

APPENDIX 50.11.004-D

SOLAR FRIENDLY TREE REPORT (APRIL 1987)

[Prepared by Conservation Management Services, a division of The Bankendorf Associates Corporation]

The following list is the result of an intensive process to determine those deciduous trees, all of which grow in the Willamette Valley, that are suitable for planting as solar friendly trees. The ranking classification was based on evaluating each tree on this list for crown density, time of leaf drop, time of leaf out, size and growth rate. A committee of tree experts from Portland, Salem, Eugene, and Corvallis ranked each tree with a numerical factor for each of the five criteria. Averages for each criterion were then added to produce the final numerical rank for each tree. The criteria for these rankings are included in the appendices.

I – Solar Friendly Trees. These are trees that had a ranking of less than 13. These are considered to be solar friendly trees based on the criteria established by the committee. A few trees, however, which had a ranking of 13 or over were discussed by the committee and designated as solar friendly after reviewing the photographs and bare branch patterns. Solar Friendly Trees – 251.

II – Solar Unfriendly Trees: These are the trees that had a ranking of 13 or more. Based on the discussion at the workshop these are considered to be solar unfriendly trees. A few trees, however, with rankings of less than 13 were classified by the committee upon careful review as solar unfriendly trees due to some specific characteristic, such as seed pods that remain on all winter. Solar Unfriendly Trees – 116.

III – Trees Not Ranked: These trees were not ranked by the committee. They will be included in the final report as trees which grow in the Willamette Valley but which have not been identified as either solar friendly or solar unfriendly. Either these trees are rare, or no one on the committee was familiar enough with the tree to give it a ranking. Trees not ranked – 37.

The climatic zone within which all these trees grow is defined as Zone 6 which extends from Clark County, Washington, down the Willamette Valley to Roseburg, Oregon. For a map of this zone see Appendix B.

I – SOLAR FRIENDLY TREES

Botanical Name	Common Name	Rank
Acer buergianum	Trident Maple	11
A. campestre 'Queen Elizabeth'	Queen Elizabeth Maple	11
A. cappadocicum	Coliseum Maple	10.3
A. c. 'Rubrum'	Red Coliseum Maple	10.3
A. capillipes	Red Snake Bark Maple	11
A. circinatum	Vine Maple	9.9
A. davidii	David's Maple	11.5
A. ginnala 'flame'	Flame Maple	10
A. griseum	Paperbark Maple	11.5
A. japonicum	Fullmoon Maple	9.5
A. nigrum 'greencolumn'	Greencolumn Maple	11

