HARDY HIBISCUS

Hibiscus syriacus

A small tree with summer flowers in pink, white or lavender. Although often seen as a multistem large shrub, it can be grown with a single stem and forms a tidy small tree.

JAPANESE DOGWOOD

Cornus kousa

Showy white flower bracts in June, followed by large edible, strawberry-like fruits. Attractive to birds. Crisp, green foliage becomes scarlet to yellow in fall. Prefers moist, acid soil, and full sun. More drought and sun tolerant than other dogwoods. Native to China, Japan and Korea.

JAPANESE MAPLE

Acer palmatum

Beautifully textured foliage with excellent fall color. Numerous cultivars are available that differ in color, texture, and habit of foliage. Requires moist, fertile soil. Prefers some shade. Native to Japan. Fullmoon maple (*Acer japonicum*) is similar.

JAPANESE SNOWBELL

Styrax japonica

Fragrant white bell-flowers in June, followed by bean-sized brown fruits that attract birds. Graceful, drooping branches. Prefers partial shade and requires moist, well-drained soils. Native to Japan and China.

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JAPANESE STEWARTIA

Stewartia pseudocamellia

Large, white camellia-like flowers produced all summer long. Rich, medium textured foliage turns shades of red/orange/yellow in fall. Patchy multicolored bark. Delicate branching provides year-round interest. Requires moist, fertile soil, and partial shade. Native to Japan. Mountain stewartia (*S. ovata*) is similar; native to southeastern North America.

JAPANESE TREE LILAC

Syringa reticulata

Creamy-white flowers in early spring. Shiny, cherry-like bark provides winter interest. Dark green, coarse-textured foliage. Tolerates some summer heat and most soils. Prefers moist, fertile, well-drained sites. Native to Japan. Peking lilac (*S. pekinensis*) is similar.

ORIENTAL CHERRY

Prunus serrulata

Sensational display of pink to white flowers in April and May. Prefers full sun and moist, fertile soils. Numerous cultivars provide double-flowered forms and diverse growth habits. Good selections include:

‘AMANOGAWA’

Pink, semidouble form in late spring. Columnar.

‘SHIROFUGEN’

Late-flowering with double pink blossoms. Wide-spreading form.

‘SHIROTAE’

Early semidouble white flowers. Fragrant. Wide-spreading form.

‘UKON’

Semidouble pale yellow flowers. Bronze new foliage.

PAPERBARK MAPLE

Acer griseum

Shiny, copper-brown, peeling bark. Spectacular orange-red fall color. Slow growth. Tolerates partial shade. Requires well-drained, moist, fertile soil. Native to Asia.

PURPLE PLUM

Prunus cerasifera

Early spring displays of pink or white flowers. Green or purple summer foliage turning red and yellow in fall. Drought tolerant. Prefers full sun for best foliage color and flower show. Numerous cultivars with purple foliage include ‘Thundercloud’ and ‘Newport’. ‘Purple Pony’ is the smallest growing form.

RED CASCADE MOUNTAIN ASH

Sorbus americana

Unusual red fruits persist into winter. Small, white clusters of mid-spring flowers. Foliage turns red-yellow in fall. Prefers moist, fertile, well-drained soil and full sun. Native to northeast North America. Forest mountain ash (*S. forrestii*) is similar but with pure-white fruits.

SERVICEBERRY

Amelanchier xgrandiflora

Fleeting but stunning pink or white flowers before leaves emerge, followed by edible purple fruits. Good wildlife value. Young leaves reddish, turning bluish-green. Great red-orange, early fall color. Smooth silvery bark. Prefers moist, fertile soils. Sun or shade. Upright 'Robin Hill' is an excellent street tree. Allegheny serviceberry (*A. laevis*) is similar; its cultivar 'Cumulus' is also upright in form.

SOURWOOD

Oxydendrum arboreum

Pendant clusters of urn-shaped white flowers in early summer, ripening into silvery persistent fruits. Excellent scarlet fall color. Unusual narrow form with drooping branches. Prefers moist, fertile, acid soil. Best in full sun. Native to southeastern North America.

