# Firewise Landscaping Plants for West Virginia

The following list contains landscape plants that can be grown in West Virginia, are commercially available, and are relatively resistant to fire. There is no such thing as a fireproof plant; however, these species exhibit a stronger resistance to ignition by wildfires. This list is not comprehensive, but rather, a guide to some suggested fire resistant species. If there are other landscaping plants that interest you, be sure they are Firewise by meeting the following criteria:

- A high moisture content in the leaves
- A low oil or resin content (avoid pines, junipers, and other evergreens)
- Minimal litter and debris production/accumulation
- Few dead branches, leaves, or twigs
- Resistant to drought
- Grows well in your climate and soil type
- An open, loose branching habit

To promote the use of native plants, all exotic-invasive species have been removed from this list and species native to West Virginia are indicated with an "N" in the column labeled "Native". Exotic-invasive species are quickly becoming a threat by invading and overtaking natural areas, and out-competing native plants. To address concerns of deer browse, a column has been added to indicate the tendency for each species to be damaged by deer. Very few plants are immune to deer browse and deer will eat almost any plant if their preferred food sources are unavailable. The deer damage column is therefore a guideline for use under most normal conditions. A column has been added indicating the most common use(s) for each species, as well as a column with pertinent comments about each plant. Below is a key to the abbreviations used in the deer damage and plant use columns.

Key to Abbreviations:

Deer Damage Ratings:

- R = Rarely Damaged S = Seldom Damaged O = Occasionally Damaged
- F = Frequently Damaged

Landscaping Uses:

S = Shade O = Ornamental Sc = Screen F = Foundation Cover H = HedgeG = Ground Cover



#### Scientific Name Common Name Native Deer Use Comments Requires a sheltered location. Not heat F Japanese Maple 0 Acer palmatum or drought tolerant Acer rubrum Red Maple Ν 0 S.O Tolerates wet soils Brittle, weak wood is easily broken in S Acer saccharinum Silver/River Maple Ν Ο wind and ice storms Susceptible to acid rain damage and road Sugar Maple Ν Ο S, O Acer saccharum salt. Not heat tolerant Mountain Maple S.O Acer spicatum Ν 0 Best in wooded conditions Susceptible to many diseases, not heat Horsechestnut 0 S, O Aesculus hippocastanum tolerant. pH adaptable S Amelanchier canadensis Shadbush / Serviceberry Ν O, Sc Tolerant of drought but not air pollution Tolerates wet soils, not tolerant of pH S S.O Betula nigra River birch Ν above 6.5 Not tolerant of heat, poor soils, or Betula papyrifera Paper/White Birch Ν R S, O pollution. Insect problems Carpinus caroliniana Hornbeam Ν 0 S Tolerates wet soils and periodic flooding Carya illinoiensis Pecan 0 S Valuable for nuts S Tolerates various soils Carya tomentosa Mockernut Hickory Ν 0 **Chinese Chestnut** Castanea mollissima F S,O Tolerates hot, dry climates Celtis occidentalis Common Hackberry Ν S S Tolerates poor soil, adapts to pH Eastern Redbud Ν F S.O Cercis canadensis Adapts to urban conditions Chionanthus virginicus Ν F Fringetree 0 Tolerates partial shade and air pollution Ο S.O Cladrastis kentuckea Yellowwood Prune in summer. Not heat tolerant Not good for hot, dry, exposed areas, or S S, O Cornus florida Flowering Dogwood Ν poorly drained soils Intolerant of wet soils. More heat Kousa/Chinese Dogwood S O, S Cornus kousa tolerant than other dogwoods Hawthorn Ν S S Crataegus spp. Not drought resistant S Ν 0 Diospyros virginiana Persimmon Tolerates poor soil, adapts to pH Roots easily damaged by construction, S.O Fagus grandifolia American Beech Ν S needs good soil 0 S Fraxinus americana White Ash Ν Good resistance to heat and drought Tolerates drought, high soil pH, salt, and S Ν 0 Fraxinus pennsylvanica Green Ash poor soils S Ginkgo biloba Ginko, Maidenhair Tree S, O Urban Tolerant. Use male trees Gleditsia triancanthos Tolerates drought, salt, and high pH. S S **Thornless Honeylocust** Ν var. inermis Use thornless forms Kentucky Coffeetree Ν 0 S Gymnocladus dioicus Tolerates drought & urban setting Halesia carolina Carolina Silverbell 0 Ο Prefers moist soil. Understory tree Prime timber tree. Phytotoxic to some S S Black Walnut Ν Juglans nigra other plants Liquidambar styraciflua Ν Ο S.O Tolerates wet soils Sweetgum Yellow Poplar, Tulip Does not tolerate poor growing Ν F S Liriodendron tulipifera conditions Poplar, Tulip Tree Magnolia acuminata Cucumber Magnolia Ν 0 S.O Intolerant of very wet or dry soils

