



Firewise Landscaping in North Carolina

Do you live in a home or community that is tucked into the woods or surrounded by marsh or shrubs? Then your home may be at risk of exposure to wildfire. You can use firewise landscaping practices to create a survivable space around your home and reduce your risk of damage from a wildfire.

What Is Firewise Landscaping?

Firewise landscaping involves creating survivable space by selecting, placing, and maintaining plants around your home that will make it less vulnerable to wildfire. Survivable space is the area extending outward from your home 30 feet or more that is designed to serve as a buffer to slow or stop a wildfire. Survivable space doesn't mean you cannot have trees in your yard. Nor does survivable space mean that your landscape will be bare or that it won't attract wildlife. Instead, firewise concepts allow you to make decisions about what you value while taking steps to reduce your risk. By using firewise landscaping, you can decrease the risk of damage to your property from a wildfire.

This publication summarizes some basic firewise concepts to use when creating a landscape around your home. It also provides lists of native plants by their flammability ratings so homeowners can make informed decisions when selecting and maintaining plants. Many of North Carolina's native plants are well-suited to firewise landscaping—they have evolved

to thrive in the state's soils and climate, are non-invasive, and are best suited to provide food, shelter, and nesting sites for North Carolina's wildlife.

Basic Concepts

All vegetation is potential fuel for a fire. There are no "fireproof" plants. But the type, amount, and placement of vegetation can have a dramatic effect on fire behavior. In fact, plant choice, spacing, and maintenance are critical to firewise landscaping.

Survivable space is the area extending outward from the boundaries of your home or structure (Figure 1). The recommended distance for survivable space varies based on the kinds of vegetation around your home and the steepness of the terrain. For homes and other structures on terrain that slopes less than 20 percent, a minimum of 30 feet is recommended for survivable space. For steeper terrain, survivable space may need to extend from the structure as much as 200 feet. To determine how much survivable space is needed for your home, contact your local fire officials, the N.C. Division of Forest Resources, or your local Cooperative Extension center.

Plant Choice

Select plants with a low flammability rating for the areas nearest your house. By selecting plants with certain characteristics, you can reduce the flammability potential of your landscape and provide habitat for wildlife. Plants that are resistant to wildfire have one or more of the following characteristics:

- They grow without accumulating large amounts of combustible dead branches, needles, or leaves (example: *Cornus florida*, flowering dogwood).
- They have open, loose branches with a low volume of total vegetation (example: *Euonymus americana*, strawberry bush).
- They have low sap or resin content (example: many deciduous species).
- They have high moisture content (example: *Impatiens capensis*, jewelweed).
- They grow slowly and need little maintenance, such as pruning (example: *Carpinus caroliniana*, ironwood).
- They are short and grow close to the ground (example: *Viola pedata*, bird-foot violet).
- They can resprout following fire and thereby reduce the costs of replanting a landscape after a fire (example: *Rhus glabra*, smooth sumac).

Plant a variety of types and species. Besides being aesthetically pleasing and more attractive to a wide range of wildlife, a variety of plants will help to ensure a healthier landscape by reducing insect and disease problems. Insects and diseases tend to increase in areas where a host plant dominates the landscape. Plants that are stressed from insects and diseases are more flammable because of the loss of vigor and increased amount of dead, dry plant material.

Plant Placement

Keep plants widely spaced. Fire can race rapidly from one plant to another when there is no space between plants. Maintain ample space between plants by placing them in small irregular clusters and islands. This will reduce the threat from wildfire by decreasing the volume of fuel available to a wildfire in your landscape.

Do not plant vines or ornamental grasses within the zone of survivable space. Vines and ornamental grasses, such as switchgrass (*Panicum virgatum*), are extremely flammable plants that can cause a wildfire to spread rapidly. This is especially so if dead growth has not been removed.

Plant Maintenance

Do not forget maintenance. A landscape is a dynamic system that is constantly changing. Trees, shrubs, and herbaceous plants that have a low flammability rating and low fuel volumes can lose these characteristics over time if they are not maintained properly. Conducting seasonal maintenance activities, such as pruning, will help you to maintain the plants' firewise properties by keeping them green and healthy. When conducting maintenance, keep the following tips in mind:

- Cut and remove the dried foliage of annual and perennial herbaceous plants.
- Rake up and dispose of plant litter as it builds up over the season.
- Mow or trim turfgrass to a low height within the survivable space.
- Remove all dead branches, twigs, and leaves attached to living trees to a height of 10 feet above the ground.
- Remove all dead shrubs from within the survivable space.
- Remove vegetation encroaching on power lines.
- Remove branches within 15 feet of the chimney and roof.
- Remove vegetation touching the house or structure.
- Conduct pruning before the nesting season (April 15 through September 15) to encourage wildlife.
- Schedule and conduct maintenance with the North Carolina fire seasons (spring and fall) in mind.

Summary

Wildfire can significantly reduce the resources and services produced by North Carolina's wildlands, including wildlife habitat, recreation, clean water, timber, and scenic beauty. More than 41 percent of North Carolina's homes are located within the wildland-urban interface, the zone where human development meets or intermixes with wildland vegetation. As the state's population grows and residential development increases, the risk increases that a wildfire will encroach upon someone's home and have a significant impact on their lives. Some homeowners may have to deal only with smoke and evacuation. For others, fire often results in destruction of their homes and property. By using firewise landscaping strategies, homeowners can create landscapes with less potential fuel for a fire and minimize the risk of a wildfire spreading to their home.

