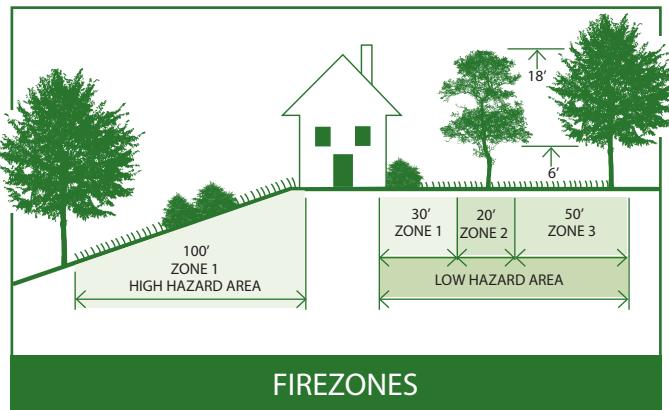




## Virginia Firescapes

### Firewise Landscaping for Woodland Homes

Reviewed by David Close, Consumer Horticulture and Master Gardener Specialist, Horticulture, Virginia Tech



Taking into consideration fire data collected for 20 years, in Virginia, 16 houses are damaged or destroyed each year by wildfire. On average, there are 1,200 wildfires each year. Fire suppression efforts by local fire departments and state and federal agencies protect more than \$126 million worth of structures each year. Firewise landscaping is one tool used to mitigate against wildfire destruction.

Source: Virginia Department of Forestry, Fire and Forest Protection Program.

### The Firescape

When the forest becomes a community, forest fires and homes are inseparable.

A home in a woodland setting is surrounded by flammable vegetation. Firewise landscaping can help you create a defensible space or buffer zone around your home. This not only helps to keep fire from approaching your woodland home, but it also provides a safe space in which firefighters can work.

Your goal in firewise landscaping should be to “break the chain” of fuel between homes and natural vegetation. Examine the yard and determine what can catch fire and what can carry fire to the house.

### The Plant List

The trees, shrubs, groundcovers and vines listed in this publication have been assigned a general flammability rating to help you create a firewise landscape around your woodland home. Some plants are more fire-resistant than others, but

**THERE ARE NO FIREPROOF PLANTS.**

**UNDER EXTREME FIRE CONDITIONS, ALL PLANTS WILL BURN!**

The location of plants in your yard should always be carefully planned. **The arrangement, spacing and density of plants that grow around the house can be more crucial than what species are planted.**

**Proper maintenance is also vital to remove excess debris and help plants retain their fire-resistive properties.**

Pruning can increase a plant’s fire resistance, whereas lack of maintenance can make plants more flammable!

[www.fire.sref.info](http://www.fire.sref.info)



## Landscaping Zones

Landscaping zones should be used when planning for fire protection.

### Zone 1: house to 5 ft. from house –

Have nothing flammable next to the house, including trees, brush, tall grass, leaves, firewood piles, bark mulch and other burnables. Carefully examine decks overhanging dense vegetation and trees overhanging the house for possible fire transfer.

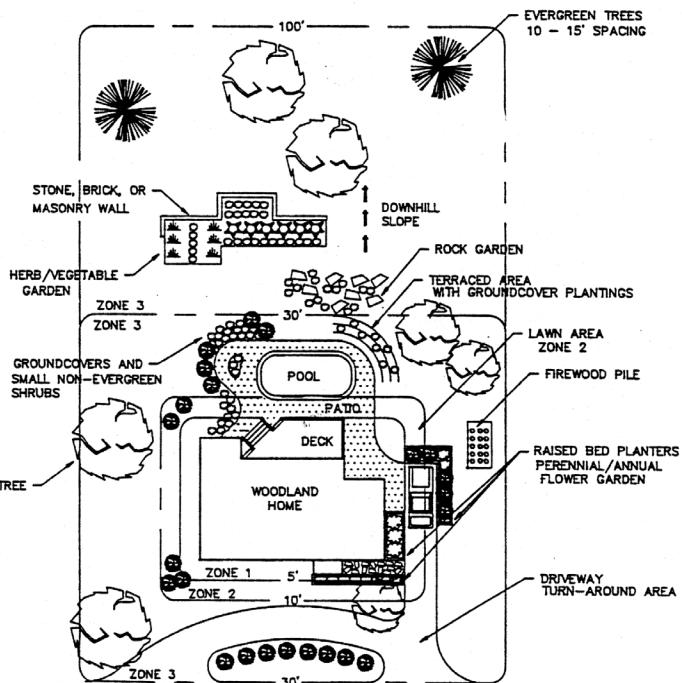
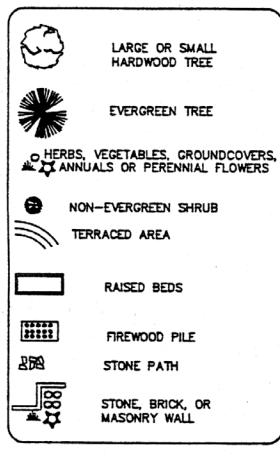
### Zone 2: 5 ft. to 10 ft. from house –

Maintain a well-kept lawn and avoid evergreens that catch fire easily and burn quickly. Use raised beds, rock gardens, stone walkways, walls and patios to create visual interest while maintaining a fuel break. Any trees used in this zone should be kept small and should be at least 10 ft. from the house. **Leave 10-15 ft. spaces between tree crowns**, and prune or limb trees to a height of 10-15 ft. up from the ground.

### Zone 3: 30 ft. to 100 ft. from house –

Remove yard debris and thin vegetation out to at least 30 ft. from the house. Clear and thin up to 100 ft. on the downhill side. Shrubs and groundcovers should be well maintained, kept free of dead material, and kept small. Control brush and weeds annually. Steep slopes can be terraced to slow wildfires down.

## Landscaping Zones



## Choose Special Trees and Shrubs

Trees and shrubs with the following characteristics are more desirable to have in a firewise landscape:

- High leaf moisture and low leaf oil or resin content.
- Minimal litter and accumulated debris potential.
- Limited foliage and few dead branches.
- Low overall height.
- Open, loose branching habit.
- Easy maintenance and low pruning requirements.
- Drought resistant.

