Wildfire-resistant Landscape Plants for Michigan
Michigan State University
Cooperative Extension Service
Wildfire Series
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Issued January 2010
12 pages

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Extension Bulletin • E2948
New, January 2010

MICHIGAN STATE UNIVERSITY EXTENSION

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Introduction

Selecting the correct landscape plants to place next to or near your home could save it from catching fire. When wildfires occur, the fire moves along the ground or through brush or forests by igniting the vegetation or fuels ahead. If flammable vegetation is planted too close to a home or building and the vegetation ignites, it could also ignite the structure. Figure 1 depicts how coniferous trees can ignite and "torch" during a wildfire. If these trees were growing next to a house or building, the structure would surely ignite. This is why it is important to select fire-resistant plants when landscaping around the home.

Most Michigan residents are surprised to learn that Michigan experiences as many as 8,000 to 10,000 wildland fires each year. These forest fires, brush fires and grass fires destroy or severely damage 100 to 200 homes, barns and outbuildings annually. This can happen when firebrands (floating embers or pieces of burning debris) land in dry leaves that have collected under decks, around landscape plants and in eavestroughs, setting the leaves on fire. Firebrands can also ignite a wood roof. Many structures also catch fire when flames or intense heat from burning vegetation catches the deck or sides of the house on fire. Firefighters at a wildfire in dune grass near Shelby, Michigan, in 2005 (Figure 2) reported flames as high as 20 feet. Two homes were destroyed in the fire, and a number of others had fire damage. In these situations, vegetation planted or allowed to grow too close to the house served as fuel, igniting the wooden stairways, decks and siding.

Figure 1. Some trees and plants can burn intensely. (Courtesy of Michigan DNR.)

To help prevent homes and buildings from catching fire — i.e., to make them "firewise" — simply eliminate these ignition points by creating defensible space around the home. This can be achieved, in part, through proper landscape plant selection and placement. Plants that do not burn easily are less likely to set a building on fire.

Any Plant Can Burn

It is important to understand that any plant can burn if the plant is dry enough or if it is exposed to intense heat long enough. This is true even of plants that are defined as fire-resistant. A fire-resistant plant possesses several characteristics that make it less likely to ignite. For example, conifers and certain other plants contain resins and can ignite even when green; they also produce intense flames and heat. Plants such as maple, dogwood and Michigan holly do not contain such resins. Fire-resistant plants also have foliage and stems that retain moisture, such as hosta. Plants that retain dead leaves or needles, such as juniper, are not considered fire-resistant because these dead plant parts can serve as ignition points or intensify a fire. Fire-resistant landscape plants should be your first choice if you live in a rural

Figure 2. This wildfire in dune grass near Shelby, Michigan, in 2005 produced flames 20 feet high and destroyed two homes. (Courtesy of Michigan DNR.)

area or an urban community bordered by natural vegetation where wildfire is a possible threat.

Even before homeowners consider the right trees, shrubs and ground covers, they should look at all landscape issues. For example, a dry lawn can burn and carry a fire to the home or other structure. Lawns should be watered, and dead lawn litter should be raked and either removed from the property or composted. A green lawn will not carry a fire.

Wildfire-resistant Plant Species

The species of trees, shrubs and ground covers in Table 1 are considered wildfire-resistant and are recommended for Michigan's climate. Remember that any plant may burn if the plant tissue becomes very dry and if the vegetation is exposed to intense heat for a period of time. Therefore, no plant is completely fireproof. In addition, some plants containing resins will burn even when green. The term "fire-resistant" in this bulletin refers to plants that will not ignite easily as long as they are alive, green and watered. It does not apply to dead plants or dead leaves and plant debris from these plants.

The plants and trees listed were selected after the authors reviewed and compared 15 fire-resistant plant lists from the United States, Canada and Tasmania. Because basic research where plants were exposed to fire in a laboratory setting is limited, most of the species are listed on the basis of observations of survival after being exposed to real wildfire or structural fire situations. In some cases, an entire genus is listed in the table; in other genera, only selected species are listed. One must also recognize that although the canopy of *Quercus* species (oak trees) will typically not ignite, dead oak leaves on the ground do not decompose quickly and are very flammable. Oak leaves serve as one of the more common fuel threats in Michigan wildfires. Therefore, it is important to keep oak leaves and other dead leaves, needles and plant debris from collecting around foundations and under decks

Your local lawn and garden centers may sell or have access to many of the fire-resistant plant species mentioned in this publication. An excellent source of information on local landscape dealers is the MSU Extension office in your county. Both the landscape dealer and the Extension agent can provide information on growing characteristics, required growing conditions, winter hardiness and planting sites required for various species.