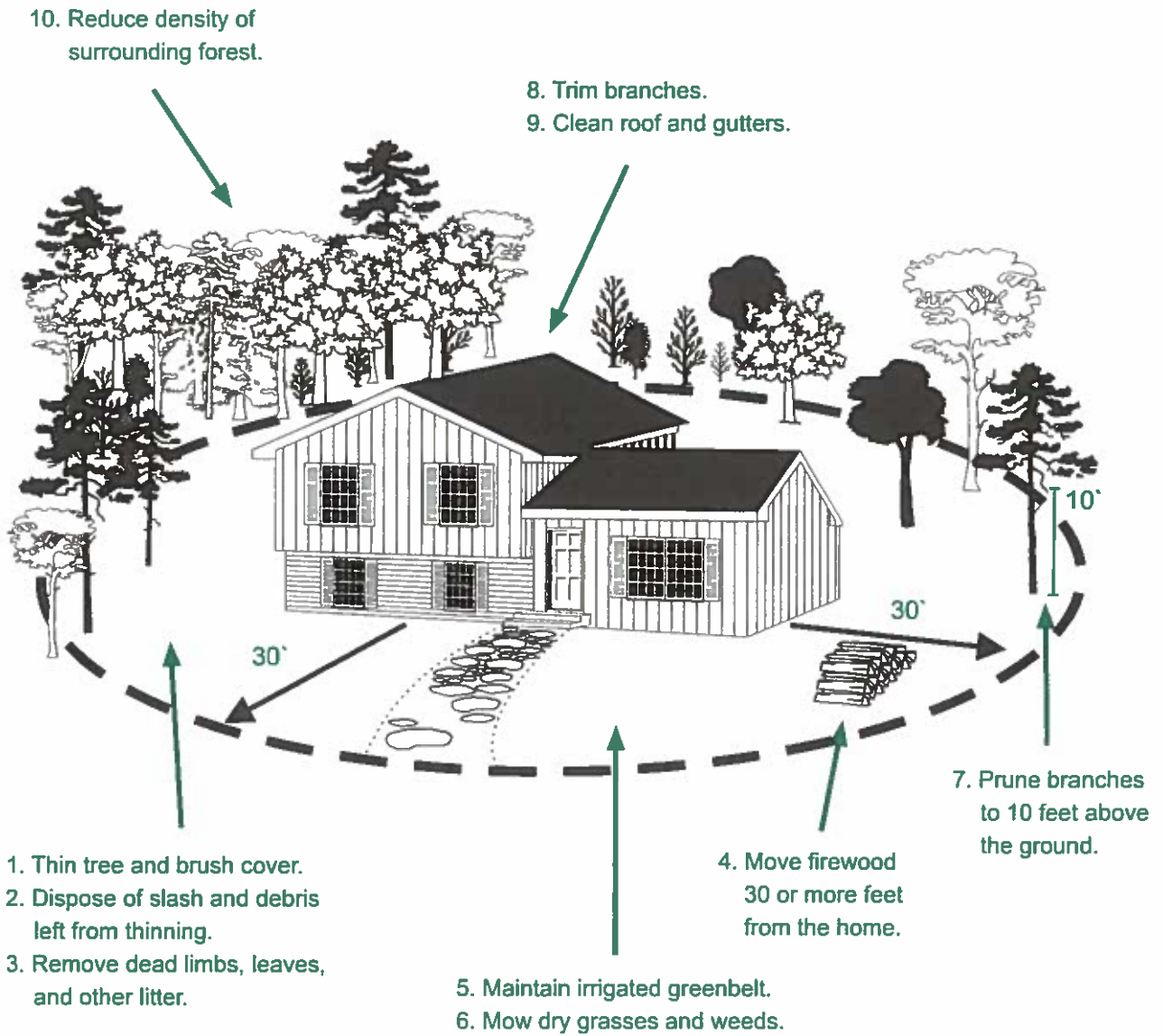


Figure 1.

An example of survivable space around a home. A firewise home has at least 30 feet of space around it that is clear of dead vegetation and flammable debris. Trees and shrubs are pruned, and the landscape consists of healthy, irrigated, fire-resistant vegetation.