## Virginia Firewise Landscaping Task Force

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## LISTS OF "MORE OR LESS" FOREST FIRE-PRONE TREES, SHRUBS AND GROUND COVERS

Flammability Rating: H = High  
 M = Medium  
 L = Low

### DECIDUOUS TREES

Scientific Name	Common Name	Native to VA	Use	Flammability Rating	Comments
<i>Acer negundo</i>	Boxelder	N	S	L	Tolerates poor soils, pH adaptable. Short lived.
<i>Acer palmatum</i>	Japanese maple	N	Sp, S	L	Requires a sheltered location. Not heat/drought tolerant.
<i>Acer pensylvanicum</i>	Striped maple	N	Sp, S	L	Prefers shade.
<i>Acer platanoides</i>	Norway maple	S	M	L	Tolerates a wide range of soil conditions.
<i>Acer rubrum</i>	Red/Swamp maple	N	S, Sp	L	Tolerates wet soil conditions.
<i>Acer saccharinum</i>	Silver/River/Soft Maple	N	S	L	Brittle, weak wood is easily broken in wind and ice storms.
<i>Acer saccharum</i>	Sugar/Rock/Hard Maple	N	S, Sp	L	Susceptible to acid rain damage and road de-icing salts. Not heat tolerant.
<i>Acer spicatum</i>	Mountain maple	N	S, Sc	L	Best in wooded conditions.
<i>Aesculus hippocastanum</i>	Horsechestnut	S, Sp	L	L	Susceptible to many diseases, pH adaptable. Not heat tolerant.
<i>Aesculus pavia</i>	Red buckeye	N	Sc	L	Small, shrubby.
<i>Albizia julibrissin</i>	Mimosa, Silktree	N	Sp	M	Very adaptable to high pH, soil salinity and drought. Short lived.
<i>Amelanchier arborea</i>	Downy serviceberry, Shadblow	N	Sp, Sc	L	Tolerant of drought, but not air pollution.
<i>Aralia spinosa</i>	Devil's walkingstick	N	Sp	L	Tolerates poor soils and urban conditions. Dangerous spines.
<i>Asimina triloba</i>	Pawpaw	N	Sp, S	L	Tolerant of wet soils, edible fruits.
<i>Betula alleghaniensis</i>	Yellow birch	N	S, Sp	L	Not tolerant of heat/drought.
<i>Betula lenta</i>	Black birch	N	S, Sp	L	Similar to above species.
<i>Betula nigra</i>	River birch	N	S, Sp	L	Tolerates wet soils, not tolerant of pH above 6.5.
<i>Betula papyrifera</i>	Paper/White/Cane birch	N	Sp, S	L	Insect problems, not heat tolerant. Should not be used in difficult, polluted sites.
<i>Betula pendula</i>	European white birch	N	Sp, S	L	Prone to bronze birch borer damage. Not heat tolerant.
<i>Broussonetia papyrifera</i>	Paper mulberry	S	H	L	Tolerates most soil conditions, also heat and drought. Weedy.
<i>Carpinus caroliniana</i>	Hornbeam	S	L	L	Tolerates wet soils and periodic flooding.
<i>Carya cordiformis</i>	Bitternut hickory	N	S	L	Fast growing hickory. Grown from seed only, as with all hickories.
<i>Carya glabra</i>	Pignut hickory	N	S, Sp	L	Tolerates varied soils.
<i>Carya illinoensis</i>	Pecan	N	S	L	Valuable for fruits.
<i>Carya ovata</i>	Shagbark hickory	N	S	L	Interesting, peeling bark.
<i>Carya tomentosa</i>	Mockernut hickory	N	S	L	Tolerates varied soils.
<i>Castanea dentata</i>	American chestnut	N	S	L	Few found due to blight.
<i>Castanea mollissima</i>	Chinese chestnut	S, Sp	M	L	Tolerates not, dry climates.
<i>Catalpa bignonioides</i>	Southern catalpa	N	S	L	Tolerates many soil types, also hot, dry sites.
<i>Catalpa speciosa</i>	Northern catalpa	N	S	L	Tolerates many soil types, also hot, dry sites.
<i>Celtis laevigata</i>	Sugarberry	N	S	L	Tolerates many soil types and conditions.
<i>Celtis occidentalis</i>	Common hackberry	N	S, Sp	L	Tolerates wind and poor soils, pH adaptable.
<i>Cercis canadensis</i>	Eastern redbud	N	Sp	L	Adapts to urban conditions.
<i>Chionanthus virginicus</i>	Fringetree	N	Sp	L	Tolerates partial shade and air pollution.
<i>Cladrastis kentukea</i>	Yellowwood	N	Sp, S	L	Prune in summer. Not heat tolerant.
<i>Cornus florida</i>	Flowering dogwood	N	Sp, S	L	Not suitable for hot, dry, exposed areas or in poorly drained soils.
<i>Cornus kousa</i>	Kousa/Chinese dogwood	N	Sp, S	L	Will not tolerate wet soils. More heat tolerant than above species.
<i>Crataegus crus-galli</i>	Cockspar hawthorn	N	Sp	L	Stems are covered with large thorns. Susceptible to rust diseases.
<i>Crataegus phaeonopyrum</i>	Washington hawthorn	N	Sp	L	Stems are covered with large thorns. Susceptible to rust diseases.
<i>Diospyros virginiana</i>	Persimmon	N	S	L	Tolerates poor, dry soils, pH adaptable.
<i>Elaeagnus angustifolia</i>	Russian-olive	N	Sc, S	L	Salt tolerant and withstands drought. Not heat tolerant, weedy.
<i>Fagus grandifolia</i>	American beech	N	Sp, S	M	Root system is easily damaged by construction. Needs good soils.
<i>Fagus sylvatica</i>	European beech	N	Sp, S	M	Does not tolerate heat well.
<i>Fraxinus americana</i>	White ash	N	S	L	Good resistance to heat and drought.
<i>Fraxinus nigra</i>	Black ash	N	S	L	Tolerates wet soils and periodic flooding.
<i>Fraxinus pennsylvanica</i>	Green ash	N	S	L	Toxins are unsightly and malodorous, use male cultivars.
<i>Ginkgo biloba</i>	Ginkgo, Maidenhair tree	S, Sp	L		Urban tolerant. Fruits are unsightly and malodorous, use male cultivars.