Locating Shrubs and Trees in the Landscape

Where you locate ornamental plants is just as critical as the species selected. Spacing between trees and shrubs is important so that fire cannot jump from a plant to a structure or from one plant to another and finally to your home. Spacing depends on the species selected. It is also important to remember that the distance between two plants will decrease as they grow larger. Space plants according to their mature size, not their size at planting. The spruce trees shown in Figure 3 were planted too close to the home and are now a threat because of direct flames and radiant heat if the trees ignite.

When creating defensible space in the yard, provide a minimum of 3 feet of clearance between the building and landscape plants. Non-flammable landscape material such as limestone, marble chips or even mineral soil can be used in this area. Avoid using organic mulch such as peat or wood chips within the 3-foot barrier. These materials can ignite when dry.

Figure 3. The spruce trees in this photo are located too close to the house. If they catch fire, they will likely create enough radiant heat to ignite the home. (Courtesy of MSU Extension.)

Table 1. Wildfire-resistant landscape plants for Michigan.

Botanical name	Common name	Category	Winter hardiness zones***	Native to Mich.**	Descriptors
Groundcovers					
Achillea tomentosa	Woolly yarrow	ground cover	zones 3-7	No	herbaceous perennial
Ajuga reptans	Carpet bugleweed	ground cover	zones 3-9	No	herbaceous perennial
Arctostaphylos uva-ursi	Kinnikinnick or bearberry	ground cover	zones 2-6	Yes	evergreen
Armeria maritima	Sea pink thrift	ground cover	zones 4-8	No	herbaceous perennial
Asarum canadense	Canadian ginger	ground cover	zones 3-7	Yes	herbaceous perennial
Cotoneaster adpressus praecox	Early cotoneaster	ground cover	zones 5-7	No	deciduous
Epimedium spp.	Barrenwort	ground cover	most spp in zone 5-8	No	herbaceous perennial
Festuca cinerea	Blue fescue	ground cover	zones 5-9	No	herbaceous perennial
Festuca rubra	Red fescue	ground cover	SCD*	SCD*	herbaceous perennial
Fragaria spp.	Wild strawberry	ground cover	SCD*	SCD*	perennial
Gaultheria procumbens	Wintergreen	ground cover	zones 4-8	No	evergreen
Hedera helix	English ivy	ground cover	zones 4-10	No	evergreen
Hosta spp.	Plaintain lily/ hosta lily	ground cover	zones 3-9	No	herbaceous perennial
Iberis sempervirens	Evergreen candytuft	ground cover	zones 3-8	No	herbaceous perennial
Mahonia repens	Dwarf Oregon grape	ground cover	zones 5-7	No	woody evergreen
Pachysandra terminalis	Japanese pachysandra	ground cover	zones 4-9	No	herbaceous evergreen
Phlox subulata	Creeping phlox	ground cover	zones 2-8	No	herbaceous perennial
Potentilla neumanniana	Spring cinquefoil	ground cover	zones 4-7	No	woody perennial
Sedum album	Green stonecrop	ground cover	zones 4-7	No	herbaceous perennial
Sedum spathyuifolium	Stonecrop	ground cover	zones 6-9	No	herbaceous perennial
Thymus praecox	Mother of thyme	ground cover	zones 5-8	No	herbaceous perennial
Thymus praecox arcticus	Creeping thyme	ground cover	zones 5-8	No	herbaceous perennial
Thymus pseudolanuginosus	Woolly thyme	ground cover	zones 5-8	No	herbaceous perennial
Perennials					
Achillea filipendulina	Fernleaf yarrow	perennial	zones 3-8	No	herbaceous perennial
Achillea millefolium	White yarrow	perennial	zones 3-9	Yes	herbaceous perennial
Achillea spp.	Yarrow	perennial	SCD*	SCD*	herbaceous perennial
Allium schoenoprasum	Chives	perennial	zones 4-7	SCD*	herbaceous perennial
Antennaria spp.	Pussytoes	perennial	SCD*	SCD*	herbaceous perennial
Aquilegia spp.	Columbine	perennial	SCD*	No	herbaceous perennial
Arabis alpina	Rock cress	perennial	zones 5-7	No	herbaceous perennial
Artemisia caucasica	Silver spreader or Caucasian sagebrush	perennial	zones 5-9	No	herbaceous perennial
Aurinia saxatilis	Basket of gold	perennial	zones 3-7	No	herbaceous perennial
Bergenia cordifolia	Heartleaf bergenia	perennial	zones 4-8	No	semi-evergreen herbaceous perennial
Bergenia spp.	Bergenia	perennial	SCD*	No	semi-evergreen herbaceous perennial
Campanula poscharskyana	Serbian bellflower	perennial	zones 3-7	No	herbaceous perennial

*SCD — Species and/or cultivar dependent.