Table 1. Plant Species Native to North Carolina with a Low Flammability Rating

| Latin Name | Common Name | Soil Moisture | | | Light Needs | | | Native Region | | | Wildlife Value | | | | | |
|---|----------------------|---------------|-------|-----|-------------|---------------|-------|---------------|----------|---------------|----------------|--------------|-----------------------|--------------------|-------------------------|-----------------------|
| | | Wet | Moist | Dry | Full sun | Partial shade | Shade | Mountains | Piedmont | Coastal plain | Winter cover | Fleshy fruit | Seed, mast, or catkin | Hummingbird nectar | Butterfly/insect nectar | Butterfly larvae host |
| Tall Trees (taller than 30 feet) | | | | | | | | | | | | | | | | |
| <i>Acer barbatum</i> | Southern sugar maple | | • | | • | • | • | | • | • | | | • | | | |
| <i>Acer rubrum</i> | Red maple | • | • | • | • | • | • | • | • | • | | | • | | | |
| <i>Acer saccharum</i> | Sugar maple | | • | | • | • | • | • | | | | | • | | | |
| <i>Aesculus flava</i> | Yellow buckeye | | • | | | • | • | • | | | | | | • | | |
| <i>Betula lenta</i> | Sweet birch | | • | • | • | • | • | • | | | | | • | | | • |
| <i>Betula nigra</i> | River birch | | • | | • | | | | • | • | | | • | | | • |
| <i>Carya glabra</i> | Pignut hickory | | • | • | • | • | | • | • | • | | | • | | | • |
| <i>Carya ovata</i> | Shagbark hickory | | • | • | • | • | • | • | • | • | | | • | | | • |
| <i>Carya tomentosa</i> | Mockernut hickory | | • | • | • | • | | • | • | • | | | • | | | • |
| <i>Celtis laevigata</i> | Sugarberry | | • | | • | • | • | | • | • | | • | | | | • |
| <i>Diospyros virginiana</i> | Persimmon | | • | • | • | • | | • | • | • | | • | | | | |
| <i>Fraxinus americana</i> | White ash | | • | | • | • | • | • | • | | | | • | | | • |
| <i>Fraxinus pennsylvanica</i> | Green ash | • | • | • | • | • | | • | • | • | | | • | | | • |
| <i>Liquidambar styraciflua</i> | Sweetgum | | • | | • | • | | • | • | • | | | • | | | |
| <i>Liriodendron tulipifera</i> | Yellow poplar | | • | | • | • | | • | • | • | | | • | • | • | • |
| <i>Magnolia acuminata</i> | Cucumber tree | | • | | • | • | | • | • | | | | • | | | |
| <i>Magnolia virginiana</i> | Sweetbay | • | • | | • | • | | | • | • | | | • | | | • |
| <i>Nyssa sylvatica</i> | Blackgum | | • | • | • | • | | • | • | • | | • | | | | |
| <i>Oxydendrum arboreum</i> | Sourwood | | • | • | • | • | • | • | • | • | | | | | • | |
| <i>Prunus serotina</i> | Black cherry | | • | • | • | | | • | • | • | | | • | | | • |
| <i>Quercus alba</i> | White oak | | • | • | • | • | | • | • | • | | | • | | | • |
| <i>Quercus coccinea</i> | Scarlet oak | | | • | • | • | | • | • | | | | • | | | • |
| <i>Quercus falcata</i> | Southern red oak | | • | • | • | • | | • | • | • | | | • | | | • |
| <i>Quercus michauxii</i> | Swamp chestnut oak | | • | | • | • | | | • | • | | | • | | | • |
| <i>Quercus nigra</i> | Water oak | | • | | • | • | | | • | • | | | • | | | • |
| <i>Quercus pagoda</i> | Cherrybark oak | | • | | • | • | | | • | • | | | • | | | • |
| <i>Quercus phellos</i> | Willow oak | | • | | • | • | | | • | • | | | • | | | • |
| <i>Quercus rubra</i> | Northern red oak | | • | | • | • | | • | • | | | | • | | | • |
| <i>Quercus shumardii</i> | Shumard oak | | • | | • | • | | | • | • | | | • | | | • |
| <i>Quercus stellata</i> | Post oak | | • | • | • | | | • | • | • | | | • | | | • |
| <i>Quercus velutina</i> | Black oak | | • | • | • | • | | • | • | • | | | • | | | • |
| <i>Robinia pseudoacacia</i> | Black locust | | • | • | • | • | | • | • | | | | • | | | • |
| <i>Salix nigra</i> | Black willow | • | • | | • | • | • | • | • | • | | | | | | • |
| <i>Sassafras albidum</i> | Sassafras | | • | • | • | • | | • | • | • | | • | | | | • |
| <i>Taxodium distichum</i> | Baldcypress | • | • | | • | • | | | | • | | | • | | | |
| <i>Tilia americana</i> | Basswood | | • | | • | • | | • | • | • | | | • | | • | • |
| <i>Ulmus alata</i> | Winged elm | | • | • | • | • | | • | • | • | | | • | | | • |
| <i>Ulmus americana</i> | American elm | | • | | • | • | | • | • | • | | | • | | | • |

Table 1. Plant Species Native to North Carolina with a Low Flammability Rating (continued)