## DECIDUOUS TREES

Scientific Name	Common Name	Native to VA	Use	Flammability Rating	Comments
<i>Gleditsia triacanthos var.inermis</i>	Thornless honeylocust	N	S	L	Tolerates drought, soil salts and high pH. Use thornless forms, as thorns are dangerous.
<i>Gymnocladus dioicus</i>	Kentucky coffee tree	N	S	L	Tolerates drought and urban conditions.
<i>Halesia carolina</i>	Carolina silverbell	N	Sp	L	Prefers moist soil. Understory tree.
<i>Juglans cinerea</i>	Butternut	N	S	L	Slow growing. Tolerates varied conditions.
<i>Juglans nigra</i>	Black walnut	N	S	L	Prime timber tree. Phytoxic to many other plants.
<i>Koelreuteria paniculata</i>	Goldraintree	N	Sp, S	L	Tolerates heat, drought, air pollution and poor fertility.
<i>Liquidambar styraciflua</i>	Sweetgum	N	Sp, S	L	Suitable tree for wet soils.
<i>Liriodendron tulipifera</i>	Tuliptree, Tulip poplar	N	Sp, S	L	Does not tolerate poor growing conditions.
<i>Maclura pomifera</i>	Osage orange	N	S, Sc	L	Tolerates drought, wind, extreme heat and wet soils.
<i>Magnolia acuminata</i>	Cucumber magnolia	N	S, Sp	L	Does not tolerate extremely dry or wet soils.
<i>Magnolia stellata</i>	Star magnolia	N	Sp	L	Heat tolerant.
<i>Magnolia tripetala</i>	Umbrella magnolia	N	Sp	L	Coarse texture.
<i>Magnolia virginiana</i>	Sweetbay magnolia	N	Sp, S	L	Tolerates wet soils, but not drought.
<i>Magnolia x soulangiana</i>	Saucer magnolia	N	Sp	L	Resistant to air pollution. Prone to spring frost damage.
<i>Malus sp.</i>	Flowering crabapple	N	Sp	L	Species is prone to insect and disease problems.
<i>Melia azedarach</i>	Chinaberry	N	S	L	Rapid grower with very weak wood. Poison fruit.
<i>Metasequoia glyptostroboides</i>	Dawn redwood	N	Sp, S	H	Species has existed for at least 50 million years. Prefers moist , well-drained soils.
<i>Morus alba</i>	White mulberry	N	S	L	Very adaptable tree. Prone to insect and disease problems.
<i>Morus rubra</i>	Red mulberry	N	S	L	Edible fruits.
<i>Nyssa sylvatica</i>	Black gum, Black tupelo, Sour gum, Swamp tupelo	N	S, Sp	L	Not tolerant of air pollution or alkaline soils. Tolerates wet soils.
<i>Ostrya virginiana</i>	Hophornbeam	N	S	L	Tolerates dry soils.
<i>Oxydendrum arboreum</i>	Sourwood, Sorrel tree, Lily-of-the-valley tree	N	S	L	Not resistant to drought or air pollution.
<i>Paulownia tomentosa</i>	Empress tree, Paulownia, American sycamore	N	Sp, S	L	Withstands air pollutants and does well in coastal areas and mountain valleys.
<i>Platanus occidentalis</i>	London planetree	N	S	M	Tolerates urban conditions with wet or dry soils, prone to disease problems.
<i>Platanus x acerifolia</i>	White poplar	N	S	M	Very tolerant to urban conditions.
<i>Populus alba</i>	Cottonwood	N	S	L	Tolerant of most soil conditions. Brittle wood, not suitable for residential use.
<i>Populus deltoides</i>	Big-toothed aspen	N	S	L	Tolerant of most soil conditions. Short lived.
<i>Populus grandidentata</i>	Purpleleaf/cherry plum	N	Sp, S	L	Tolerates dry soils. Valuable for pulp wood.
<i>Prunus cerasifera</i>	Common/Flowering peach	N	Sp, S	L	Avoid heavy soils and air pollution. Prone to many insect problems.
<i>Prunus persica</i>	Wild black cherry	N	S	L	Subject to many insect and disease problems. Short lived.
<i>Prunus serotina</i>	Japanese flowering cherry	N	Sp, S	L	Tolerates most soil types. Can become invasive. Poisonous to livestock.
<i>Prunus serrulata</i>	Weeping/Higan/Rosebud cherry	N	Sp, S	L	Stressed trees are more susceptible to insect and disease problems. Short lived.
<i>Prunus subhirtella</i>	Yoshino cherry	N	Sp, S	L	Not drought tolerant.
<i>Prunus x yedoensis</i>	Water ash	N	S	L	Tolerates a range of soil conditions. Prone to borer attack.
<i>Ptelea trifoliata</i>	Callery pear	N	S, Sp	L	Tolerates heavy shade.
<i>Pyrus calleryana</i>	Common pear	N	S	L	Drought-resistant. Prune to create stronger crotch angles.
<i>Pyrus communis</i>	White oak	N	S	L	Prone to fireblight disease, use resistant varieties.
<i>Quercus alba</i>	Swamp white oak	N	S	L	Very susceptible to construction damage. Tolerates various soils.
<i>Quercus bicolor</i>	Scarlet oak	N	S	L	Tolerates wet acidic soils.
<i>Quercus coccinea</i>	Southern red oak	N	S	L	Less tolerant than other oaks of adverse conditions.
<i>Quercus falcata</i>	Blackjack oak	N	S	L	Prefers drier soils.
<i>Quercus marilandica</i>	Water oak	N	S	L	Tolerates sandy soils.
<i>Quercus nigra</i>	Pin oak, Swamp oak	N	S	L	Will withstand very wet conditions. Maintain pH below 6.0.
<i>Quercus palustris</i>	Willow oak	N	S	L	Transplants readily. Tolerates wet soils.
<i>Quercus phellos</i>	Chestnut oak	N	S	L	Tolerates dry, poor soils.
<i>Quercus rubra</i>	Red/Northern red oak	N	S	L	Moderately drought tolerant. Maintain pH below 6.0.
<i>Quercus stellata</i>	Post oak	N	S	L	Tolerates dry, poor soil conditions.