#### **Deciduous Trees**

Magnolia tripetala	Umbrella Magnolia	Ν	0	0	Coarse texture
Magnolia virginiana	Sweetbay Magnolia	Ν	F	S, O	Tolerates wet soil but not drought
Malus spp.	Apples & Crabapples		F	0	Prone to insect and disease problems
Nyssa sylvatica	Black Gum, Black Tupelo, Sour Gum	Ν	R	S	Not tolerant of air pollution or high pH soil. Tolerates wet soils
Oxydendrum arboreum	Sourwood, Sorrel Tree	Ν	0	S, O	Not resistant to drought or air pollution
Platanus x acerifolia	London Planetree		S	S	Very tolerant of urban conditions
Populus grandidentata	Big-Toothed Aspen	Ν	F	S	Tolerates dry soil
Prunus serotina	Black Cherry	Ν	F	S	Common at higher elevations. pH adaptable
Prunus subhirtella	Weeping/Rosebud Cherry		0	S, O	Not drought tolerant
Pyrus communis	Common Pear		F	S, O	Prone to fireblight – use resistant types Do Not plant <i>Pyrus calleryana</i>
Quercus alba	White Oak	Ν	0	S	Very susceptible to construction damage. Tolerates various soils
Quercus bicolor	Swamp White Oak	Ν	0	S	Tolerates wet, acidic soils
Quercus coccinea	Scarlet Oak	Ν	0	S	Less tolerant than other oaks to adverse conditions
Quercus palustris	Pin Oak	Ν	0	S	Tolerates wet conditions. Maintain pH below 6.0
Quercus rubra	Northern Red Oak	Ν	0	S	Moderately drought tolerant. Maintain pH below 6.0
Salix babylonica	Weeping Willow		0	S, O	Grows in wet soil. Vigorous, shallow roots can be a problem
Salix nigra	Black Willow	Ν	0	S	Grows in wet soils
Tilia cordata	Littleleaf Linden		0	S, O	Prone to Japanese Beetle damage, pH adaptable
Ulmus americana	American Elm	Ν	F	S	Susceptible to Dutch Elm Disease. Use new resistant varieties
Viburnum prunifolium	Blackhaw Viburnum	Ν	0	Sc, O	Adaptable to many soil types
Zelkova serrata	Japanese Zelkova		F	S	Tolerant of drought & air pollution, pH adaptable