STAGHORN SUMAC

Rhus typhina

Coarse-textured leaves turn brilliant orange-purple-red in fall. Open, flat-topped branching gives winter interest. Branches densely covered with red hairs. Female plants have maroon seed clusters that linger all winter. Good wildlife plant. Fast growth to mature height. Tolerant of pollution, drought, poor soil and other extreme conditions. Native to North America. Nutgall tree (*R. chinensis*) is similar but has fluffy mid-summer flowers.

VINE MAPLE

Acer circinatum

Clean, green foliage, brilliant red-orange-yellow in fall. Red and white flowers in spring followed by reddish fruits. Multistemmed tree adaptable to available space. Tolerates dense shade and full sun. Drought-resistant, but prefers moist, well-drained soils. Good wildlife value. Native to Pacific Northwest. Similar in appearance to mountain maple (*A. glabrum*) but prefers shade.

WASHINGTON HAWTHORN

Crataegus phaenopyrum

Large masses of white flowers in June/July result in many bright orange fruits that persist through winter. Attractive horizontal branching and pyramidal form. Tolerant of pollution and extreme urban conditions. Native to southeastern North America.

WHITE FRINGETREE

Chionanthus retusus

Display of unusual white flowers in early summer. Coarse-textured glossy leaves expand late in spring, turning yellow in autumn. Drought and heat tolerant. Sun or partial shade. Native to China and Taiwan.

WITCH-HAZEL

Hamamelis x intermedia

Fragrant yellow or rust colored flowers in late winter or very early spring. Large, rich-green foliage turns clear yellow in late autumn. Tolerates partial shade and most soils. Prefers moist, fertile sites. Native to China. Japanese witch-hazel (*H. japonica*) is similar but has red autumn foliage and red flowers.

Broadleaf Evergreens



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CALIFORNIA LILAC

Ceanothus species

These evergreens form attractive specimens covered in spring with beautiful blue or white flowers and glossy dark green leaves throughout the year. Different selections range in size from low growing ground covers to small trees. Drought-tolerant and pest-free. Requires sun and well-drained position.

EVERGREEN MAGNOLIA

Magnolia grandiflora 'Little Gem'

These are worthwhile and handsome trees useful as a screen or grouping. These have beautiful evergreen foliage and fragrant summer flowers. 'Little Gem' stays smaller than other evergreen magnolia cultivars.

FRASER PHOTINIA

Photinia x Fraseri

Commonly seen as a shrub used for hedges. Can be trained into a single stem form. Bright red new growth fades to deep green. White flowers in terminal panicles. Dense canopy. Best in well-drained, moist soils but highly adaptable.

GLOSSY PRIVET

Ligustrum lucidum

Massive displays of white-yellow blossoms in late summer followed by clusters of black berries on red fruit stems that persist through winter. Large, glossy leaves. Best trained to a single stem. Drought and pollution tolerant. Prefers full sun. Native to China.

LEATHERLEAF VIBURNUM

Viburnum rhytidophyllum

An excellent specimen used for massing or useful as a screen. Tolerates shade. Ornamental in bloom with creamy white spring flowers.

PACIFIC WAX MYRTLE

Myrica californica

Aromatic glossy green willow-like leaves. Inconspicuous flowers. Highly tolerant of a variety of exposures and soils. Full sun or partial shade. Resistant to salt spray. Good plant for screening. Can be pruned into a hedge or small tree. Native to West Coast.

RHODODENDRON

Rhododendron sp.

Some species are arboreal, meaning they form small trees. Many flower colors available. May need patience for tree size to develop. Tolerates shade and prefers moist, acid soils.

STRAWBERRY TREE

Arbutus Unedo

Common landscape shrub which can be grown as single stem tree. White urn-shaped flowers in the fall develop into attractive orange-red fruits in the spring. Drought tolerant. Prefers full sun and well-drained soil. Native to Ireland and southern Europe.

Needled Evergreens



BRISTLECONE PINE

Pinus aristata

A shrubby and picturesque pine with a slow but determined growth habit. Handles dry and rocky soils. Needs full sun exposure. Some trees in the Southwest are known to be 4,000 to 5,000 years old.