## DECIDUOUS TREES

Scientific Name	Common Name	Native to VA	Use	Flammability Rating	Comments
<i>Quercus velutina</i>	Black oak	N	S	L	Tolerates varied conditions, including poor soils.
<i>Robinia pseudoacacia</i>	Black locust	N	S	L	Tolerates dry, saline soils. Suckering problem. Spines on young growth.
<i>Salix babylonica</i>	Weeping willow		S, Sp	L	Grows in wet soils. Its vigorous, shallow root system can be a problem.
<i>Salix matsudana</i> 'Tortuosa'	Corkscrew willow		Sp, S	L	Grows in wet soils. Its vigorous, shallow root system can be a problem.
<i>Salix nigra</i>	Black willow	N	S	L	Grows in wet soils.
<i>Sassafras</i>	Sassafras		S, Sp	L	May become invasive. Difficult to transplant.
<i>Mountainash</i>	Mountainash	N	S, Sp	L	Mountain region plant.
<i>Bald cypress</i>	Bald cypress	N	S, Sp	H	Tolerates most soil types. Requires soil with low pH.
<i>American linden, Basswood</i>	American linden, Basswood	N	S	L	Will not tolerate drought.
<i>Tilia americana</i>	Littleleaf linden		S, Sp	L	Very air pollution tolerant, pH adaptable. Susceptible to Japanese beetle damage.
<i>Tilia cordata</i>	Winged elm	N	S	L	May be susceptible to powdery mildew.
<i>Ulmus alata</i>	American elm	N	S	L	Susceptible to many insects and diseases, especially Dutch elm disease - use new resistant varieties.
<i>Ulmus americana</i>					
<i>Ulmus parvifolia</i>	Lacebark/Chinese elm		S, Sp	L	Urban tolerant. Resistant to most insect and disease problems.
<i>Ulmus pumila</i>	Siberian elm		S	L	Fast growing, weedy, has brittle wood. Prone to many insect problems.
<i>Ulmus rubra</i>	Slippery elm		S	L	Susceptible to Dutch elm disease. Weedy.
<i>Viburnum prunifolium</i>	Blackhaw viburnum		Sc, Sp	L	Adaptable to many soil types.
<i>Zelkova serrata</i>	Japanese zelkova		S	L	Tolerant of drought, wind and air pollution, pH adaptable.