| Latin Name | Common Name | Soil Moisture | | | Light Needs | | | Native Region | | | Wildlife Value | | | | | |
|--|------------------------|---------------|-------|-----|-------------|---------------|-------|---------------|----------|---------------|----------------|--------------|-----------------------|--------------------|-------------------------|-----------------------|
| | | Wet | Moist | Dry | Full sun | Partial shade | Shade | Mountains | Piedmont | Coastal plain | Winter cover | Fleshy fruit | Seed, mast, or catkin | Hummingbird nectar | Butterfly/insect nectar | Butterfly larvae host |
| Small Trees and Shrubs (10 to 30 feet tall) | | | | | | | | | | | | | | | | |
| <i>Aesculus pavia</i> | Red buckeye | | • | | • | | | | • | | | | • | • | | |
| <i>Aesculus sylvatica</i> | Painted buckeye | | • | | • | | | • | | | | | • | | | |
| <i>Alnus serrulata</i> | Alder | • | • | | • | • | | • | • | • | | • | | | | • |
| <i>Amelanchier arborea</i> | Serviceberry | | • | | • | • | • | • | • | | | • | | | • | • |
| <i>Amelanchier canadensis</i> | Juneberry | | • | | • | • | | | • | • | | • | | | • | • |
| <i>Amelanchier laevis</i> | Allegheny serviceberry | | • | • | • | • | • | • | | | | • | | | • | • |
| <i>Aralia spinosa</i> | Devil's walking stick | | • | | • | • | | • | • | • | | • | | | • | |
| <i>Asimina triloba</i> | Pawpaw | | • | | • | • | • | • | • | • | | • | | | | • |
| <i>Carpinus caroliniana</i> | Ironwood | | • | | | • | • | • | • | • | | • | | | | • |
| <i>Celtis tenuifolia</i> | Dwarf hackberry | | | • | • | • | | | • | | | • | | | | • |
| <i>Cercis canadensis</i> | Eastern redbud | | • | • | • | • | | • | • | | | • | | | • | • |
| <i>Chionanthus virginicus</i> | Fringetree | | • | • | • | • | | • | • | • | | • | | | | |
| <i>Cornus florida</i> | Flowering dogwood | | • | • | • | • | | • | • | • | | • | | | • | • |
| <i>Crataegus</i> spp. | Hawthorn | | • | | • | • | • | • | • | • | | • | | • | • | • |
| <i>Halesia carolina</i> | Carolina silverbell | | • | | | • | • | • | • | | | | | | • | |
| <i>Hamamelis virginiana</i> | Witch hazel | | • | | • | • | • | • | • | • | | • | | | | |
| <i>Ilex decidua</i> | Possumhaw | • | • | • | • | • | | • | • | | | • | | | • | • |
| <i>Ilex verticillata</i> | Winterberry | • | • | | • | • | • | • | • | • | | • | | | • | • |
| <i>Morus rubra</i> | Red mulberry | | • | • | • | • | • | • | • | • | | • | | | | • |
| <i>Ostrya virginiana</i> | Hophornbeam | | • | • | • | • | • | • | • | | | • | | | | • |
| <i>Prunus americana</i> | Wild plum | | • | • | • | | | • | • | | | • | | | • | • |
| <i>Prunus angustifolia</i> | Chickasaw plum | | • | • | • | | | • | • | | | • | | | • | • |
| <i>Prunus pensylvanica</i> | Fire cherry | | • | • | • | | | • | | | | • | | | • | • |
| <i>Rhus copallinum</i> | Winged sumac | | • | • | • | • | | • | • | • | | • | | | • | • |
| <i>Rhus glabra</i> | Smooth sumac | | • | • | • | • | | • | • | • | | • | | | • | • |
| <i>Salix caroliniana</i> | Carolina willow | • | • | | • | • | | • | • | | | | | | | • |
| <i>Sambucus canadensis</i> | Elderberry | • | • | | • | • | | • | • | • | | • | | | | |
| <i>Sorbus americana</i> | Mountain ash | | • | | • | • | | • | | | | • | | | | |
| <i>Viburnum prunifolium</i> | Blackhaw | | • | | • | • | • | • | • | • | | • | | | | • |
| <i>Viburnum rufidulum</i> | Rusty blackhaw | | • | • | • | • | • | • | • | • | | • | | | | • |
| Small Shrubs (less than 10 feet tall) | | | | | | | | | | | | | | | | |
| <i>Callicarpa americana</i> | American beautyberry | | • | • | • | • | • | | • | • | | • | | | | |
| <i>Calycanthus floridus</i> | Sweetshrub | | • | | | • | • | • | • | | | | | | • | |
| <i>Ceanothus americanus</i> | New Jersey tea | | • | • | | • | • | • | • | • | | • | | | • | • |
| <i>Cephalanthus occidentalis</i> | Buttonbush | • | • | | • | • | | • | • | • | | • | • | • | • | |
| <i>Clethra alnifolia</i> | Sweet pepperbush | • | • | | • | • | | • | • | | | • | | • | • | |
| <i>Corylus americana</i> | Hazelnut | | • | | • | • | | • | • | | | • | | | | |
| <i>Euonymus americana</i> | Strawberrybush | | • | | | • | • | • | • | • | | • | | | | |

Table 1. Plant Species Native to North Carolina with a Low Flammability Rating (continued)