DWARF HINOKI CYPRESS

Chamaecyparis obtusa

There are many handsome selections of this graceful conifer. All display cupped sprays of dark green foliage and are often seen in Japanese style gardens.

'ELEGANS' JAPANESE CEDAR

Cryptomeria japonica 'Elegans'

Extremely fine-textured soft foliage turns uniquely bronze-red with a touch of violet in winter. Needles a delicate silver-green in summer. Peeling red-brown bark. Pollution tolerant. Requires moist, fertile soils. Prefers full sun.

JAPANESE UMBRELLA PINE

Sciadopitys verticillata

Large, fleshy needles dark green in summer, turning bronze in fall. Distinct narrow cone habit gives formal appearance. Very slow growth. Tolerates salt spray. Prefers moist, fertile soil and full sun. Native to Japan.

LACEBARK PINE

Pinus bungeana

Multicolored mottled bark especially beautiful on older trees. Bright green foliage. Slow growth. Prefers full sun and well-drained sites. Native to China.

TANYOSHO PINE

Pinus densiflora 'Umbraculifera'

Red-orange bark. Distinct horizontal branching and umbrella-shaped crown. Tolerates some drought. Requires well-drained sites in full sun.

Tree Information and Permit Directory

For information regarding electrical utilities and trees, call Seattle City Light at **(206) 684-3000**.

For tree planting, pruning or removal, particularly in street rights-of-way, contact your local city or county.

- City of Seattle requires a Street Use Permit for all trees planted along Seattle streets or rights-of-way.

For Seattle street tree selection and permits, call the City Arborist at **(206) 684-7649**.

For questions regarding trees in Seattle parks, boulevards and greenbelts, call the Park Horticulturist at **(206) 684-4111**.

- King County Special Use Permits for tree planting along King County roads or rights-of-way are available through King County Real Property Division at **(206) 296-6640**.
- City of Tukwila, Public Works: **(206) 433-0179**.
- City of Normandy Park: **(206) 248-7603**.
- City of Lake Forest Park: **(206) 368-5440**.
- City of Shoreline: **(206) 546-0788**
- City of Burien: **(206) 241-4647**
- City of SeaTac: **(206) 241-9100**

Call-Before-You-Dig at **1-800-424-5555**.

Washington State Cooperative Extension Service and Master Gardener Program: **(206) 296-3986**

The Miller Library, University of Washington Center for Urban Horticulture: **(206) 543-0415**.



Bibliography

GENERAL PLANT MATERIALS AND PLANT SELECTION REFERENCES

Bean, W.J. 1981. *Trees and shrubs hardy in the British Isles*. 4 volumes. St.Martins Press, New York, New York.

City of Seattle Neighborhood Planning Office, *The Outreach Tool*, Seattle: City of Seattle, 1996.

City of Seattle Urban Forest Coalition, *A City Among the Trees*, Seattle: City of Seattle 1998.

City of Seattle Solid Waste Utility, "How Mulching Can Make Your Trees Grow Bigger and Healthier" (pamphlet), Seattle: City of Seattle, n.d.

City of Seattle Transportation Department, *Tree Steward Resource Field Guide*, Seattle: City of Seattle, 1997.

Dirr, Michael A. 1983. *Manual of woody landscape plants: their identification, ornamental characteristics, culture, propagation, and uses*. Stripes Publishing Company, Champaign, Illinois.

Dirr Michael A. 1997 *Dirr's Hardy Trees and Shrubs, An Illustrated Encyclopedia*, Times Press, Portland, Oregon.

Everett, Thomas H. 1981. *The New York Botanical Garden illustrated encyclopedia of horticulture*. Garland Publishing Company, New York, New York.

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

Koller, Gary L. and Michael A. Dirr. 1979. *Street trees for home and municipal landscapes*. *Arnoldia* 3(39): 73-237.

Krussmann, Gerd. 1985. *Manual of cultivated conifers*. Hans-Dieter Warda, ed. Timber Press, Portland, Oregon.

Krussmann, Gerd. 1984. *Manual of cultivated broad-leaved trees and shrubs*. 3 vols. Gilbert S. Daniels, tech. Ed. Timber Press, Portland, Oregon.