**LISTS OF "MORE OR LESS" FOREST FIRE-PRONE TREES, SHRUBS AND GROUND COVERS**

Flammability Rating: H = High  
M = Medium  
L = Low

**DECIDUOUS SHRUBS**

Scientific Name	Common Name	Native to VA	Use	Flammability Rating	Comments
<i>Aesculus parviflora</i>	Bottlebrush buckeye	N	Sc, Sp	L	Well-suited for use under shade trees.
<i>Alnus rugosa</i> (or serrulata)	Spotted alder	N	Sc	L	Tolerates wet soils.
<i>Amorpha fruticosa</i>	Indigobush amorpha, False indigo	N	Sc	L	Tolerates poor soils.
<i>Aronia arbutifolia</i>	Red chokeberry	N	Sc	L	Well adapted to many soil types and to warm or cold climates.
<i>Aronia melanocarpa</i>	Black chokeberry	N	Sc	L	Well adapted to many soil types, prefers cold climates.
<i>Baccharis halimifolia</i>	Groundsel-bush, Salt bush	N	Sc	H	Tolerates poor soils and salt.
<i>Berberis thunbergii</i>	Japanese barberry	N	H, F	L	Handle spiny stems with care.
<i>Buddleia davidii</i>	Butterfly bush	N	Sp, Sc	L	Attracts butterflies.
<i>Callicarpa americana</i>	Beautyberry	N	Sp, Sc	L	Prune out rank growth. Showy fruit. Best in warm climates, use introduced species in cold climates.
<i>Calyanthus floridus</i>	Sweetshrub; Carolina allspice	N	Sp, Sc	L	Aromatic flowers and stems.
<i>Castanea pumila</i>	Chinkapin, Chinquapin	N	Sc	L	Nuts for wildlife.
<i>Ceanothus americanus</i>	New Jersey tea	N	Sp, Sc	L	Tolerates dry soil.
<i>Cephaelanthus occidentalis</i>	Buttonbush	N	Sc	L	Well suited for use in wet soils.
<i>Chaenomeles speciosa</i>	Japanese flowering quince	N	Sp, H, S	L	Well adapted to many conditions. Has spines and is susceptible to leaf diseases.
<i>Clethra alnifolia</i>	Summersweet clethra	N	Sp, Sc	L	Well suited for use in wet soils.
<i>Comptonia peregrina</i>	Sweetfern	N	Sp	L	Aromatic leaves and stems. Adapted to dry, sandy soil.
<i>Cornus sericea</i>	Redosier dogwood	N	Sc, Sp	M	Provides erosion control on slopes. Prefers moist soils.
<i>Corylus americana</i>	American hazelnut	N	Sc	L	Well adapted to many conditions.
<i>Corylus avellana</i>	European filbert	N	Sc	L	Prized for its nut production.
<i>Cotinus coggygria</i>	Smokebush	N	Sp, Sc	L	Well adapted to many conditions.
<i>Cotoneaster horizontalis</i>	Rockspray cotoneaster	F, GC	L		Tolerates wind, dry, poor soils, very pH adaptable.
<i>Cytisus scoparius</i>	Scotcbroom	Sp, Sc	L		Used for stabilizing sandy soils, pH adaptable, tolerates poor soils. Can become weedy.
<i>Deutzia gracilis</i>	Slender deutzia	N	Sp, Sc	L	Well adapted to many conditions.
<i>Dierama sessilifolia</i>	Southern bush-honeysuckle	N	H, Sc	L	Tolerates exposed sites.
<i>Euonymus alatus</i>	Fall firebush, winged euonymus	N	Sp, Sc	L	Not tolerant of drought or waterlogged conditions.
<i>Euonymus americanus</i>	American euonymus, Hearts-a-bustin,	N	Sp, Sc	L	Very insect susceptible. Very adaptable to wet or dry soil conditions.
<i>Forsythia x intermedia</i>	Strawberry bush	N	Sp, H, Sc	L	Tolerant of urban conditions, pH adaptable.
<i>Hamamelis vernalis</i>	Border forsythia	N	Sp, Sc	L	Tolerates poorly drained soils.
<i>Hamamelis virginiana</i>	Vernal witchhazel	N	Sp, Sc	L	Very adaptable to climatic conditions.
<i>Hibiscus syriacus</i>	Common witchhazel	N	Sp, Sc	L	Well adapted to many conditions. Susceptible to insect problems.
<i>Hydrangea arborescens</i>	Rose-of-Sharon	N	Sp, Sc	L	Suckers freely from roots, will cover large areas if not maintained.
<i>Hydrangea macrophylla</i>	Smooth hydrangea	N	Sp, Sc	L	Plant parts are poisonous. Tolerates shade.
<i>Hydrangea paniculata</i>	Bigleaf hydrangea	N	Sp, Sc	L	Plant parts are poisonous. Very adaptable.
<i>Hydrangea quercifolia</i>	P.G. hydrangea, panicle hydrangea	N	Sp, Sc	L	Plant parts are poisonous. Tolerates shade. Rugged plant.
<i>Ilex verticillata</i>	Oakleaf hydrangea	N	Sp, F, GC	L	Excellent plant for dry, heavy soils.
<i>Itea virginica</i>	St. Johnswort	N	Sp, Sc	L	Tolerates wet soils.
<i>Jasminum nudiflorum</i>	Winterberry holly	N	Sp, Sc	L	Drought tolerant, used in erosion control.
<i>Lagerstroemia indica</i>	Virginia sweetspire	N	Sp, H	L	Tolerant of Drought and urban conditions. Not cold tolerant.
<i>Leucothoe racemosa</i>	Winter jasmine	N	Sp, Sc	L	Tolerates wide range of conditions.
<i>Hydrangea macrophylla</i>	Crape myrtle	N	Sc	H	Subject to winter dieback in cold exposed areas. Weedy and invasive.
<i>Hydrangea paniculata</i>	Sweetbells leucothoe	N	H	M	Golden Yellow leaves will become greenish yellow if grown in shade.
<i>Hypericum prolificum</i>	Cinnamon privet, Hedge privet	N	H	M	Tolerates Shade. Has scented foliage.
<i>Ilex verticillata</i>	Golden Vicary privet	N	Sc	L	Adapts to many soils and ph levels. Weedy.
<i>Itea virginica</i>	Spicebush	N	Sp, Sc	L	Has escaped cultivation and become a weed in some areas
<i>Jasminum nudiflorum</i>	Winter Honeysuckle	N	Sc, Sp	L	
<i>Ligustrum vulgare</i>	Tatarian Honeysuckle	N			
<i>Lindera benzoin</i>					
<i>Lonicera fragrantissima</i>					
<i>Lonicera tatarica</i>					

## DECIDUOUS SHRUBS

Scientific Name	Common Name	Nathee to VA	Use	Flammability Rating	Comments
<i>Philadelphus coronarius</i>	Sweet mockorange	N	Sp, Sc	L	Adapts to almost any soil condition.
<i>Physocarpus opulifolius</i>	Nine-bark		Sc, Sp	L	Drought resistant, pH adaptable.
<i>Poncirus trifoliata</i>	Hardy-orange		Sp, Sc	L	Handle thorny stems with care. Soil adaptable.
<i>Potentilla fruticosa</i>	Shrubby cinquefoil	N	Sp, F	L	Adapts poorly to hot, humid locations.
<i>Prunus glandulosa</i>	Flowering almond	N	Sp, H, F	L	Very adaptable, showy. Weedy.
<i>Rhododendron calendulaceum</i>	Flame azalea	N	Sp, Sc	M	Requires moist acidic soil.
<i>Rhododendron periclymenoides</i>	Pinxterbloom azalea	N	Sp, Sc	M	Tolerates more shade than most deciduous azaleas.
<i>Rhododendron prinophyllum</i>	Roseshell azalea	N	Sp, Sc	M	Will tolerate higher pH levels than most deciduous azaleas.
<i>Rhus copallina</i>	Shining sumac	N	Sc, Sp	L	Useful for dry, rocky sites.
<i>Rhus glabra</i>	Smooth sumac	N	Sc	L	Tolerates drought and poor soil conditions.
<i>Rhus typhina</i>	Staghorn sumac	N	Sc, Sp	L	Suitable for colder climates, otherwise similar to above species.
<i>Rosa carolina</i>	Carolina rose	N	Sp, H	L	Tolerates wet soil conditions.
<i>Rosa hybrida</i>	Garden roses (floribundas, grandifloras & hybrid teas)	N	Sp	L	Very insect and disease susceptible. Thorny stems.
<i>Rosa rugosa</i>	Rugose rose	N	Sp, H, Sc	L	Tolerates wind, poor soils and seaside conditions.
<i>Rosa virginiana</i>	Virginia rose	N	Sp, H, Sc	L	Tolerates wind, poor soils and seaside conditions.
<i>Salix discolor</i>	Pussywillow	N	Sp, Sc	L	Tolerates poorly drained soils. Short lived.
<i>Sambucus canadensis</i>	Elderberry	N	Sc, Sp	L	Tolerates both wet and dry soils.
<i>Spirea nipponica</i>	Nippon spirea		Sp, F	L	Adapts well to urban conditions.
<i>Spirea prunifolia</i>	Bridalwreath spirea		Sp, Sc	L	Heavy pruning will destroy this shrub's natural arching habit.
<i>Spirea x bumalda</i>	Bumald spirea		Sp, F	L	Needs well drained soil.
<i>Spirea x vanhouttei</i>	Vanhoutte spirea		Sp, Sc	L	Very adaptable.
<i>Symphoricarpos orbiculatus</i>	Indian coralberry	N	Sp, Sc	L	Shade tolerant.
<i>Syringa persica</i>	Persian lilac	N	Sp, Sc	L	Heat tolerant.
<i>Syringa vulgaris</i>	Common lilac	N	Sp, Sc	L	Not heat tolerant. Prone to powdery mildew in humid areas. Requires soils with higher pH.
<i>Vaccinium angustifolia</i>	Lowbush blueberry	N	Sc, H	L	Prized for its berries.
<i>Vaccinium corymbosum</i>	Highbush blueberry	N	Sc, H	L	Tolerates acid, sandy soil conditions. Wildlife food.
<i>Vaccinium stamineum</i>	Deerberry	N	Sp, Sc	L	Tolerates dry, poor soils.
<i>Viburnum acerifolium</i>	Mapleleaf viburnum	N	Sc, Sp	L	Tolerates shade and poor soils.
<i>Viburnum carlesii</i>	Koreanspice viburnum	N	Sp, H, Sc	L	Early, fragrant flowers.
<i>Viburnum dentatum</i>	Arrowwood viburnum	N	Sc	L	Tolerates high pH, heavy soils and cold temperatures.
<i>Viburnum opulus</i>	European cranberry viburnum	N	Sp, Sc	L	Needs good drainage and full sun.
<i>Viburnum plicatum</i> var. <i>tomentosum</i>	Doublefile viburnum	N	Sp, Sc	L	Tolerates wet soils, pH adaptable.
<i>Viburnum triplum</i>	Mapleleaf viburnum	N	Sc, Sp	L	Not heat or drought tolerant.
<i>Viburnum x burkwoodii</i>	Burkwood viburnum	N	Sc, Sp	L	Heat and cold tolerant, adaptable to urban conditions.
<i>Vitex agnus-castus</i>	Chastetree; Vitex	N	Sp, Sc	L	Adaptable to poor soils and dry sites.
<i>Weigela florida</i>	Weigela	F	Sp, H, Sc, L		Very tolerant to air pollution.