| Latin Name | Common Name | Soil Moisture | | | Light Needs | | | Native Region | | | Wildlife Value | | | | | |
|--|--------------------|---------------|-------|-----|-------------|---------------|-------|---------------|----------|---------------|----------------|--------------|-----------------------|--------------------|-------------------------|-----------------------|
| | | Wet | Moist | Dry | Full sun | Partial shade | Shade | Mountains | Piedmont | Coastal plain | Winter cover | Fleshy fruit | Seed, mast, or catkin | Hummingbird nectar | Butterfly/insect nectar | Butterfly larvae host |
| Small Shrubs (less than 10 feet tall) (continued) | | | | | | | | | | | | | | | | |
| <i>Gaylussacia frondosa</i> | Blue huckleberry | | • | • | • | • | • | | • | • | | • | | | • | • |
| <i>Hydrangea arborescens</i> | Wild hydrangea | | • | | | • | • | • | • | | | | • | | • | |
| <i>Itea virginica</i> | Virginia willow | • | • | | | • | • | • | • | • | | | • | | • | |
| <i>Lindera benzoin</i> | Spicebush | | • | • | • | • | • | • | • | • | | • | | | | • |
| <i>Photinia pyrifolia</i> | Red chokeberry | | • | | • | • | | • | • | • | | • | | | | • |
| <i>Vaccinium corymbosum</i> | Highbush blueberry | | • | | • | • | | | • | • | | • | | | • | • |
| <i>Vaccinium stamineum</i> | Deerberry | | • | • | • | • | | • | • | • | | • | | | • | • |
| <i>Vaccinium pallidum</i> | Lowbush blueberry | | | • | • | • | | • | • | • | | • | | | • | • |
| <i>Viburnum acerifolium</i> | Mapleleaf viburnum | | • | • | | • | • | • | • | | | • | | | | • |
| <i>Viburnum dentatum</i> | Arrowwood | | • | • | • | • | • | • | • | • | | • | | | | • |
| <i>Viburnum nudum</i> | Wild raisin | • | • | | • | • | • | • | • | • | | • | | | | • |
| Ferns | | | | | | | | | | | | | | | | |
| <i>Polystichum acrostichoides</i> | Christmas fern | | • | | | • | • | • | • | • | • | | | | | |
| Herbs and Wildflowers | | | | | | | | | | | | | | | | |
| <i>Apocynum cannabinum</i> | Hemp dogbane | | • | • | • | • | | • | • | • | | | | | • | |
| <i>Arisaema triphyllum</i> | Jack-in-the-pulpit | | • | | | • | • | • | • | • | | • | | | | |
| <i>Aristolochia serpentaria</i> | Virginia snakeroot | | • | • | | • | • | • | • | • | | | | | | • |
| <i>Chrysogonum virginianum</i> | Green-and-gold | | • | | | | • | | • | • | | • | | | • | |
| <i>Desmodium spp.</i> | Beggarlice | | • | • | • | • | | • | • | • | | • | | | | • |
| <i>Eupatorium coelestinum</i> | Mistflower | | • | | • | • | | • | • | • | | | • | | • | |
| <i>Eupatorium fistulosum</i> | Joe-pye-weed | | • | | • | | | • | • | • | | | • | • | | • |
| <i>Geranium maculatum</i> | Wild geranium | | • | • | • | • | | • | • | | | • | | | • | |
| <i>Houstonia caerulea</i> | Bluets | | • | • | • | • | • | • | • | • | | | | | • | |
| <i>Impatiens capensis</i> | Jewelweed | | • | | | • | • | • | • | • | | | | • | • | |
| <i>Iris cristata</i> | Crested iris | | • | | | • | • | • | • | | | | • | | | |
| <i>Phlox carolina</i> | Carolina phlox | | • | • | • | • | | • | • | • | | | | | • | |
| <i>Phlox divaricata</i> | Blue phlox | | • | | | • | • | • | • | • | | | | | • | |
| <i>Phlox paniculata</i> | Summer phlox | | • | | • | • | | • | • | • | | | | | • | |
| <i>Phlox pilosa</i> | Prairie phlox | | • | • | • | • | | | • | • | | | | | • | |
| <i>Phlox subulata</i> | Moss pink | | • | • | • | | | • | • | | | | | | • | |
| <i>Silene virginica</i> | Fire pink | | • | • | | • | • | • | • | • | | • | • | • | | |
| <i>Spigelia marilandica</i> | Indian pink | | • | | | • | • | • | • | • | | | • | | | |
| <i>Viola pedata</i> | Bird-foot violet | | • | • | • | • | | • | • | • | | | | | | • |

Table 2. Plant Species Native to North Carolina with a *Medium* Flammability Rating