A. palmatum	Japanese Maple	10.4
A. platanoides	Norway Maple	12
A. p. 'almira'	Almira Norway Maple	12
A. p. 'cavalier'	Cavalier Norway Maple	12
A. p. 'cleveland'	Cleveland II Norway Maple	11
A. p. 'crimson sentry'	Crimson Sentry Maple	12
A. p. 'columnare'	Columnar Norway Maple	11.8
A. p. 'crimson king'	Crimson King Norway Maple	11.3
A. p. 'deborah'	Deborah Maple	12
A. p. 'emerald queen'	Emerald Queen Norway Maple	13
A. p. 'globe'	Globe Norway Maple	11.3
A. p. 'jade glen'	Jade Glen Maple	12
A. p. 'olmsted'	Olmsted Norway Maple	11.6
A. p. 'royal red'	Royal Red Norway Maple	11.6
A. p. 'schwedleri'	Schwedler Norway Maple	11.6
A. p. 'silver variegated'	Silver Variegated Maple	12
A. pseudoplatanus	Sycamore Maple	12.3
A. p. atropurpureum 'spaethi'	Wineleaf Sycamore Maple	12
A. p. 'pyramidale'	Pyramidal Sycamore Maple	10.3
A. rubrum	Scarlet Maple	12.5
A. r. 'autumn flame'	Autumn Flame Maple	11
A. r. 'bowhall'	Bowhall Red Maple	12.1
A. r. 'gerling'	Gerling Red Maple	12.9
A. r. 'karpick'	Karpick Red Maple	12
A. r. 'morgan'	Morgan Red Maple	11.7
A. r. 'october glory'	October Glory Red Maple	12.5
A. r. 'scanlon'	Scanlon Red Maple	12.4
A. r. 'scarlet sentinel'	Scarlet Sentinel Maple	10
A. r. 'schlesinger'	Schlesinger Red Maple	11.9
A. rufrinerve	Redvein Maple	12.5
A. saccharum 'bonfire maple'	Bonfire Maple	12
A. s. 'columnare'	Columnar Sugar Maple	12.7
A. s. 'commemoration'	Commemoration Maple	12
A. s. 'green mountain'	Green Mountain Sugar Maple	10.4
A. s. 'legacy'	Legacy Maple	12
A. truncatum	Truncate Maple	10.8
Aesculus carnea	Red Horsechestnut	12.5
A. hippocastanum 'baumannii'	Baumann's Horsechestnut	11.6
Ailanthus altissima	Tree-of-Heaven	12.3
Albizia julibrissin	Silk Tree Mimosa	10
Amelanchier canadensis	Serviceberry	10
A. laevis	Allegheny Serviceberry	10

<i>Aralia elata</i>	Japanese Aralia	10
<i>A. spinosa</i>	Devil's Walking Club	7.2
<i>Betula jacquemontii</i>	Jacquemontii Birch	13
<i>B. papyrifera</i>	Paper Birch	12.1
<i>B. pendula 'alba'</i>	European White Birch	12.1
<i>B. p. 'Dalecarlica'</i>	Cutleaf Weeping Birch	11.4
<i>B. p. 'fastigiata'</i>	Pyramidal White Birch	12.3
<i>B. p. 'Youngii'</i>	Young's Weeping Birch	10.1
<i>Carpinus betulus 'globesun'</i>	Globe European Hornbeam	12
<i>C. b. 'quercifolia'</i>	Oakleaf European Hornbeam	10
<i>C. caroliniana</i>	American Hornbeam	11.5
<i>C. tschonoskii</i>	Yeddo Hornbeam	11
<i>Carya illinoensis</i>	Pecan	10
<i>C. ovata</i>	Shagbark Hickory	10
<i>Castanea sativa</i>	European Chestnut	12.7
<i>Catalpa bignoides</i>	Southern Catalpa	10.7
<i>C. bungei</i>	Manchurian Catalpa	7
<i>C. speciosa</i>	Northern Catalpa	10.2
<i>Celtis occidentalis</i>	Common Hackberry	11.6
<i>Cercidiphyllum japonicum</i>	Katsura Tree	10.3
<i>Cercis canadensis</i>	Eastern Redbud	11
<i>C. occidentalis</i>	Western Redbud	11
<i>Cladrastis lutea</i>	American Yellowwood	11.1
<i>Cornus controversa</i>	Giant Dogwood	10.8
<i>C. florida</i>	Flowering Dogwood	10.6
<i>C. kousa</i>	Japanese Dogwood	11
<i>C. nuttallii</i>	Pacific Dogwood	11.3
<i>Corylus maxima</i>	Filbert	11.8
<i>C. colurna</i>	Turkish Hazel	12.8
<i>Cotinus coggygria</i>	Smoke tree	8.8
<i>Crataegus crus-galli 'inermis'</i>	Thornless Cockspur Hawthorn	12
<i>C. punctata 'ohio pioneer'</i>	Ohio Pioneer Dotted Hawthorn	12.7