**LISTS OF “MORE OR LESS” FOREST FIRE-PRONE TREES, SHRUBS AND GROUND COVERS**

Flammability Rating: H = High  
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GC = Ground Cover

**EVERGREEN TREES**

Scientific Name	Common Name	Native to VA	Use	Flammability Rating	Comments
<i>Abies concolor</i>	White fir	N	Sp	H	Tolerates urban conditions in cooler regions.
<i>Abies fraseri</i>	Fraser fir		Sp	H	Popular as Christmas tree, use in cool regions.
<i>Cedrus atlantica</i>	Atlas cedar		Sp	H	Difficult to transplant, drought tolerant.
<i>Cedrus deodara</i>	Deodara cedar		Sp	H	Drought tolerant. Limited cold tolerance.
<i>Cedrus libani</i>	Cedar of Lebanon		Sp	H	Very cold hardy. Requires good drainage.
<i>Chamaecyparis obtusa</i>	Hinoki falsecypress		Sp, Sc	H	Requires good drainage.
<i>Chamaecyparis pisifera</i>	Japanese falsecypress	N	Sp, Sc	H	Requires good drainage.
x <i>Cupressocyparis leylandii</i>	Atlantic whitecedar		Sc, Sp	H	Adapts to wet, boggy sites.
<i>Cupressus arizonica</i>	Leyland cypress		Sc, Sp	H	Adapts to pH extremes, salt spray, poor fertility, drought.
<i>Ilex aquifolium</i>	Arizona cypress		Sc, Sp	H	Tolerates hot, dry conditions.
Illex x attenuata ‘Fosteri’	English holly		Sp	H	Requires good drainage and compatible male plant for berry production. (dioecious). Not cold tolerant.
Illex x ‘Nellie R. Stevens’	Foster's holly		Sp, Sc	H	Urban tolerant. Dioecious.
<i>Ilex opaca</i>	Nellie R. Stevens holly	N	Sc, Sp	H	Somewhat drought tolerant. Dioecious.
	American holly		Sp, Sc	H	Prone to native holly leafminer damage. Tolerates wet conditions.
<i>Juniperus scopulorum</i>	Western redcedar	N	Sc, Sp	H	Adapts to pH extremes, poor fertility, drought. Requires good drainage.
<i>Juniperus virginiana</i>	Eastern redcedar	N	Sc, Sp	H	Alternate host for cedar apple rust disease. Tolerates urban conditions. Difficult to transplant.
<i>Magnolia grandiflora</i>	Southern magnolia	N	Sp	H	Broadleaved - considerable litter.
<i>Picea abies</i>	Norway spruce		Sp	H	Tolerates cold climates and some warm climates.
<i>Picea glauca</i>	White spruce		Sp	H	Withstands drought, wind and temperature extremes.
<i>Picea pungens</i>	Colorado spruce		Sp	H	Very drought tolerant. Not heat tolerant.
<i>Pinus echinata</i>	Shortleaf pine	N	Sc, Sp	H	Difficult to transplant due to deep taproot.
<i>Pinus nigra</i>	Austrian pine		Sp, Sc	H	Resists drought and seaside conditions. Disease problems develop with age.
<i>Pinus palustris</i>	Longleaf pine	N	Sp	H	Native plant.
<i>Pinus strobus</i>	Table mountain pine	N	Sp	H	Native - not commercially available. Rugged plant.
<i>Pinus taeda</i>	Pitch pine	N	Sp, Sc	H	Requires good drainage.
<i>Pinus thunbergiana</i>	White pine	N	Sp, Sc	H	Sensitive to heat, air pollution and salts. Requires good drainage.
<i>Pinus virginiana</i>	Loblolly pine	N	Sp, Sc	H	Tolerates salt spray, sandy soils.
<i>Quercus hemisphaerica</i>	Japanese black pine	N	Sc, Sp	H	Will grow in either sandy or heavy, clay soils.
<i>Quercus virginiana</i>	Virginia pine, Jersey pine	N	Sc, Sp	H	Adapts to urban conditions. Prefers warm climates. Leaf/acorn litter.
<i>Thuya occidentalis</i>	Laurel oak	N	Sc, F, H	H	Adapts to urban conditions. Prefers warm climates. Leaf/acorn litter.
<i>Thuya orientalis</i> ( <i>Platycladus</i> )	Live oak	N	Sc, F, H	H	Requires good drainage. Not heat tolerant.
<i>Tsuga canadensis</i>	Northern whitecedar; Arborvitae	N	Sp, Sc	H	Adapts to many growing conditions. Subject to several insect pests.
<i>Tsuga caroliniana</i>	Oriental arborvitae	N	Sp, Sc	H	Will not tolerate drought and heat. Requires good drainage.
	Canadian hemlock, Eastern hemlock	N	Sp, Sc	H	Will not tolerate drought, requires good drainage.
	Carolina hemlock	N	Sp, Sc	H	