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(continued)

Table 1. (cont.) Wildfire-resistant landscape plants for Michigan.

Botanical name	Common name	Category	Winter hardiness zones***	Native to Mich.**	Descriptors
Perennials (continued)					
Campanula rotundifolia	Harebell	perennial	zones 2-7	No	herbaceous perennial
Carex spp.	Sedges	perennial	SCD*	SCD*	herbaceous perennial
Caryopteris xclandonensis	Blue mist spirea	perennial	zones 5-9	No	herbaceous to woody perennial
Centranthus ruber	Red valerian	perennial	zones 5-8	No	herbaceous perennial
Cerastium tomentosum	Snow in summer	perennial	zones 2-10	No	herbaceous perennial
Coreopsis auriculata nana	Dwarf coreopsis	perennial	zones 4-9	No	herbaceous perennial
Coreopsis spp.	Coreopsis	perennial	SCD*	SCD*	herbaceous perennial
Dianthus deltoides	Maiden pinks	perennial	zones 3-8	No	herbaceous perennial
Dianthus plumarius	Pinks	perennial	zones 3-8	No	herbaceous perennial
Dianthus spp.	China pinks	perennial	zones 3-8	No	herbaceous perennial
Epilobium angustifolium	Fireweed	perennial	zones 3-7	Yes	herbaceous perennial
Erigeron hybrids	Fleabane	perennial	zones 4-7	SCD*	herbaceous perennial
Fragaria chiloensis	Wild strawberry	perennial	zones 4-8	No	herbaceous perennial
Gaillardia xgrandiflora	Blanket flower	perennial	zones 2-9	No	herbaceous perennial
Geranium cinereum	Hardy geranium	perennial	zones 5-7	No	herbaceous perennial
Geranium sanguineum	Blood red geranium	perennial	zones 3-8	No	herbaceous perennial
Geranium spp.	Geranium	perennial	zones 3-8	No	most species perennial, some annual
Helianthemum nummularium	Sunrose	perennial	zones 5 - 7	No	mounding
Heuchera sanguinea	Coral bells	perennial	zones 3-8	No	herbaceous perennial
Iberis sempervirens	Candytuft	perennial	zones 3-8	No	herbaceous perennial
Iris missouriensis	Wild blue iris	perennial	zones 3-8	No	herbaceous perennial
Iris spp.	Iris	perennial	SCD*	No	most species perennial, some annual
Lavandula angustifolia	Lavender	perennial	zones 5-9	No	herbaceous perennial
Leucanthemum xsuperbum	Shasta daisy	perennial	zones 4-9	No	herbaceous perennial
Liriope muscari	Blue lily-turf	perennial	zones 6-9	No	herbaceous perennial
Lupinus spp.	Lupine	perennial	SCD*	SCD*	not strong performers in Michigan
Oenothera macrocarpa	Evening primrose	perennial	zones 4-7	No	herbaceous perennial
Oenothera spp.	Primrose	perennial	SCD*	SCD*	herbaceous perennial
Papaver spp.	Poppy	perennial	SCD*	No	most species perennial, some annual
Penstemon spp.	Beard tongue	perennial	SCD*	SCD*	most species perennial, some annual
Phlox drummondii	Creeping phlox	perennial	zones 4-9	No	herbaceous perennial
Potentilla spp.	Potentilla	perennial	SCD*	SCD*	most species perennial, some annual
Salvia spp.	Sage	perennial	SCD*	No	most species perennial, some annual

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(continued)