C. x. mordensis 'toba'	Toba Hawthorn	11
Davidia involucrata	Dovetree	11.7
Diospyros virginiana	Common Persimmon	9.2
Elaeagnus angustifolia	Russian Olive	12.1
Ficus carica	Common Fig	8.3
Franklinia alatamaha	Frankliniana	10
Fraxinus Americana	White Ash	9
F. a. 'autumn applause'	Autumn Applause Ash	9
F. a. 'autumn purple'	Autumn Purple Ash	9
F. a. 'rosehill'	Rosehill Ash	10
F. angustifolia 'dr. pirone'	Dr. Pirone Narrowleaf Ash	11.8
F. excelsior	European Ash	11.3
F. e. 'rancho'	Rancho European Ash	12
F. holotricha	(no common name listed)	10.7
F. latifolia	Oregon Ash	11.3
F. ornus	Flowering Ash	12.1
F. o. 'raywood'	Raywood Ash	12.9
F. o. 'aureaefolia'	Golden Desert Ash	13.5
F. pennsylvanica lanceolata	Green Ash	11.3
F. p. 'marshall'	Marshall Ash	11
F. p. 'summit'	Summit Ash	9
F. p. 'patmore'	Patmore Aha	9
F. p. 'emerald'	Emerald Ash	10
F. quadrangulata	Blue Ash	10.5
Gingko biloba	Maidenhair Tree	8.4
Gleditsia triacanthos	Common Honeylocust	9.1
G. t. inermis 'trueshade'	Trueshade Honeylocust	8
G. t. 'green arbor'	Green Arbor Honeylocust	8
G. t. 'halka'	Halka Honeylocust	8
G. t. 'imperial'	Imperial Common Honeylocust	7.3
G. t. 'moraine'	Moraine Common Honeylocust	9.7
G. t. 'shademaster'	Shademaster Common Honeylocust	9.2
G. t. 'skyline'	Skyline Common Honeylocust	9.5
G. t. 'summergold'	Summergold Honeylocust	8
G. t. 'sunburst'	Sunburst Common Honeylocust	7.2
Gymnocladus dioica	Kentucky Coffee Tree	8.6

Halesia carolina	Carolina Silverbell	8
H. monticola	Mountain Silverbell	10.8
Hovenia dulcis	Japanese Raisin Tree	11
Idesia polycarpa	Idesia	9.7
Juglans cinerea	Butternut	7
J. hindsii	Hinds Blackwalnut	7
J. nigra	Blackwalnut	10.9
J. regia	English walnut	9.7
Koelreuteria paniculata	Panicled Goldenrain Tree	11.2
K. p. 'September goldenrain'	September Goldenrain Tree	11
Laburnum alpinus	Scotch Laburnum	9
L. anagyroides	Goldenchain Laburnum	11.6
Lagerstroemia indica	Common Crapemyrtle	10.3
Larix decidua	European Larch	11.7
L. laricina	Eastern Larch (Tamarack)	7
L. leptolopis	Japanese Larch	9
L. occidentalis	Western Larch	10
Liquidambar formosana	Chinese Sweetgum	12
L. orientalis	Oriental Sweetgum	12.5
L. styraciflua variegata	Golden American Sweetgum	12.7
Maackia amurensis	Amur Maacki	11
Magnolia acuminata	Cucumbertree Magnolia	13.2
M. campbellii	Campbell Magnolia	12.5
M. macrophylla	Bigleaf Magnolia	10
M. salicifolia	Anise Magnolia	10
M. sargentiana	Sargent Magnolia	11.5
M. soulangeana	Saucer Magnolia	10.1
M. stellata	Star Magnolia	10.8
M. veitchii	Veitch Magnolia	9.8
M. wilsoni	Wilson Magnolia	8
Malus arnoldiana	Arnold Crabapple	11.5
M. baccata	Flowering Crabapple	12
M. b. 'columnaris'	Columnar Siberian Crabapple	11.5
M. b. 'jackii'	Jackii Crabapple	12