**LISTS OF “MORE OR LESS” FOREST FIRE-PRONE**

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## TREES, SHRUBS AND GROUND COVERS

### EVERGREEN SHRUBS

Scientific Name	Common Name	Native to VA	Use	Flammability Rating	Comments
<i>Abelia x grandiflora</i>	Glossy abelia		H, F	H	Adapts to many growing conditions.
<i>Aucuba japonica</i>	Japanese aucuba		Sp, F, H	H	Requires shade. Prefers warmer climates.
<i>Berberis julianae</i>	Wintergreen barberry		H	H	Avoid contact with spiny stems and leaves.
<i>Buxus microphylla</i>	Japanese boxwood		F, H, Sp	H	Partially tolerant of drought and heat.
<i>Buxus sempervirens</i>	American boxwood		F, H, Sp	H	Leaves and stems toxic to livestock. Applications of lime are required for plant vigor.
<i>Buxus sempervirens suffruticosa</i>	Edging box, English boxwood		H, Sp, F	H	Needs well drained soil.
<i>Camellia japonica</i>	Japanese camellia		Sp, Sc	H	Subject to winter injury, use in warmer climates only.
<i>Sasanqua camellia</i>	Sasanqua camellia		Sp, Sc	H	Subject to winter injury, use in warmer climates only.
<i>Cotoneaster dammeri</i>	Bearberry cotoneaster		F	H	Tolerates wide range of conditions, use for erosion control.
<i>Cotoneaster salicifolius</i>	Willowleaf cotoneaster		Sc, Sp, H	H	Tolerates poor soils, pH adaptable. Generally pest free.
<i>Daphne odora</i>	Winter daphne		F, Sp	H	Leaves and fruit are very poisonous. Produces highly scented flowers early.
<i>Elaeagnus pungens</i>	Thorny elaeagnus		Sc	H	Tolerates salt spray, drought, air pollution & wind.
<i>Euonymus japonicus</i>	Japanese euonymus		H, Sc	H	Subject to numerous pest problems.
<i>Euonymus kiautschovicus</i>	Spreading euonymus		H, Sc	H	Fruit and leaves may be toxic.
<i>Gardenia jasminoides</i>	Gardenia, Cape jasmine		Sp, Sc, F	H	Requires well drained, acidic soil. Use in warmer climates only.
<i>Ilex cornuta</i>	Chinese holly		Sc, Sp	H	Very adaptable to drought, pH, and to many soil types.
<i>Ilex crenata</i>	Japanese holly		H, F	H	Mildly drought tolerant. Needs well drained soil.
<i>Ilex glabra</i>	Inkberry holly	N	H, F	H	May be grown in acid soils on wet sites.
<i>Ilex vomitoria</i>	Yaupon holly	N	H, F, Sc	H	Tolerant of most soil conditions and salt spray. Use in warmer climates only.
<i>Ilex x meserveae</i>	Meserve holly, Blue holly		Sp	H	A male cultivar is necessary for berry production.
<i>Juniperus chinensis</i>	Chinese juniper	N	F, H, Sc	H	Tolerant of salt and alkaline soils.
<i>Kalmia latifolia</i>	Mountain-laurel	N	Sp, F	H	Leaves are poisonous. Requires shade.
<i>Leucothoe fontanesiana</i>	Drooping leucothoe	N	F, Sp	H	Not tolerant of drought or wind.
<i>Ligustrum japonicum</i>	Japanese privet, Waxleaf ligustrum		H, Sc	H	Adapts to poor fertility, drought, sun or shade and salt.
<i>Manonia aquifolium</i>	Oregon grapeholly		Sp, H, F	H	Susceptible to winter dessication.
<i>Mahonia bealei</i>	Beale's mahonia, Leatherleaf mahonia	N	Sp, H, F	H	Requires good soil drainage.
<i>Myrica cerifera</i>	Waxmyrtle; Southern bayberry	N	Sc, Sp	H	Very tolerant of soil salts and salt spray.
<i>Myrica pensylvanica</i>	Nandina	N	Sp, F, Sc	H	Very cold tolerant than the above species. Tolerates a wide range of conditions.
<i>Nandina domestica</i>	Holly osmanthus		Sc, Sp	H	Tolerates a wide range of conditions in warm climates.
<i>Osmanthus heterophyllus</i>	Fraser photinia; Red-tip		Sc, H, Sp	H	Very susceptible to leaf spot disease.
<i>Photinia x fraseri</i>	Japanese pieris		Sp, F	H	Protect from wind dessication. Requires soils with lower pH.
<i>Pieris japonica</i>	Mugho pine		F, Sc	H	Susceptible to many insect and disease problems.
<i>Pinus mugo</i>	Cherry laurel, English laurel		Sc, H	H	Fruit and leaves may be mildly poisonous.
<i>Prunus laurocerasus</i>	Pyracantha, Firethorn		Sp, H, F	H	Tolerates drought. Avoid spines.
<i>Raphiolepis indica</i>	Indian hawthorn		Sp, F, H	H	Salt and wind tolerant. Use in warm climates.
<i>Rhododendron catawbiense</i>	Catawba rhododendron	N	Sp, Sc	H	Not heat or drought tolerant. Requires acid soil.
<i>Rhododendron maximum</i>	Rosebay rhododendron	N	Sp, Sc	H	Requires acid soil. Not heat tolerant.
<i>Rhododendron obtusum</i>	Kurume azalea		Sp, F, Sc	H	Requires well drained acid soil.
<i>Rhododendron sp.</i>	Hybrid azaleas		Sp, F, Sc	H	Requires well drained acid soil.
<i>Taxus baccata</i>	English yew		F, H, Sc	H	Plant parts are very poisonous. Requires well drained soil.
<i>Taxus cuspidata</i>	Japanese yew		F, H, Sc	H	Plant parts are very poisonous. Requires well drained soil.
<i>Taxus x media</i>	Anglojap yew		F, H, Sc	H	Leaves are very poisonous. Requires well drained soil.
<i>Viburnum rhytidophyllum</i>	Leatherleaf viburnum		Sp, H, Sc	H	Not wind or heat tolerant.
<i>Yucca filamentosa</i>	Yucca, Adam's needle yucca	N	Sp, GC	H	Drought resistant and generally maintenance free.

