

Protect Your Home from Wildfire

Fire Resistant Vegetation and Landscaping

Alaska Department of Natural Resources / Division of Forestry / Community Forestry Program
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Create Defensible Space

Many Alaskans live in areas where wildfire is a threat each spring and summer. You may not be able to eliminate the threat, but you can take steps to protect your home or cabin. Fire resistant vegetation and appropriate landscaping can slow or stop the spread of fire and provide a safety zone for firefighters near your home. Firewise landscapes do not have to be stark and boring. Proper plant selection, placement, and maintenance can create a beautiful landscape that is also a defense from wildfire or an escaped structure or debris fire. To protect your home, create three zones of defensible space.

Zone 1 Within 30 feet of your home

On a steep slope, increase this distance to 100 feet downhill from the house.

- Plant ground covers and low-growing, herbaceous perennials, which retain more moisture than turf grass. Use only plants less than 18 inches tall near buildings.
- Don't plant or retain trees or shrubs with volatile foliage, such as evergreen needles, in Zone 1.
- Remove dense shrubs, tall grass, and dead trees.
- Deciduous trees may be planted or retained on the outer edges of Zone 1 if the trunks are 20 feet apart and crowns are at least 10 feet apart at maturity. For trees taller than 20 feet, remove branches within eight feet of the ground.
- Use rock or herb gardens and flower beds to create islands of vegetation.
- Use stone, gravel, concrete, and other non-flammable materials in walls, walkways, driveways, borders, and other landscape features to create fire breaks.
- Don't use a wooden walkway, fence, or wood chips in a way that could lead a fire to your house.
- Remove trees and branches growing within ten feet of a building, or any tree or shrub that drops debris on the roof or in gutters.
- Keep vegetation healthy and tidy by watering, pruning, and mowing as needed.

Zone 2 Area 60 feet beyond Zone 1

- Use deciduous trees and shrubs and a few widely-spaced conifers in Zone 2. Larch is a deciduous conifer that is less flammable than other conifers.
- Remove branches within eight feet of the ground on large trees and space trees so that crowns remain 10 feet apart at maturity. Surround trees with low growing ground covers and perennials.
- Space shrubs or groups of shrubs a distance of two to three times their height apart.
- Use flower and vegetable gardens and non-flammable features, such as rock, to break up areas of vegetation.

Zone 3 Woodlands beyond Zone 2

- Retain deciduous trees and shrubs but clear areas of dense vegetation.
- Thin spruce and remove lower branches. Prune in late summer or fall. A spruce tree wounded in the spring may attract spruce bark beetles.
- Mow tall grass or replace with less flammable plants.
- Retain healthy plants and a variety of species and ages.
- A trail in Zone 3 can serve as a fire break.

Maintenance

The key to a firewise landscape is regular maintenance.

- Thin vegetation to eliminate a continuous fuel source from wildlands to the house and to slow the spread of fire.
- Create islands of plants separated by less flammable material. Beds of plants with similar needs allow for easier watering and maintenance. Plants that are watered well are less likely to burn.
- Prune to eliminate ladder fuels—fuels at different heights and close enough together to allow a fire to climb from the ground into the crowns of trees, where it can spread rapidly.
- Don't prune more than 1/4 of a tree's crown in a year.

Access

Safe access can help you escape a fire and help firefighters reach your home.

- Create two access routes to your home if possible.
- A circular driveway in Zone 1 or 2 provides good access and a firebreak for your home.
- A two-way driveway should be at least 18 feet wide and have an all-weather surface to accommodate fire engines. Remove overhanging branches and create at least 15 feet of overhead clearance.
- Fire engines need a minimum turnaround radius of 60 feet on dead-end roads and cul-de-sacs.
- Clearly mark your driveway and display your address so that firefighters can find your home if necessary.

Fire resistant vegetation

All plants will burn under extreme conditions but fire resistant plants burn at a lower intensity with slower rates of spread and with shorter flame lengths.

Characteristics of plants that ignite and burn readily:

- Resinous plants, such as spruce, pine, juniper, and fir
- Leaves and wood containing waxes, terpenes, or oils
- Gummy, resinous sap with a strong odor
- Needle-leaved evergreens
- Stiff, leathery, fine, or lacy leaves
- Leaves that are aromatic when crushed

Characteristics of fire resistant plants:

- High water content and supple, moist leaves.
- Water-like sap (birch vs. pine)
- Little or no accumulation of dead vegetation on the ground or on the plant
- Slow-growing and well-adapted to the site so less care is required

Following are a few of the plants that may be used in firewise landscapes in Alaska if placed and maintained appropriately. Some ground covers are invasive and not appropriate for all locations. Check horticultural references and local garden centers for plants recommended for your area and for information on required growing conditions and uses of these plants.

Shrubs

Currant *Ribes alpinum*, *R. triste**
Red Elder *Sambucus racemosa**
Flowering almond *Prunus triloba*
Lilac, dwarf varieties *Syringa meyeri*, *S. patula*
Nanking cherry *Prunus tomentosa*
Potentilla *Potentilla fruticosa**
Rose *Rosa rugosa*, *R. glauca*, *R. acicularis**
Red-twig dogwood *Cornus stolonifera**
Serviceberry *Amelanchier alnifolia**
Silverberry *Eleagnus commutata**
Spirea *Spirea bumalda*, *S. betulifolia**
Viburnum *Viburnum lantago*, *V. trilobum*, *V. edule**

Trees

Amur chokecherry *Prunus maackii*
Amur maple *Acer tatarica* spp. *ginnala*
Apple and crabapple *Malus*
Birch *Betula papyrifera*,* *B. pendula*
Chokecherry *Prunus virginiana*
Japanese tree lilac *Syringa reticulata*
Larch *Larix russica*, *L. decidua*, *L. laricina**
Mountain ash *Sorbus aucuparia*, *S. decora*
Quaking aspen *Populus tremuloides**

Ground covers and perennials

Berginia *Berginia crassifolia*, *B. cordifolia*
Bleeding heart *Dicentra spectabilis*, *D. eximia*
Buttercup, creeping *Ranunculus repens*
Chocolate lily *Fritillaria camschatcensis**
Columbine *Aquilegia**
Creeping Jenny *Lysimachia nummularia*
Dwarf dogwood *Cornus canadensis**, *C. suecica**
Ferns, native and non-native
Goutweed *Aegopodium podagraria*
Hosta *Hosta*
Iris *Iris sibirica*, *I. setosa**
Jacob's ladder *Polemonium**
Johnny-jump-up *Viola tricolor*
Kinnikinick *Arctostaphylos uva-ursi**
Lily of the valley *Convallaria majalis*
Nagoonberry *Rubus arcticus** 'Kenai Carpet'
Phlox, creeping *Phlox stolonifera*
Rhubarb *Rheum rhabarbarum*
Speedwell *Veronica**
Yarrow *Achillea**
Tulip *Tulipa*
*Plants native to Alaska

For more information:

Contact the Alaska Community Forestry Program or the Cooperative Extension for information on plant selection, care, and pruning. Proper care can help keep your plants safe, healthy, and attractive.