M. 'david'	David Crabapple	12
M. 'liset'	Liset Crabapple	12
M. 'mary potter'	Mary Potter Crabapple	11
M. 'prairiefire'	Prairiefire Crabapple	13
M. 'red baron'	Red Baron Crabapple	12
M. 'royal ruby'	Royal Ruby Crabapple	10
M. sargentii	Sargent Crabapple	11
M. s. 'rosea'	Sargent Pinkbud Crabapple	9.8
M. s. 'rancho ruby'	Rancho Ruby Sargent Crabapple	8
M. selkirk	Selkirk Crabapple	10
M. tschonoskii	Tschonoskii Crabapple	12
M. 'van eseltine'	Van Eseltine Crabapple	9.5
M. 'white cascade'	White Cascade Crabapple	13
M. zumi 'calocarps'	Calocarpa Zumi Crabapple	10.5
Metasequoia glyptostroboides	Dawn Redwood	11.7
Nyssa sylvatica	Black Tupelo	11.4
Oxydendrum arboreum	Sourwood	9
Paulownia tomentosa	Royal Paulownia	11.5
Phellodendron amurense	Amur Corktree	10.7
Populus tremuloides	Quaking Aspen	11
Prunus avium	Mazzard Cherry	12.2
P. a. 'plena'	Double Mazzard Cherry	9
P. a. 'scanlon'	Scanlon Cherry	10.3
P. blireiana	Blireiana Plum	11.2
P. cerasifera	Myrobalan Plum	12
P. c. atropurpurea	Purple Plum	12
P. c. 'newport'	Newport Plum	12
P. c. 'thundercloud'	Thundercloud Plum	12.6
P. c. Krauter 'vesuvius'	Krauter Vesuvius Plum	10.7
P. maacki	Amur Chokecherry	11
P. mune	Japanese Apricot	12
P. 'okame'	Okame Cherry	10
P. persica	Peach varieties	11
P. padus 'alberti'	Albert Birdcherry	12
P. p. 'bigflower'	Bigflower European Birdcherry	12
P. p. 'berg'	Rancho European Birdcherry	12
P. sargentii	Sargent Cherry	11.5
P. s. 'columnaris'	Columnar Sargent Cherry	10.3

P. s. 'rancho'	Rancho Sargent Cherry	11.1
P. serrula	Birch Bark Cherry	11
P. serrulata	Oriental Cherry	10.5
P. s. amanogawa	Amanogawa Cherry	11
P. s. kwanzan	Kwanzan Oriental Cherry	11.2
P.s. 'Mt. Fuji' or 'shirotae'	Mt. Fuji Cherry	11
P. subhirtella 'autumnalis'	Autumn Flowering Cherry	10
P. s. 'rosea'	Whitcomb Flowering Cherry	10
P. s. 'pendula plena rosea'	Double Weeping Cherry	12
P. s. 'yedoensis'	Yoshino Cherry	12
P. s. 'yedoensis akebono'	Akebono Cherry	12
Pterocarya stenoptera	Chinese Wingnut	11
P. fraxinifolia	Caucasian Wingnut	11
Pterosyrax hispida	Fragrant Epaulette Tree	11.3
Quercus coccinea	Scarlet Oak	12.5
Q. garryana	Oregon White Oak	12.2
Q. kelloggii	California Black Oak	9.5
Rhus glabra	Smooth Sumac	7
R. typhina	Staghorn Sumac	8.6
Robinian pseudoacacia 'decaisne'	Decaisne Black Locust	13
R. hispida macrophylla	Smooth Rosecacia Locust	13
Salix discolor	Pussy Willow	11
Sambucus caerulea	Blue Elderberry	11.2
Sassafras albidum	Common Sassafras	10
Sophora japonica	Japanese Pagodatree	11.6
Sorbus alnifolia	Korean Mountain Ash	10
S. aucuparia	European Mountain Ash	12.4
S. a. fastigiata	Dwarf Mountain Ash	11
S. a. 'wilson'	Wilson Mountain Ash	11
S. cashmeriana	Kashmir Mountain Ash	11.5
S. tianshanica 'red cascade'	Red Cascade Mountain Ash	10
Stewartia koreana	Korean Stewartia	10.5
S. pseudo-camellia	Japanes Stewartia	12.2
S. monodelpha	Tall Stewartia	9.5
Styrax japonica	Japanese Snowbell	10.7