## **Deciduous Shrubs**

Scientific Name	Common Name	Native	Deer	Use	Comments
Aesculus parviflora	Bottlebrush Buckeye	Ν	R	O, Sc	Well-suited for use under shade trees
Alnus rugosa	Speckled Alder	N	0	Sc	Tolerates wet soils; shade intolerant; short-lived
Alnus serrulata	Smooth Alder	Ν	0	Sc	Tolerates wet soils; shade intolerant; short-lived
Arctostaphylos uva-ursi	Bearberry, Kinnickinick	N	R	G	Very adaptable, prefers well-drained soils
Aronia arbutifolia	Red Chokeberry	Ν	0	Sc	Well adapted to many soil types and to warm or cold climates
Aronia melanocarpa	Black Chokeberry	Ν	0	Sc	Adaptable to soil type; subject to weed invasion
Buddleia davidii	Butterfly Bush		S	O, Sc	Attracts butterflies
Callicarpa americana	Beautyberry	Ν	F	O, Sc	Best in warm climates. Showy fruit
Calycanthus floridus	Sweetshrub; Carolina Allspice	Ν	S	O, Sc	Aromatic flowers and stems

Castanea pumila	Chinkapin, Chinquapin	Ν	F	Sc	Nuts for wildlife
Ceanothus americanus	Choenothus, Buckbrush, New Jersey Tea	Ν	S	O, Sc	Prefers dry soils and full to partial sun
Cephalanthus occidentalis	Buttonbush	Ν	0	Sc	Well suited for use in wet or moist soils
Chaenomeles speciosa	Japanese Flowering Quince		Ο	O, H, Sc	Very adaptable. Has spines. Susceptible to leaf diseases
Clethra alnifolia	Summersweet Clethra	Ν	0	O, Sc	Well suited for wet soils
Comptonia peregrina	Sweetfern	Ν	0	0	Adapted to dry, sandy soils
Cornus amomum	Silky Dogwood	Ν	F	O, Sc	Provides erosion control on slopes. Prefers moist soil
Cornus racemosa	Gray Dogwood	Ν	F	O, Sc	Provides erosion control on slopes. Tolerates moist soil
Cornus stolonifera	Redosier Dogwood	Ν	F	O, Sc	Prefers moist soils; cold hardy
Corylus americana	American Hazelnut	Ν	0	Sc	Provides food for wildlife. Very adaptable
Corylus avellana	European Filbert		0	Sc	Prized for its nut production
Cotinus coggygria	Smokebush		0	O, Sc	Well adapted to many conditions
Cotoneaster spp.	Cotoneaster		0	F, G	Tolerates wind, dry, poor soil; very pH adaptable
Daphne spp.	Daphne		S	0	Requires full to partial sun
Deutzia gracilis	Slender Deutzia		0	O, Sc	Well adapted to many conditions
Diervilla lonicera	Dwarf Bush-Honeysuckle	Ν	S	G, H, Sc	Tolerates exposed sites; cold hardy; less vigorous
Diervilla sessilifolia	Southern Bush-Honeysuckle		S	H, Sc	Tolerates exposed sites
Euonymus americanus	Wahoo, Strawberry Bush	Ν	0	O, Sc	Insect susceptible; adaptable to wet or dry soil conditions
Forsythia spp.	Forsythia		S	O, H, Sc	Tolerant of urban conditions, pH adaptable
Hamamelis vernalis	Vernal Witchhazel		0	O, Sc	Tolerates poorly drained soils
Hamamelis virginiana	Common Witchhazel	Ν	0	O, Sc	Very adaptable to climatic conditions
Hibiscus syriacus	Rose-of-Sharon		R	O, Sc	Adaptable to many conditions. Susceptible to insect problems
Hydrangea arborescens	Smooth Hydrangea	Ν	0	O, Sc	Suckers freely from roots; will cover large areas if not pruned
Hydrangea macrophylla	Bigleaf Hydrangea		F	O, Sc	Plants are poisonous. Tolerates shade
Hydrangea paniculata	Panicle Hydrangea		0	O, Sc	Plants are poisonous. Very adaptable
Hydrangea quercifolia	Oakleaf Hydrangea	Ν	F	O, Sc	Plant parts are poisonous. Tolerates shade. Rugged plant
Hypericum prolificum	St. Johnswort		S	G, F	Excellent plant for dry, heavy soils
Ilex verticillata	Winterberry Holly	Ν	F	O, Sc	Tolerates wet soils
Itea virginica	Virginia Sweetspire	Ν	0	O, Sc	Tolerates wet soils
Jasminum nudiflorum	Winter Jasmine		S	O, H	Drought tolerant, used in erosion control
Lagerstroemia indica	Crapemyrtle		0	O, Sc	Tolerant of drought and urban conditions. Not cold tolerant
Lindera benzoin	Spicebush	Ν	S	Sc	Tolerates shade
Mahonia spp.	Grape Holly		S	0	Tolerates partial shade
Philadelphus coronarius	Sweet Mockorange		S	O, Sc	Adapts to almost any soil condition