| Latin Name | Common Name | Soil Moisture | | | Light Needs | | | Native Region | | | Wildlife Value | | | | | |
|--|------------------------|---------------|-------|-----|-------------|---------------|-------|---------------|----------|---------------|----------------|--------------|-----------------------|--------------------|-------------------------|-----------------------|
| | | Wet | Moist | Dry | Full Sun | Partial Shade | Shade | Mountains | Piedmont | Coastal plain | Winter cover | Fleshy fruit | Seed, mast, or catkin | Hummingbird nectar | Butterfly/insect nectar | Butterfly larvae host |
| Tall Trees (taller than 30 feet) | | | | | | | | | | | | | | | | |
| <i>Fagus grandifolia</i> | American beech | | • | | | • | • | • | • | • | | | • | | | |
| <i>Gordonia lasianthus</i> | Loblolly bay | • | • | | • | • | | | | • | • | | | | | |
| <i>Magnolia grandiflora</i> | Southern magnolia | | • | | | • | • | | • | • | • | | • | | | |
| <i>Persea borbonia</i> | Redbay | • | • | | • | • | • | | | • | • | | • | | | • |
| <i>Platanus occidentalis</i> | Sycamore | | • | | • | • | | • | • | • | | | • | | | |
| Small Trees and Shrubs (10 to 30 feet tall) | | | | | | | | | | | | | | | | |
| <i>Castanea pumila</i> | Chinquapin | | • | • | • | • | | • | • | • | | | • | | | |
| <i>Cornus amomum</i> | Silky dogwood | • | • | | • | • | | • | • | • | | | • | | • | • |
| <i>Cyrilla racemiflora</i> | Titi | • | • | | • | • | • | | • | • | • | | | | • | |
| <i>Osmanthus americanus</i> | Wild olive, devilwood | | • | • | • | • | | | | • | • | • | | | | |
| <i>Prunus caroliniana</i> | Carolina laurel cherry | | • | • | • | • | | | | • | • | • | | | • | • |
| <i>Symplocos tinctoria</i> | Sweetleaf | | • | • | • | • | • | • | • | • | | | • | | • | • |
| Small Shrubs (less than 10 feet tall) | | | | | | | | | | | | | | | | |
| <i>Gaylussacia dumosa</i> | Dwarf huckleberry | | • | • | • | • | | • | • | • | | | • | | • | • |
| <i>Lyonia lucida</i> | Fetterbush | | • | | | • | • | | • | • | • | | | | • | |
| <i>Rhododendron atlanticum</i> | Dwarf azalea | | • | • | • | • | • | | • | • | | | | • | • | |
| <i>Rhododendron calendulaceum</i> | Flame azalea | | • | • | | • | • | • | | | | | | • | • | |
| <i>Rhododendron maximum</i> | Rosebay rhododendron | | • | | | • | • | • | • | | • | | | • | • | |
| <i>Rhododendron periclymenoides</i> | Wild azalea | | • | | • | • | • | • | • | • | | | | • | • | |
| <i>Vaccinium arboreum</i> | Sparkleberry | | • | • | • | • | • | | • | • | • | • | | | • | • |
| Herbs and Wildflowers | | | | | | | | | | | | | | | | |
| <i>Aquilegia canadensis</i> | Columbine | | • | • | | • | • | • | • | • | | | • | • | • | |
| <i>Aruncus dioicus</i> | Goat's beard | | • | | | • | • | • | • | | | | | | | • |
| <i>Asclepias incarnata</i> | Swamp milkweed | • | • | | • | • | | • | • | • | | | | | • | • |
| <i>Asclepias tuberosa</i> | Butterfly weed | | | • | • | • | | • | • | • | | | | | • | • |
| <i>Asclepias variegata</i> | White milkweed | | • | • | • | • | | • | • | • | | | | | • | • |
| <i>Aster curtisii</i> | Aster | | • | • | • | • | | • | | | | | • | | • | • |
| <i>Aster divaricatus</i> | Heart-leaved aster | | • | • | | • | • | • | • | | | | • | | • | • |
| <i>Aster novae-angliae</i> | New England aster | | • | • | • | • | | • | | | | | • | | • | • |
| <i>Aster novi-belgii</i> | New York aster | | • | | • | • | | | | • | | | • | | • | • |
| <i>Aster pilosus</i> | White heath aster | | | • | • | | | • | • | • | | | • | | • | • |
| <i>Baptisia australis</i> | Blue false indigo | | • | | • | • | | • | • | | | | | | • | • |
| <i>Baptisia tinctoria</i> | Yellow wild indigo | | | • | • | • | | • | • | • | | | | | • | • |
| <i>Bidens aristosa</i> | Sticktight | • | • | • | • | • | | | • | • | | | • | | • | |
| <i>Chamaecrista fasciculata</i> | Partridge pea | | • | • | • | | | • | • | • | | | • | | | • |
| <i>Cimicifuga racemosa</i> | Black cohosh | | • | | | | • | • | • | | | | | | | • |

Table 2. Plant Species Native to North Carolina with a *Medium* Flammability Rating (continued)