S. obassia	Fragrant Snowbell	9.6
Syringa reticulata	Japanese Tree Lilac	11.7
S. vulgaris	Common Lilac	9
Tamarix pentandra	Salt Cedar	9
Tilia cordata	Littleleaf Linden	11.9
T. c. 'greenspire'	Greenspire Littleleaf Linden	12.2
T. c. 'saalem'	Salem Littleleaf Linden	11
T. c. 'rancho'	Rancho Littleleaf Linden	11.7
T. c. 'chancellor'	Chancellor Littleleaf Linden	12
T. c. 'june bride'	June Bride Littleleaf Linden	11
T. c. 'glenleven'	Glenleven Littleleaf Linden	12
T. c. 'olympic'	Olympic Littleleaf Linden	12
T. euchlora	Crimson Linden	11.8
T. e. 'redmond'	Redmond Crimean Linden	11.9
T. europea	European Linden	12
T. mongolica	Mongolian Linden	10.5
Ulmus glabra	Scotch Elm	11
U. g. 'camperdownii'	Camperdown Elm	12.9
U. pumila	Siberian Elm	12.9
Zelkova serrata	Japanese Zelkova	12.9
Z. s. 'halka'	Halka Zelkova	12
Z. s. 'green vase'	Green Vase Zelkova	12
Z. s. 'village green'	Village Green Zelkova	13

II – SOLAR UN-FRIENDLY TREES

Botanical Name	Common Name	Rank
<i>Acer campestre</i>	Hedge Maple	12.1
<i>A. ginnala</i>	Amur Maple	12.2
<i>A. macrophyllum</i>	Bigleaf Maple	14.6
<i>A. negundo</i>	Box Elder	13
<i>A. platanoides</i> 'Cleveland'	Cleveland Norway Maple	13.5
<i>A. p.</i> 'emerald lustre'	Emerald Lustre Maple	13
<i>A. p.</i> 'fassens black'	Fassens Black Norway Maple	12.8
<i>A. p.</i> 'summershade'	Miller's Superform Norway Maple	13.2
<i>A. p.</i> 'royal crimson'	Royal Crimson Norway Maple	13.5
<i>A. rubrum</i> 'armstrong'	Armstrong Red Maple	13.5
<i>A. r.</i> 'armstrong II'	Armstrong II Red Maple	13.2
<i>A. r.</i> 'red sunset'	Red Sunset Maple	13.5
<i>A. r. x saccharinum</i> 'autumn blaze'	Autumn Blaze Maple	12.8
<i>A. r.</i> 'tilford'	Tilford Red Maple	14
<i>A. saccharum</i>	Sugar Maple	13.9
<i>A. s.</i> 'Newton sentry'	Newton Sentry Sugar Maple	13.5
<i>A. saccharinum</i>	Silver Maple	13.2
		13.9
<i>Aesculus carnea brioti</i>	Red Flowering Horsechestnut	13.5
<i>A. hippocastanum</i>	Common Horsechestnut	13.3
<i>Alnus glutinosa</i>	European Alder	12.5
<i>A. rhombifolia</i>	White Alder	13.314
<i>A. rubra</i>	Red Alder	13.3
<i>Betula nigra</i>	Red Birch	12.5
<i>B. nigra</i> 'heritage'	Heritage Birch	15
<i>Carpinus betulus</i>	European Hornbeam	12.9
<i>C. betulus</i> 'columnaris'	Columnar European Hornbeam	13.3
<i>C. b. fastigiata</i>	Pyramidal European Hornbeam	14
<i>Castanea mollissima</i>	Chinese Chestnut	13.4
<i>Cercis siliquastrum</i>	Judas Tree	15
<i>Crataegus</i> 'autumn glory'	Autumn Glory Hawthorn	14
<i>C. lavalleyi</i>	Lavelle Hawthorn	14.1
<i>C. mollis</i> sel #1	Downy Hawthorn (Sel #1)	14
<i>C. monagyna</i> 'stricta'	Pyramidal Singleseed Hawthorn	13.5
<i>C. oxycantha</i>	English Hawthorn	13.9
<i>C. phaenopyrum</i>	Washington Hawthorn	12.7