Physocarpus opulifolius	Nine-bark	N	R	Sc, O	Drought resistant, pH adaptable
Poncirus trifoliata	Hardy-Orange			O, Sc	Has thorny stems. Soil adaptable
Potentilla fruticosa	Shrubby cinquefoil		F	0, F	Adapts poorly to hot, humid locations
Prunus glandulosa	Flowering Almond		0	H, F	Very adaptable, showy, and weedy
Pyracantha coccinea	Firethorn		0	O, Sc	Drought tolerant
Rhus copallina	Shining Sumac	Ν	0	O, Sc	Useful for dry, rocky sites
Ribes spp.	Currant, Gooseberry	Ν	S	0	Prefers higher elevations. Shade tolerant
Rosa spp.	Garden Rose Hybrids		F	0	Insect & disease susceptible, thorny stems. Do not plant <i>Rosa multiflora</i>
Salix discolor	Pussywillow	Ν	0	O, Sc	Tolerates poorly drained soil. Short lived
Sambucus canadensis	Elderberry	N	R	Sc, O	Tolerates both wet and dry soils
Sarcococca hookerana var. humilis	Sweetbox, Dwarf Sweet Christmas Box		R	G	Tolerates air pollution
Spirea bumalda	Bumald Spirea		0	O, F	Needs well-drained soil
Spirea prunifolia	Bridalwreath Spirea		0	O, Sc	Heavy pruning will destroy this shrubs natural arching habit
Staphylea trifolia	American Bladdernut	N	0	0	Shade tolerant; urban adaptive
Symphoricarpus orbiculatus	Indian Coralberry	Ν	S	O, Sc	Shade Tolerant
Syringa persica	Persian Lilac		0	O, Sc	Heat Tolerant
Syringa vulgaris	Common Lilac		S	O, Sc	Not heat tolerant. Prone to powdery mildew in humid areas. Requires soil with high pH
Vaccinium angustifolia	Lowbush Blueberry	Ν	F	Sc, H	Prized for its berries
Vaccinium corymbosum	Highbush Blueberry	Ν	F	Sc, H	Tolerates acid, sandy soil conditions. Wildlife food
Viburnum acerifolium	Mapleleaf Viburnum	Ν	0	O, Sc	Tolerates shade and poor soils
Viburnum carlesi	Koreanspice Viburnum		S	O, H, Sc	Early, fragrant flowers
Viburnum dentatum	Arrowwood Viburnum	N	S	Sc	Tolerates high pH, heavy soils, and cold temperatures
Viburnum opulus	European Cranberry Viburnum		0	O, Sc	Tolerates wet soils, pH adaptable
Viburnum plicatum	Doublefile Viburnum		S	O, Sc	Needs good drainage and full sun
Vitex angus-castus	Chastetree, Vitex		S	O, Sc	Adaptable to poor soils & dry sites
Weigela florida	Weigela		S	O, H, Sc, F	Very tolerant of air pollution

## **Ground Covers**

Scientific Name	Common Name	Native	Deer	Use	Comments
Arctostaphylos uva-ursi	Bearberry, Kinnickinick		R	G	Very adaptable, prefers well-drained soils
Galium odoratium	Sweet Woodruff		R	G, 0	Very shade tolerant. Attractive, delicate white flowers
Gaultheria procumbens	Wintergreen	Ν	R	G	Good for woodland sites