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Santolina chamaecyparissus	Lavender cotton	perennial	zones 6-10	No	mounding
Sempervivum tectorum	Hens and chicks	perennial	zones 3-7	No	herbaceous perennial
Solidago spp.	Goldenrod	perennial	SCD*	SCD*	herbaceous perennial
Stachys byzantina	Lamb's ear	perennial	zones 4-7	No	herbaceous perennial
Thymus praecox arcticus	Creeping thyme	perennial	zones 5-8	No	herbaceous perennial
Shrubs					
Amelanchier alnifolia	Alder-leaved serviceberry	shrub	zones 4-5	No	deciduous, also small tree
Amelanchier spp.	Serviceberry	shrub	zones 4-9	SCD*	deciduous, also small tree
Arctostaphylos uva-ursi	Bearberry	shrub	zones 2 - 6	Yes	creeping shrub
Aronia arbutifolia	Red chokeberry	shrub	zones 5-8	No	deciduous, also small tree
Aronia melanocarpa	Black chokeberry	shrub	zones 3-8	Yes	deciduous
Berberis buxifolia	Box-leaf barberry	shrub	zones 5-8	No	evergreen
Berberis xmentorensis	Mentor barberry	shrub	zones 5-8	No	deciduous
Buddleia davidii	Butterfly bush	shrub	zones 5-9	No	deciduous, also small tree
Chaenomeles speciosa	Flowering quince	shrub	zones 4-8	No	deciduous
Clethra alnifolia	Summersweet	shrub	zones 4-9	No	deciduous
Cornus sericea	Yellowtwig dogwood/ red osier dogwood	shrub	zones 2-8	No	deciduous
Corylus avellana	European filbert	shrub	zones 4-8	No	deciduous, also small tree
Cotinus coggygria	Royal purple smoketree	shrub	zones 5-8	No	deciduous
Cotoneaster apiculatus	Cranberry cotoneaster	shrub	zones 4-7	No	deciduous
Cotoneaster divaricatus	Spreading cotoneaster	shrub	zones 4-7	No	deciduous
Cotoneaster horizontalis	Rock cotoneaster	shrub	zones 5-7	No	deciduous
Cotoneaster spp.	Cotoneaster	shrub	SCD*	No	SCD*
Daphne xburkwoodii	Burkwood daphne	shrub	zones 4-7	No	semi-evergreen
Deutzia gracilis	Slender deutzia	shrub	zones 4-8	No	deciduous
Forsythia xintermedia	Lynwood border forsythia	shrub	zones 5-8	No	deciduous
Hibiscus syriacus	Rose of Sharon	shrub	zones 5-8	No	deciduous, also small tree
Hydrangea macrophylla	Bigleaf Hydrangea	shrub	zones 5-8	No	deciduous
Hydrangea quercifolia	Oakleaf hydrangea	shrub	zones 5-9	No	deciduous
Ilex verticillata	Michigan holly	shrub	zones 3-9	Yes	deciduous
Mahonia repens	Creeping mahonia	shrub	zones 5-7	No	evergreen, also ground cover
Mahonia spp.	Creeping grape holly	shrub	SCD	No	evergreen
Myrica pensylvanica	Northern bayberry	shrub	zones 3-6	No	deciduous

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Shrubs (continued)					
Philadelphus spp.	Mock orange	shrub	SCD*	No	deciduous
Potentilla fruticosa	Shrubby cinquefoil	shrub	zones 2-6	Yes	deciduous
Prunus americana	Native plum	shrub	zones 3-8	Yes	deciduous, also small tree
Prunus besseyi	Sand cherry	shrub	zones 3-6	No	deciduous
Prunus tomentosa	Nanking cherry	shrub	zones 3-7	No	deciduous
Pyrancantha spp.	Pyracantha	shrub	SCD*	No	can have fireblight problems on more vigorous selection
Rhus spp.	Sumac	shrub	SCD*	SCD*	SCD*
Ribes alpinum	Green mound Alpine currant	shrub	zones 2-7	No	deciduous
Rosa carolina	Carolina cose	shrub	zones 4-9	Yes	deciduous
Rosa wichuriana	Memorial rose	shrub	zones 5-8	No	semi-evergreen
Rubus spp.	Raspberry	shrub	SCD*	SCD*	deciduous
Sheperdia canadensis	Russet buffaloberry	shrub	zones 2-6	Yes	deciduous
Shepherdia argentea	Silver buffaloberry	shrub	zones 2-6	No	deciduous, also small tree
Spiraea japonica	Daphne spiraea	shrub	zones 4-8	No	deciduous
Spiraea nipponica	Snowmound Nippon spiraea	shrub	zones 4-8	No	deciduous
Spiraea xvanhouttei	Vanhoutte spiraea	shrub	zones 3-8	No	deciduous
Symphoricarpos albus	Snowberry	shrub	zones 3-7	Yes	deciduous
Syringa spp.	Lilac	shrub	SCD*	No	deciduous
Syringa vulgaris	Common lilac	shrub	zones 3-7	No	deciduous
Syringa xprestoniae	Preston lilac	shrub	zones 3-7	No	deciduous
Viburnum trilobum	American cranberrybush viburnum	shrub	zones 2-7	Yes	deciduous
Viburnum trilobum 'Compactum'	Dwarf American cranberrybush viburnum	shrub	zones 2-7	No	deciduous
Viburnum carlesii	Korean spice viburnum	shrub	zones 4-8	No	deciduous
Viburnum dentatum	Arrowwood viburnum	shrub	zones 2-8	No	deciduous
Viburnum lentago	Nannyberry	shrub	zones 3-7	No	deciduous, also tree
Viburnum plicatum var. *tomentosum*	Doublefile viburnum	shrub	zones 5-8	No	deciduous
Viburnum prunifolium	Blackhawk viburnum	shrub	zones 3-9	Yes	deciduous
Viburnum xburkwoodii	Burkwood viburnum	shrub	zones 5-8	No	deciduous
Viburnum xrhytidophylloides	Willowwood or Allegheny viburnum	shrub	zones 5-8	No	deciduous
Weigela florida	Old fashioned weigela	shrub	zones 5-8	No	deciduous