C. x mordenensis 'snowbird'	Snowbird Hawthorn	13
C. viridis 'winter king'	Winter King Hawthorn	15
Fagus sylvatica	European Beech	13.4
F. s. 'fernleaf'	Fernleaf European Beech	13.5
F. s. 'golden'	Golden European Beech	13.5
F. s. 'dawycyk'	Dawycyk European Beech	13.5
F. s. 'roundleaf'	Roundleaf European Beech	13.5
F. s. 'tricolor'	Tricolor European Beech	13.5
Firmiana simplex	Chinese Parasol Tree	13.5
Fraxinus oxycarpa 'flame'	Flame Ash	13.2
Liquidambar styraciflua	American Sweetgum	14.3
L. s. 'festival'	Festival Sweetgum	14
Liriodendron tulipifera	Tuliptree	13.6
Magnolia dawsoniana	Dawson Magnolia	14
M. denudata	Yulan Magnolia	13.5
M. kobus	Kobus Magnolia	13.7
M. k. 'dr. merrill'	Dr. Merrill Kobus Magnolia	14
M. sprengeri	Sprengeri Magnolia	14
Malus 'adams'	Adams Crabapple	13
M. 'beverly'	Beverly Crabapple	15
M. 'bob white'	Bob White Crabapple	14
M. 'centurion'	Centurion Crabapple	15
M. 'donald wyman'	Donald Wyman Crabapple	16
M. floribunda	Floribunda Crabapple	14
M. 'koebeli'	Koebeli Crabapple	13
M. 'ormiston roy'	Ormiston Roy Crabapple	14
M. 'profusion'	Profusion Crabapple	14
M. 'red jewel'	Red Jewel Crabapple	13
M. 'robinson'	Robinson Crabapple	17
M. 'snowdrift'	Snowdrift Crabapple	15
M. 'white angel'	White Angel Crabapple	13
Melia azedarach	Chinaberry	13
M. s. umbraculiformis	Umbrella Chinaberry	13
Morus alba	White Mulberry	13.2
M. a. 'kingan'	Fruitless Mulberry	13
Parrotia persica	Persian Parrotia	14.3

Platanus acerifolia	London Planetree	13.7
P. occidentalis	American Planetree	13.5
P. racemosa	California Planetree	14
Populus alba	White Poplar	13
P. a. bolleana	Bolleana White Poplar	14
P. canadensis eugenei	Carolina Poplar	15
P. nigra	Black Poplar	14.7
P. n. 'lombardy'	Lombardy Black Poplar	14.7
P. trichocarpa	California Poplar	13.8
Prunus cerasifera 'Mt. St. Helens'	Mt. St. Helens Plum	16.5
P. c. 'pissard'	Pissard Myrobalan Plum	13
P. virginiana 'canada red'	Canada Red Chokecherry	14
P. padus	European Birdcherry	13
Pyrus calleryana	Callery Pear	14.8
P. c. 'chanticleer'	Canticleer Callery Pear	12.8
P. c. 'rancho'	Rancho Callery Pear	12.9
P. c. 'redspire'	Redspire Pear	16
P. c. 'aristocrat'	Aristocrat Pear	15
P. communis	Common Pear	13.8
Quercus alba	White Oak	13.3
Q. lobata	Valley Oak	14
Q. macrocarpa	Bur (Scrub) Oak	13.7
Q. palustris	Pin Oak	13.3
Q. phellos	Willow Oak	14.8
Q. robur	English Oak	14.6
Q. rubra	Northern Red Oak	13.7
Q. shumardi	Shumard Oak	14.4
Robinia pseudoacacia	Black Locust	11.6
R. p. ambigua	Flowering Globe Locust	13
R. p. umbraculifera	Globe Locust	13
R. p. 'inermis'	Globe Locust	15
Salix alba 'weeping gold'	Weeping Gold Weeping Willow	16
S. babylonica	Babylon Weeping Willow	16.2
S. matsudana	Hankow Willow	14.3
Sorbus aucuparia 'columbia queen'	Columbia Queen Mountainash	13
S. a. 'black hawk'	Blackhawk Mountainash	13
S. a. 'cherokee'	Cherokee Mountainash	13