| Latin Name | Common Name | Soil Moisture | | | Light Needs | | | Native Region | | | Wildlife Value | | | | |
|--|-------------------------|---------------|-------|-----|-------------|---------------|-------|---------------|----------|---------------|----------------|--------------|-----------------------|--------------------|-------------------------|
| | | Wet | Moist | Dry | Full Sun | Partial Shade | Shade | Mountains | Piedmont | Coastal plain | Winter cover | Fleshy fruit | Seed, mast, or catkin | Hummingbird nectar | Butterfly/insect nectar |
| Herbs and Wildflowers (continued) | | | | | | | | | | | | | | | |
| <i>Coreopsis angustifolia</i> | Narrow-leaved coreopsis | | • | | • | • | | | | • | | | • | | • |
| <i>Coreopsis auriculata</i> | Eared coreopsis | | • | | • | • | | • | • | • | | | • | | • |
| <i>Coreopsis falcata</i> | Sickle tickseed | • | • | | • | • | | | • | • | | | • | | • |
| <i>Coreopsis lanceolata</i> | Lance-leaved coreopsis | | • | • | • | | | • | • | • | | | • | | • |
| <i>Coreopsis major</i> | Greater tickseed | | • | • | • | • | | • | • | | | | • | | • |
| <i>Coreopsis verticillata</i> | Threadleaf coreopsis | | • | • | • | • | | • | • | • | | | • | | • |
| <i>Echinacea purpurea</i> | Purple coneflower | | • | • | • | | | • | • | | | | • | | • |
| <i>Helianthus angustifolius</i> | Swamp sunflower | • | • | | • | • | | • | • | • | | | • | | • |
| <i>Helianthus atrorubens</i> | Sunflower | | • | • | • | | | • | • | • | | | • | | • |
| <i>Helianthus divaricatus</i> | Woodland sunflower | | • | • | | • | | • | • | • | | | • | | • |
| <i>Heliopsis helianthoides</i> | Ox-eye | | • | • | • | • | | • | • | • | | | • | | • |
| <i>Hibiscus moscheutos</i> | Rose mallow | | • | | • | • | | • | • | • | | | | • | • |
| <i>Liatris spicata</i> | Blazing star | | • | | • | • | | • | • | | | | | | • |
| <i>Lobelia cardinalis</i> | Cardinal flower | • | • | | • | • | • | • | • | • | | | | • | • |
| <i>Lobelia puberula</i> | Downy lobelia | • | • | • | • | • | | • | • | • | | | | • | • |
| <i>Lobelia siphilitica</i> | Great blue lobelia | • | • | | | • | • | • | | | | | | • | • |
| <i>Mitchella repens</i> | Partridgeberry | | • | | • | • | • | • | • | | • | | | | |
| <i>Monarda didyma</i> | Beebalm | | • | | | • | • | • | | | | | | • | • |
| <i>Monarda fistulosa</i> | Wild bergamot | | • | • | • | • | | • | • | | | | | • | • |
| <i>Monarda punctata</i> | Horsemint | | • | • | • | • | | | • | • | | | | • | • |
| <i>Oenothera fruticosa</i> | Sundrops | | • | • | • | • | | • | • | • | | | • | • | |
| <i>Penstemon canescens</i> | Hairy beardtongue | | • | • | • | • | | • | • | | | | | • | • |
| <i>Penstemon laevigatus</i> | Smooth beardtongue | | • | | • | • | • | • | • | • | | | | • | • |
| <i>Phytolacca americana</i> | Pokeweed | | • | • | • | | | • | • | • | | • | • | | |
| <i>Pycnanthemum incanum</i> | Hoary mountainmint | | • | • | • | • | | • | • | • | | | | | • |
| <i>Rudbeckia fulgida</i> | Orange coneflower | | • | | • | | | • | • | • | | | • | | • |
| <i>Salvia lyrata</i> | Lyreleaf sage | | • | • | • | • | • | • | • | • | | | | • | • |
| <i>Solidago</i> spp. | Goldenrod | | • | • | • | • | | • | • | • | | | • | | • |
| <i>Vernonia noveboracensis</i> | Ironweed | | • | | • | • | | • | • | • | | | | | • |

Table 3. Plant Species Native to North Carolina with a *High* Flammability Rating

| Latin Name | Common Name | Soil Moisture | | | Light Needs | | | Native Region | | | Wildlife Value | | | | | |
|--|----------------------|---------------|-------|-----|-------------|---------------|-------|---------------|----------|---------------|----------------|--------------|-----------------------|--------------------|-------------------------|-----------------------|
| | | Wet | Moist | Dry | Full Sun | Partial Shade | Shade | Mountains | Piedmont | Coastal plain | Winter cover | Fleshy fruit | Seed, mast, or catkin | Hummingbird nectar | Butterfly/insect nectar | Butterfly larvae host |
| Tall Trees (taller than 30 feet) | | | | | | | | | | | | | | | | |
| <i>Chamaecyparis thyoides</i> | Atlantic whitecedar | • | • | | • | • | | | | • | • | | | | | • |
| <i>Ilex opaca</i> | American holly | | • | • | • | • | • | • | • | • | • | • | | | | • |
| <i>Juniperus virginiana</i> | Eastern redcedar | | • | • | • | • | | • | • | • | • | • | | | | • |
| <i>Pinus echinata</i> | Shortleaf pine | | • | • | • | • | | • | • | • | • | | • | | | • |
| <i>Pinus palustris</i> | Longleaf pine | | • | • | • | | | • | • | • | | • | | | | |
| <i>Pinus strobus</i> | Eastern white pine | | • | • | • | | | • | • | | • | • | | | | |
| <i>Pinus taeda</i> | Loblolly pine | | • | • | • | | | • | • | • | • | | • | | | • |
| <i>Quercus virginiana</i> | Live oak | | • | • | • | | | | | • | • | | • | | | • |
| <i>Tsuga canadensis</i> | Eastern hemlock | | • | | | • | • | • | • | | • | | • | | | |
| Small Trees and Shrubs (10 to 30 feet tall) | | | | | | | | | | | | | | | | |
| <i>Ilex vomitoria</i> | Yaupon | | • | • | • | • | | | | • | • | • | | | | • |
| <i>Morella cerifera</i> | Wax myrtle | | • | • | • | • | | | • | • | • | • | | | | • |
| Small Shrubs (less than 10 feet tall) | | | | | | | | | | | | | | | | |
| <i>Ilex glabra</i> | Inkberry | | • | | • | • | | | • | • | • | • | | | | • |
| <i>Kalmia carolina</i> | Carolina laurel | | • | • | • | • | • | | | • | • | | | • | • | |
| <i>Kalmia latifolia</i> | Mountain laurel | | • | • | • | • | • | • | • | | • | | | • | • | |
| <i>Leucothoe axillaris</i> | Doghobble | • | • | | • | • | | • | • | • | • | | | | | • |
| <i>Rhododendron catawbiense</i> | Catawba rhododendron | | • | | | • | • | • | • | | • | | | • | • | |