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(continued)

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Botanical name	Common name	Category	Winter hardiness zones***	Native to Mich.**	Descriptors
Trees (continued)					
Acer campestre	Hedge maple	tree	zones 4-8	No	deciduous
Acer griseum	Paperbark maple	tree	zones 5-7	No	deciduous
Acer palmatum	Japanese maple	tree	SCD*	No	deciduous
Acer platanoides	Norway maple	tree	zones 4-7	No	deciduous
Acer rubrum	Red maple	tree	SCD*	Yes	deciduous
Acer saccharum	Green Mountain sugar maple	tree	zones 4-8	Yes	deciduous
Acer spp.	Maple	tree	SCD*	SCD*	deciduous
Aesculus hippocastanum	Horsechestnut	tree	zoness 4-7	No	deciduous
Alnus cordata	Italian alder	tree	zones 5-7	No	deciduous
Betula nigra	River birch	tree	zones 3-9	No	deciduous
Betula spp.	Birch	tree	SCD*	SCD*	deciduous
Carpinus betulus	Upright European hornbeam	tree	zones 4-7	No	deciduous
Catalpa speciosa	Northern catalpa	tree	zones 4-8	No	deciduous
Celtis occidentalis	Common hackberry	tree	zones 2-9	Yes	deciduous
Cercis canadensis	Eastern redbud	tree	zones 5-9; best from local seed source	Yes	deciduous
Cercis spp.	Redbud	tree	zones 5-9; best from local seed source	SCD*	deciduous
Cornus florida	Flowering dogwood	tree	zones 5-8; best from local seed source	Yes	deciduous
Crataegus phaenopyrum	Washington hawthorn	tree	zones 4-8	No	deciduous
Crataegus spp.	Hawthorn	tree	zones 4-7	SCD*	deciduous
Fagus spp.	Beech	tree	SCD*	No	deciduous
Fagus sylvatica	European beech	tree	zones 4-7	No	deciduous
Gleditsia triacanthos	Honeylocust	tree	zones 4-9	SCD*	deciduous
Gymnocladus dioicus	Kentucky coffee tree	tree	zones 3-8	Yes	deciduous
Juglans spp.	Walnut	tree	zones 4-7	Yes	deciduous
Liquidambar styraciflua	American sweetgum	tree	zones 5-9		deciduous
Liriodendron tulipifera	Tulip tree	tree	zones 4-9	Yes	deciduous
Magnolia stellata	Star magnolia	tree	zones 4-9	No	deciduous
Magnolia xsoulangiana	Saucer magnolia	tree	zones 4-9	No	deciduous
Malus spp.	Crabapple	tree	SCD	SCD*	deciduous
Nyssa sylvatica	Black gum	tree	zones 4-9	Yes	deciduous
Plantanus occidentalis	Eastern sycamore	tree	zones 4-9	Yes	deciduous
Platanus xacerifolia	London planetree	tree	zones 4-8	No	deciduous

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(continued)