Hosta spp.	Hosta		0	G	Tolerates variable moisture
Hypericum calycinum	St Johnswort		S	G	Used in erosion control. Poisonous
Iberis sempervirens	Candytuft		F	G	Prefers loam soil, and full sun or partial shade. pH adaptable
Liriope muscari	Bigblue Liriope, Lilyturf		S	G	Semi-tolerant of drought. Potentially invasive. Do Not plant <i>Liriope spicata</i>
Ophiopogon japonicus	Monkeygrass, Dwarf Mondo Grass		S	G	Good for erosion control in warm climates. Drought tolerant
Opuntia spp.	Prickly Pear		F	G	Native to arid regions, but is very adaptable. Has spiny stems
Pachysandra terminalis	Pachysandra, Japanese Spurge		R	G	Not tolerant of foot traffic or full sun conditions
Phlox subulata	Phlox, Moss-phlox	Ν	F	G	Prefers dry soils
Rhus aromatica	Fragrant Sumac	Ν	R	G	Drought tolerant
Sarcococca hookerana var. humilis	Sweetbox, Dwarf Sweet Christmas Box		R	G	Tolerates air pollution
Sedum spp.	Sedum, Stonecrop		F	G	Drought tolerant and maintenance free
Vinca major	Bigleaf periwinkle		0	G	Good for erosion control, tolerates drought
Viola spp.	Violet	Ν	F	G	Native and cultivated varieties, adapting to many conditions

### **Herbaceous Annuals and Perennials**

Scientific Name	Common Name	Native	Deer	Use	Comments
Achillea spp.	Yarrow	N	R	0	Adaptable to various soil types and moistures
Aconitum spp.	Monkshood	Ν	R	0	Prefers moist soils. Shade tolerant
Allium christophii	Star of Persia		R	0	Prefers sun or partial shade. Do Not plant <i>Allium vineale</i>
Anemone spp.	Anemone Hybrids		R	0, G	Prefers partial sun and moist soils
Anemonella thalictroides	Rue Anemone, Windflower	N	R	0	Prefers moist soils and partial shade
Aquilegia vulgaris	Columbine		R	0	Adapts to full sun or partial shade and rocky soils
Arabis spp.	Rock Cress	N	R	0	Many varieties, adaptable to many conditions
Artemisia spp.	Wormwood, Sage	N	S	0	Many varieties, both native and cultivated. Prefers dry soils. Do Not plant <i>Artemisia vulgaris</i>
Asarum canadense	Wild Ginger	Ν	R	0	Not tolerant of highly acid soils
Asclepias tuberosa	Butterfly Weed	Ν	R	0	Drought tolerant; shade intolerant
Aster spp.	Asters	Ν	S	0	Many types, both native and cultivated
Aubrietia deltoidea	False Rock Cress		R	0	Prefers full sun
Bergenia spp.	Bergenia		R	0	Drought tolerant
Convallaria majalis	Lily-of-the-Valley		R	0, G	Shade tolerant
Delphinium spp.	Delphinium, Larkspur	N	S	0	Some native and cultivated varieties. Prefers high pH soils