S. thuringiaca 'fastigiata'	Oakleaf Mountainash	15
Tilia americana	American Linden	13.1
T. tomentosa	Silver Linden	13.5
T. platyphyllos	Bigleaf Linden	13.3
Ulmus americana	American Elm	13.3
U. carpinifolia	Smoothleaf Elm	16
U. parvifolia	Chinese Elm	13

III – TREES NOT RANKED

Botanical Name	Common Name
Acer rubrum 'shade king'	Shade King Red Maple
A. r. 'excelsior'	Excelsior Red Maple
Amelanchier canadensis columnaris	Upright Serviceberry
A. c. oblongifolia	Globe Serviceberry
Aralia chinensis	Chinese Aralia
Fagus grandiflora	American Beech
Fraxinus bungeana	Bunge Ash
F. excelsior 'lucerne'	Lucerne European Ash
Laburnum watererii	Waterer Laburnum
Liquidamber formosana	Chinese Sweetgum
Malus floribunda	Floribunda Crab
M. 'hope'	Hopa Crab
M. hupensis	Tea Crab
M. 'katherine'	(no common name listed)
M. micromalus	Midget Crab
Photinia villosa	Oriental Photinia
Platanus orientalis	Oriental Planetree
Populus deltoides	Eastern Poplar
Prunus serrulata oh-nanden	Nanden Cherry
P. s. 'shiro-fugen'	Shiro-fugen Cherry
P. s. 'shogetsu'	Moon Hanging Low By A Palm Tree
P. s. 'tai-haku'	Great White Cherry
P. s. 'ukon'	Ukon Cherry
P. padus 'purpurea'	Purpleleaf Birdcherry
Pyrus calleryana 'princess'	Princess Pear
P. pyrifolia	Sand Pear
Quercus douglasii	Blue Oak
Sassafras albidum	Common Sassafras

Sorbus aria	White Beam Mountain Ash
Tilia cordata 'bicentennial'	Bicentennial Littleleaf Linden
Ulmus hollandica	Dutch Elm
U. parvifolia 'drake'	Chinese Elm
U. p. 'true green'	Chinese Elm
U. procera	English Elm
Zelkova sinica	Chinese Zelkova

Sources:

- Solar Friendly Tree List, City of Portland, (n.d.)
- Solar Characteristics for Tree Species, City of Corvallis, (n.d.)
- Solar Friendly Trees, City of Salem, (n.d.)
- Portland Solar Access Vegetation Research Report, June, 1984.
- Sunset Western Garden Book, 1985.
- Solar Friendly Tree Committee, formed Dec. 11, 1986.

Appendices:

Not Included

- A. Members serving on Solar Friendly Tree Committee.
- B. Participants in the Solar Friendly Tree Project Seminar, Dec. 11, 1986.
- C. Ranking classifications *chart*.
- D. Climatic vegetation zone, Zone 6 map.