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Botanical name	Common name	Category	Winter hardiness zones***	Native to Mich.**	Descriptors
Trees (continued)					
Populus spp.	Aspens, cottonwoods, poplars	tree	SCD*	SCD*	deciduous
Populus tremuloides	Quaking aspen	tree	zones 1-6	Yes	deciduous
Prunus cerasifera 'Atropurpurea'	Flowering plum	tree	zones 5-8	No	deciduous
Prunus serrulata	Kwanzan Oriental cherry	tree	zones 5-7	No	deciduous
Prunus subhirtella	Higan cherry	tree	zone 5-8	No	deciduous
Prunus virginiana	Chokecherry	tree	zones 2-6	Yes	deciduous
Prunus xyedoensis	Yoshino cherry	tree	zones 5-8	No	deciduous
Pyrus calleryana	Callery pear	tree	zones 5-8	No	deciduous, may break under heavy snow/ice loads
Quercus alba	White oak	tree	zones 3-9	Yes	deciduous
Quercus macrocarpa	Bur oak	tree	zones 3-8	Yes	deciduous
Quercus rubra	Red oak	tree	zones 3-7	Yes	deciduous
Quercus spp.****	Oak	tree	SCD*	SCD*	deciduous
Salix spp.	Willow	tree	SCD*	SCD*	deciduous
Sorbus aucuparia	Euopean Mountain ash	tree	zones 3-7	No	deciduous, several pest problems
Vines					
Campsis radicans	Trumpet vine	vine	zones 4-9	No	deciduous
Clematis hybrids	Clematis	vine	SCD*	No	deciduous
Lonicera sempervirens	Trumpet honeysuckle	vine	zones 4-9	No	deciduous
Lonicera xheckrottii	Goldflame honeysuckle	vine	zones 4-9	No	semi-evergreen
Parthenocissus quinquefolia	Virginia creeper	vine	zones 4-9	Yes	deciduous
Wisteria sinensis	Chinese wisteria	vine	zones 5-8	No	deciduous

*SCD — Species and/or cultivar dependent.

**Michigan's critical dune guidelines allow only native plants to be used within 100 feet of the crest of a dune. In addition, any alteration on the lake side of the dune requires a permit, including establishing or reestablishing.

***Winter hardiness refers to the ability of the plant to withstand average low winter temperatures. Winter hardiness zones listed in the table refer to the USDA National Arboretum Plant Hardiness Zone Map (see page 12) which can also be found at http://www.usna.usda.gov/Hardzone/ushzmap.html. Other factors will also affect the suitability of a plant for a particular climate, such as heat, humidity, soil characteristics, and water availability.

(continued)

Leave at least 30 feet of defensible space between the building and solid stands of natural vegetation. Studies from two major wildfires in the western United States have shown that 85 to 90 percent of homes that survived those wildfires had 30 to 50 feet of defensible space and fire-resistant roofing materials. Liquid propane tanks, stacks of firewood and other potential fuels should also be located outside of this perimeter.

Houses and structures built at the crest of a hill should have 60 feet of defensible space because fire traveling uphill will move faster, be more intense and radiate more heat than a wildfire moving on level ground.

The term "ladder fuels" describes low-hanging branches and limbs that could catch fire from a wildfire moving across the ground. If the tree is combustible, such as a spruce or pine, the fire will ignite the lower branches and move upward. Should this happen, the radiant heat given off could set a nearby house or building on fire. Remove limbs and branches of combustible ornamental landscape trees within 6 to 8 feet of the ground so that fire cannot move from the ground to the lower branches of the tree and then into the canopy.

When you're planting any tree or shrub, it is important to match the species with the conditions in the planting site. Some species may grow better in sandy soils than in heavy clay soils. Some will do better than others in poorly drained areas. Other species may do better in the sun than in the shade. This information is often included on a tag attached to the tree or shrub at the garden center. If there is no tag, ask an informed employee about the preferred environment before purchasing. Again, your local Extension office will likely have this information as well. To obtain more information on planting landscape plants, obtain a copy of Extension bulletin E-2941, *A Guide for the Selection and Use of Plants in the Landscape*, from your county Extension office.

Maintaining the Yard and Shrubbery

If the landscape is not maintained properly, a wildfire can move across the yard and ignite a home and other structures. To decrease this possibility, keep your lawn mowed and watered. A green lawn is unlikely to catch fire and will typically serve as a protective barrier around the home. On the other hand, a yard that is managed in natural vegetation or a lawn that has become very dry could allow a wildfire to move across it and pose a danger of igniting a deck or wood siding and then the house. The home and garage shown in Figure 4 were damaged because tall grass was allowed to grow too close to the structures.

It is also important to provide adequate water for newly planted trees and shrubs. Once these plants have grown and have established extensive root systems, they should usually be able to absorb sufficient nutrients from the soil and from lawn fertilizers. Regular watering will still be necessary, however, to reduce the possibility of ignition. Ornamental plants may or may not need special fertilization. This can be determined by a soil test, which is available through your local Extension office. For more information, pick up a copy of North Central Region publication 356, *Fertilizing Garden & Landscape Plants & Lawns*, from your county Extension office.

Figure 4. A wildfire in a grassy field melted the siding on this garage and home.
(Courtesy of Michigan DNR.)