Echinacea purpurea	Purple Coneflower		R	0	Prefers full sun; tolerates partial shade
Gaillardia aristata	Blanket Flower	Ν	S	0	Drought and sun tolerant; intolerant of moist soils
Galium spp.	Bedstraw, Woodruff, Cleavers	N	R	0	Many native and cultivated varieties. Prefers dry soils
Geranium spp.	Hardy Geraniums	Ν	0	0	Many varieties, both native and cultivated. Shade tolerant
Helianthus spp.	Sunflower	Ν	F	0	Many varieties to suit all conditions
Hemmerocallis spp.	Daylily		F	0	Native and cultivated varieties. Don't plant <i>H. flava</i> or <i>H. fulva</i>
Hypericum calycinum	St Johnswort		S	G, O	Used in erosion control. Poisonous
Iberis sempervirens	Candytuft		F	G, 0	Prefers loam soil, and full sun or partial shade. pH adaptable
Iris spp.	Iris	Ν	S	0	Many native and cultivated varieties. Prefers full sun. Do Not plant <i>Iris pseudacorus</i>
Lamium spp.	Dead Nettle	N	R	0	Native and cultivated varieties. Do Not plant <i>L. amplexicaule</i> or <i>L. purpureum</i>
Lavandula spp.	Lavender		R	0	Prefers full sun
Liatris spp.	Gayfeather, Blazing Star	N	R	0	Prefers full sun
Liriope muscari	Bigblue Liriope, Lilyturf		S	G, O	Semi-tolerant of drought. Potentially invasive. Do Not plant <i>Liriope spicata</i>
Lupinus spp.	Lupine		S	0	Lupinus perennis is native, other varieties are cultivated. Prefers full sun and dry soil
Mertensia virginica	Virginia Bluebells	Ν	R	0	Tolerates shade and moist soils
Monarda spp.	Bee Balm	Ν	0	0	Sun loving; disease susceptible
Ophiopogon japonicus	Monkeygrass, Dwarf Mondo Grass		S	G, O	Good erosion control, drought tolerant. Prefers warm climates
Pachysandra terminalis	Pachysandra, Japanese Spurge		R	G, O	Not tolerant of foot traffic or full sun conditions
Papaver orientale	Oriental Poppy		R	0	Prefers full sun to partial shade
Phlox subulata	Phlox, Moss-phlox	Ν	F	G, 0	Prefers dry soils
Physostegia virginiana	Obedient Plant	Ν	S	0	Tolerates moist to wet soils; urban tolerant; full sun
Potentilla spp.	Potentilla, Cinquefoil	Ν	S	0	Native and cultivated varieties, adaptable to many conditions
Rudbeckia spp.	Coneflower	Ν	R	0	Many native and cultivated species
Rudbeckia hirta	Black-eyed Susan	Ν	R	0	State flower of Maryland
Salvia spp.	Sage	Ν	R	0	Several native and cultivated varieties
Sedum spp.	Sedum, Stonecrop		F	G, 0	Drought tolerant and maintenance free
Solidago spp.	Goldenrod	Ν	R	0	Many varieties. Prefers dry soils
Thymus spp.	Thyme		R	0	Planted and used as a spice
Veronica spp.	Speedwell	N	S	Ο	Native and cultivated varieties, adapting to many conditions
Viola spp.	Violet	N	F	0, G	Native and cultivated varieties, adapting to many conditions

#### Mulch

Landowners often prefer to place mulch around the home and in planting beds. Many commonly used mulches, however, can be quite flammable and pose the threat of ignition by windborne embers in the event of a wildfire. With the proximity that mulch usually has to the home, the risk becomes even more significant. For this reason, a table of the most commonly used mulching materials is included below, along with the relative ignitability of each. Some organic mulches also become more easily ignited after having time to dry out, therefore a column has been included which shows the ignitability of each mulching material after one year.

Mulching Material	Initial Ignitability	Ignitability After 1 Year
Bluegrass Sod	Very Low	Very Low
Brick Chips	Nonflammable	Nonflammable
Cocoa Shells	Very Low	Low
Composted Yard Waste	Moderate	High
Decorative Ground Rubber	Very High	Very High
Ground Recycled Pallets	High	High
Marble / Limestone Chips	Nonflammable	Nonflammable
Oat Straw	Very High	Low
Oyster Shells	Nonflammable	Nonflammable
Pine Bark Nuggets (1" – 2")	Low	Moderate
Pine Bark Nuggets $(1/2" - 1")$	Low - Moderate	Moderate - High
Pine Straw (Needles)	High	Very High
Shredded Cypress Bark	High	High
Shredded Hardwood Bark	High	High
Shredded Pine Bark	Moderate	High