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**GROUNDCOVERS**

Scientific Name	Common Name	Native to VA	Flammability Rating	Comments
<i>Ajuga reptans</i>	Ajuga, Bugleweed	N	L	Not drought tolerant. Prefers light shade.
<i>Arctostaphylos uva-ursi</i>	Bearberry, Kinnickinnick	N	L	Adapts to many growing conditions. Prefers well-drained soils.
<i>Euonymus fortunei</i>	Wintergreen euonymus	N	L	Many forms exist, some vines. Best planted in sun. Prone to insect problems.
<i>Gaultheria procumbens</i>	Wintergreen	N	L	Good for woodland sites.
<i>Hypericum calycinum</i>	St. Johnswort	N	L	Used in erosion control. Poisonous.
<i>Juniperus conferta</i>	Shore juniper	N	H	Tolerates sandy soils. Requires good drainage, full sun.
<i>Juniperus horizontalis</i>	Creeping juniper	N	H	Grows in many soil types. Requires good drainage, full sun.
<i>Juniperus procumbens</i>	Jap. garden juniper	N	H	Grows in many soil types. Requires good drainage, full sun.
<i>Litiope muscaria</i>	Bigblue liriope	N	H	Semi-tolerant of drought.
<i>Litiope spicata</i>	Liriope	N	L	Excellent for erosion control, drought tolerant. Grows under shallow rooted trees.
<i>Ophiopogon japonicum</i>	Monkeygrass	N	L	Good for erosion control, drought tolerant. Prefers warm climates.
<i>Opuntia spp.</i>	Prickly pear	N	L	Native to arid regions, but very climate adaptable. Has spiny stems.
<i>Pachysandra terminalis</i>	Pachysandra	N	L	Not tolerant to foot traffic or full sun conditions.
<i>Rhus aromatica</i>	Fragrant sumac	N	L	Good for erosion control, tolerates drought.
<i>Sarcococca hookeriana</i> var. <i>humilis</i>	Sweetbox	N	L	Tolerates air pollution.
<i>Sedum spp.</i>	Sedum	N	L	Drought tolerant & maintenance free.
<i>Vinca major</i>	Bigleaf periwinkle	N	L	Good for erosion control, tolerates drought.
<i>Vinca minor</i>	Periwinkle; Vinca	N	L	Good for erosion control, finer texture than <i>V. major</i> . Prefers a shaded location.

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Scientific Name	Common Name	Native to VA	Flammability Rating	Comments
<i>Aristolochia durior</i>	Dutchman's pipe	L	L	Vigorous, low maintenance.
<i>Bignonia capreolata</i>	Crossvine	N	L	Vigorous, requires pruning and support. Showy. Native species are also available.
<i>Campsis radicans</i>	Trumpet creeper, Trumpet vine	N	M	Invasive. Requires pruning and support. Showy.
<i>Celastrus scandens</i>	Bittersweet	N	M	A male plant is required for fruit set (dioecious). Invasive.
<i>Clematis virginiana</i>	Virgin's bower,	N	M	May be used as groundcover. Vigorous.
<i>Clematis x Jackmanii</i>	Jackman clematis	L	L	Fairly fragile, requires support. Non-aggressive. Showy.
<i>Gelsemium sempervirens</i>	Carolina jessamine	N	L	Evergreen. Showy. Poisonous.
<i>Hydrangea anomala petiolaris</i>	Climbing hydrangea	L	L	Slow to establish. Requires support. Showy.
<i>Lonicera japonica</i>	Japanese honeysuckle	N	H	Can be used as groundcover. Invasive. Weedy.
<i>Lonicera sempervirens</i>	Trumpet honeysuckle	N	L	Requires pruning and support. Showy.
<i>Lonicera x heckrottii</i>	Goldflame honeysuckle	N	L	Requires support. Showy.
<i>Parthenocissus quinquefolia</i>	Virginia creeper	N	L	Requires support, will cover walls. Tolerates urban conditions.
<i>Parthenocissus tricuspidata</i>	Boston ivy	N	L	Tolerates urban conditions.
<i>Passiflora incarnata</i>	Passionflower, Maypop	N	L	Requires support, can be used as groundcover. Showy.
<i>Passiflora lutea</i>	Yellow passionflower	N	L	Less showy.
<i>Phus radicans</i>	Poison ivy	N	M	Triggers skin allergies in most people. Invasive.
<i>Polygonum aubertii</i>	Silverlace vine, Fleece vine	N	L	Very vigorous and adaptable. Showy.
<i>Rosa spp.</i>	Climbing roses	N	L	High maintenance. Requires support. Showy.
<i>Smilax rotundifolia</i>	Greenbrier, Smilax, Catbrier	N	L	Weedy, invasive. Evergreen forms exist.