Summary

Each year in Michigan, wildfires damage or destroy homes and other structures. A firewise home requires adequate defensible space, fire-resistant building materials, and eavestroughs and spaces around and under the base of the home kept clean of accumulated plant litter and debris. Firewise homeowners also place other fuels such as LP tanks and firewood stacks at a safe distance from the home (Figure 5). Adding fire-resistant plants and pruning trees can greatly increase the chances that a home or outbuilding will still be standing after a wildfire passes, while also providing the esthetics that the homeowner desires.

For more information on Michigan wildfires and protecting your home and family, pick up copies of Extension bulletins E-2831, *Protect Your Michigan Home from Wildfire*, and E-2882, *Understanding Wildfire Behavior in Michigan*, from your county Extension office.

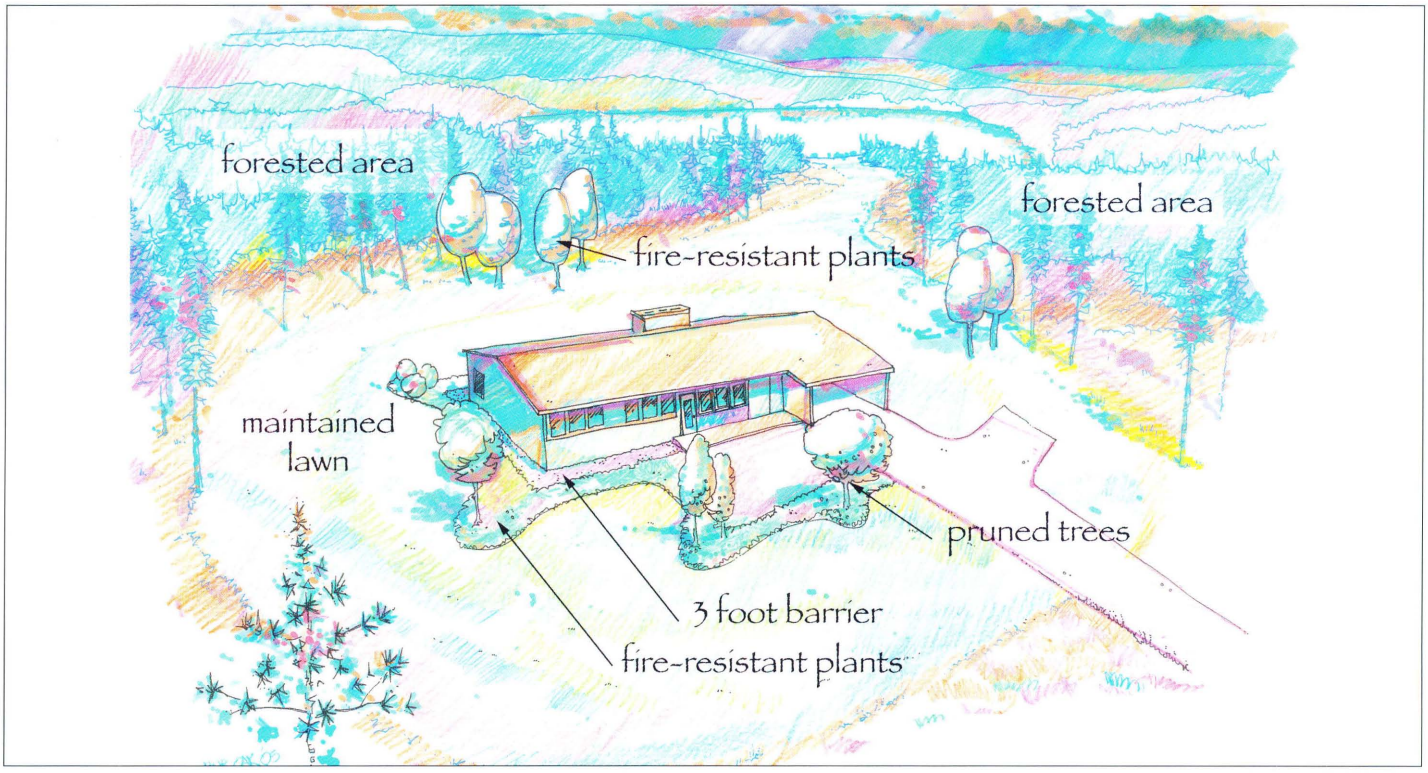


Figure 5. Firewise landscaping reduces the chance of wildfire damage to a home.
(Courtesy of Dr. Jon Bryan Burley, ASLA, associate professor, LAP director, MSU.)