PlantAmnesty Newsletter, published quarterly by PlantAmnesty, Seattle, Washington.

Sunset Books. 1997. *Western Garden Book*. Lane Publishing Company, Menlo Park, California.

Tree City USA Bulletins, published periodically by Friends of Tree City USA, Nebraska City, NE: National Arbor Day Foundation.

TreeLink News Bulletin, published periodically by the Washington State Department of Natural Resources, Urban and Community Forestry Program, Olympia, Washington.

U.S. Forest Service, "*How To Prune Trees*" (pamphlet), Washington, DC: U.S. Department of Agriculture, n.d.

U.S. Forest Service, "*How To Recognize Hazardous Defects in Trees*", (pamphlet), Washington, DC: U.S. Department of Agriculture, n.d.

Van Pelt, Robert, *Champion Trees of Washington State*, Seattle: University of Washington Press, 1996.

Washington Department of Natural Resources, "*Backyard Forest Stewardship*", Olympia, Washington State Department of Natural Resources, n.d.

Whitman, Ann, ed., *Familiar Trees of North America, Western Region* (Audubon Society Pocket Guide), New York: Alfred A. Knopf, 1986.

Wyman, Donald. 1965. *Trees for American gardens*. The Macmillan Company, New York, New York.

CULTIVATION (PLANTING, PRUNING, AND MAINTENANCE)

American Horticultural Society. 1996. *A-Z Encyclopedia of Garden Plants*. American Horticultural Society, Mount Vernon, Virginia.

Harris, Richard W., Clark, James R. and Matheny, Nelda P. 1999. *Arboriculture*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Hill, Lewis. 1986. *Pruning simplified*. Storey Communications Inc., Pownal, Vermont.

Shigo, Alex. 1986. *A new tree biology*. Shigo and Trees, Associates, Durham, New Hampshire.

Shigo, Alex. 1986. *A new tree biology dictionary*. Shigo and Trees, Associates, Durham, New Hampshire.

Sunset Books. 1999. *Pruning*. Lane Publishing Company, Menlo Park, California.

Handy Telephone Numbers

City of Seattle:

Department of Construction and Land Use (DCLU)

Design Review	.684-8875
Environmentally Critical Areas Inspection	.684-8423

Department of Neighborhoods, Neighborhood Matching Fund .684-0406

Department of Parks and Recreation

Adopt-A-Park: North Seattle	.233-3979
Adopt-A-Park: Central Seattle	.386-1419
Adopt-A-Park: South Seattle	.684-4557
Urban Forestry	.684-4113
Forest Restoration Programs	.684-4122

Seattle City Light

Power Line Clearance Program	.386-1663
Urban Tree Replacement Program	.386-1902

Seattle Transportation (SEATRAN)

City Arborist's Office	.684-7649
Landscape Architect's Office	.684-5041
Street Use Permit Counter	.684-5283
Tree Steward Program	.684-5008
Trees in the City	www.cityofseattle.net/oem/trees/trees.htm
Seattle Transportation, Application to Plant a Tree	www.cityofseattle.net/td/treeapp.asp
Seattle Transportation - Seattle Tree Inventory	www.cityofseattle.net/td/treeinv.asp
Seattle Transportation - Street Tree Planting Procedures	www.cityofseattle.net/td/treeplant.asp

Community Resources:

Call Before You Dig (48-hour response)	.1 (800) 424-5555
Center for Urban Horticulture, University of Washington	.543-8616
Elisabeth Miller Library	.543-0415
Friends of Seattle's Olmsted Parks	.283-7090
International Society of Arboriculture Pacific NW Chapter	.(503) 585-4285
Master Gardeners	.205-8616
PlantAmnesty	.783-5660
TREEmendous Seattle	.985-6867
Seattle School District Self-Help Program	.298-7637
Washington Association of Landscape Professionals	.(425) 644-7642
Washington Dept. of Natural Resources Community & Urban Forestry Programs	(360) 902-1703 or 1 (800) 523-8733
Washington Native Plant Society	.784-4471
Washington State University, Cooperative Extension	.296-3440