Table 4. Plant Species Native to North Carolina with an *Extreme* Flammability Rating
 (These species should *not* be planted inside the zone of survivable space.)

| Latin Name | Common Name | Soil Moisture | | | Light Needs | | | Native Region | | | Wildlife Value | | | | | |
|------------------------------------|------------------------|---------------|-------|-----|-------------|---------------|-------|---------------|----------|---------------|----------------|--------------|-----------------------|--------------------|-------------------------|-----------------------|
| | | Wet | Moist | Dry | Full Sun | Partial Shade | Shade | Mountains | Piedmont | Coastal plain | Winter cover | Fleshy fruit | Seed, mast, or catkin | Hummingbird nectar | Butterfly/insect nectar | Butterfly larvae host |
| Vines | | | | | | | | | | | | | | | | |
| <i>Ampelopsis arborea</i> | Peppervine | • | • | | • | • | | | | • | | • | | | | |
| <i>Aristolochia macrophylla</i> | Dutchman's pipe | | • | • | | • | • | • | | | | | | | | • |
| <i>Berchemia scandens</i> | Rattanvine, supplejack | • | • | | • | • | | | • | • | | • | | | | |
| <i>Bignonia capreolata</i> | Crossvine | | • | • | • | • | | | • | • | | | | • | | |
| <i>Campsis radicans</i> | Trumpet vine | | • | • | • | • | | • | • | • | | | | • | | |
| <i>Decumaria barbara</i> | Climbing hydrangea | | • | | • | • | • | | | • | | | | | • | |
| <i>Gelsemium sempervirens</i> | Carolina jasmine | | • | | • | • | | | • | • | • | | | • | • | |
| <i>Lonicera sempervirens</i> | Coral honeysuckle | | • | | • | • | | | • | • | | | | • | | |
| <i>Parthenocissus quinquefolia</i> | Virginia creeper | | • | • | • | • | • | • | • | • | | • | | | | |
| <i>Passiflora incarnata</i> | Passionflower | | • | • | • | • | | • | • | • | | | | • | • | • |
| <i>Smilax</i> spp. | Greenbrier | • | • | • | • | • | | • | • | • | • | • | | | | |
| <i>Vicia caroliniana</i> | Wood vetch | | | • | • | • | | • | • | • | | | • | | | • |
| <i>Vitis</i> spp. | Grape | • | • | • | • | • | | • | • | • | | • | | | | |
| Grasses | | | | | | | | | | | | | | | | |
| <i>Andropogon glomeratus</i> | Bushy bluestem | | • | | • | | | | • | • | • | | • | | | • |
| <i>Andropogon temarius</i> | Splitbeard bluestem | | • | • | • | | | • | • | • | • | | • | | | • |
| <i>Aristida stricta</i> | Wiregrass | | • | • | • | • | | | • | • | • | | • | | | |
| <i>Arundinaria gigantea</i> | Switchcane | • | • | • | • | • | • | • | • | • | • | • | • | | | • |
| <i>Panicum virgatum</i> | Switchgrass | • | • | | • | • | | • | • | • | • | | • | | | • |
| <i>Sorghastrum nutans</i> | Indiangrass | | • | • | • | | | • | • | • | • | | • | | | |

Additional Resources

- Bardon, R., and R. Carter. 2003. *Minimizing Wildfire Risk – A Forest Landowner’s Guide*. North Carolina Cooperative Extension, Publication no. AG-616. North Carolina State University, Raleigh, N.C.
Online: <http://www.ces.ncsu.edu/forestry/pdf/ag/ag-616.pdf>
- Behm, A. L., A. J. Long, M. C. Monroe, C. K. Randall, W. C. Zipperer, and L. A. Hermansen-Baez. 2004. *Fire in the Wildland-Urban Interface: Preparing a Firewise Plant List for WUI Residents*. Florida Cooperative Extension. University of Florida, Gainesville, Fla.
- Miller, J. H., and K. V. Miller. 1999. *Forest Plants of the Southeast and Their Wildlife Uses*. Craftmasters Printing Inc. Auburn, Ala.
- Moorman, C., M. Johns, and L. T. Bowen. 2003. *Landscaping for Wildlife with Native Plants*. North Carolina Cooperative Extension, Publication no. AG-636-03. North Carolina State University, Raleigh, N.C.
Online: http://www.ces.ncsu.edu/forestry/pdf/ag/ag636_03.pdf
- National Wildland/Urban Interface Fire Program. Firewise Web site: <http://www.firewise.org/>.
- National Wildland/Urban Interface Fire Program. 2003. *Firewise Communities: Where We Live, How We Live*. Firewise Communities Program. Quincy, Mass.
- North Carolina Division of Forest Resources. Firewise in North Carolina. Web site: <http://www.ncfirewise.org/>.
- U.S. Department of Agriculture, Natural Resources Conservation Service. 2004. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, La.



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