Supporting Resources:

Wildfire in Michigan
www.firewise.msu.edu

Firewise Communities, 2009
www.firewise.org

Firewise Plant Lists, 2009,
Firewise Communities/USA.
www.firewise.org/usa/fw_plantlists.htm

Living With Fire: A Guide for the
Black Hills Homeowner.
www.state.sd.us/doa/forestry/
publications/Living%20With%20Fire.pdf

Firewise Plants Offer Colorful Choices
for Fire Safe Gardens
www.firewise.org/usa/files/Arkansas
PlantGuide.pdf

Fire Resistant Landscaping Plants
for the Sierra Springs Area
http://ceeldorado.ucdavis.edu/files/4017.pdf

Firewise Plant Materials
www.ext.colostate.edu/pubs/natres/
06305.html

Making Your Landscape More Resistant to Wildfires
www.firewise.org/usa/files/florida.pdf

Protecting and Landscaping Homes
in the Wildland/Urban Interface
www.cnr.uidaho.edu/extforest/Fire
ProtectBro.pdf

Fire-Resistant Plants for Montana Landscapes
http://extn.msu.montana.edu/
publications.asp

Firewise Plant Materials
http://aces.nmsu.edu/defensible_zone/
protect/docs_pdf/fire_wise.pdf

Firewise Plant Materials
www.ces.ncsu.edu/forestry/pdf/ag/
firewise_landscaping.pdf

Fire-Resistant Plants for Home Landscapes
http://extension.oregonstate.edu/
catalog/html/pnw/pnw590/pnw590.pdf

Fire Retardant Garden Plants for the Urban Fringe
and Rural Areas
www.fire.tas.gov.au/mysite/
publications/1709%20Brochure.pdf

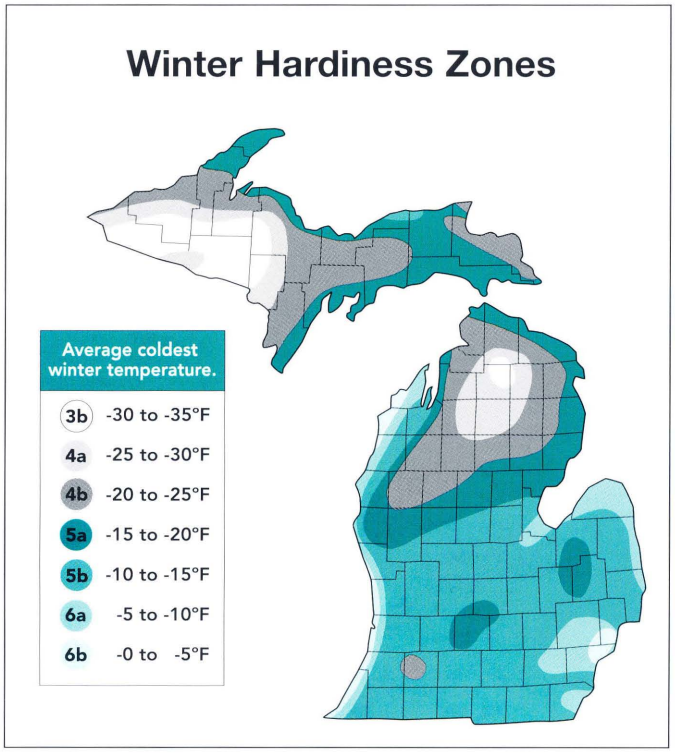
Quick Guide to Firewise Shrubs
www.interfacesouth.org/products/pdf/
Shrub_Flammability.pdf

Firewise Plants for Utah Landscapes
www.utahfireinfo.gov/prevention/
firewiseplants.pdf

Fire Resistant Plants
www.srd.gov.ab.ca/wildfires/firesmart/
default.aspx

Fire Resistant Plants for your Landscape
http://plumasfiresafe.org/Documents/PNF_BRD
%20Fire%20Resistant%20Plants.pdf

Firewise Landscaping
http://estore.osu-extension.org/
productdetails.cfm?PC=2050



For an online version of the USDA National Arboretum Plant Hardiness Zone Map for North America, go to: http://www.usna.usda.gov/Hardzone/ushzmap.html.

Other publications in the **Wildfire Series** are available from your MSU county Extension office or the MSU Bulletin Office, 117 Central Services Bldg., Michigan State University, East Lansing, MI 48824.

E-2831, Protect Your Michigan Home from Wildfire

E2831SP, Protegiendo Su Casa en Michigan de los Incendios Forestales

E-2882, Understanding Wildfire Behavior in Michigan

E2882SP, Comprendiendo la Conducta de los Incendios Forestales en Michigan

Michigan DNR

In cooperation with Michigan Dept. of Natural Resources and the USDA Forest Service.

MICHIGAN STATE UNIVERSITY EXTENSION