The Lean, Clean, and Green Checklist:

- ✓ Emphasize the use of low growing herbaceous (non-woody) plants that are kept green during the fire season through irrigation if necessary. Herbaceous plants include lawn, clover, a variety of groundcovers, bedding plants, bulbs, perennial flowers, and conservation grasses.
- ✓ Emphasize use of mulches, rock, and noncombustible hard surfaces like concrete sidewalks, brick patios, and asphalt driveways.
- ✓ Deciduous ornamental trees and shrubs are acceptable if they are kept green and free of dead plant material, ladder fuels are removed, and individual plants or groups of plants are arranged so that adjacent wildland vegetation cannot convey a fire through them to the structure. Shorter deciduous shrubs are preferred.
- ✓ Mimimize the use of ornamental coniferous shrubs and trees such as juniper, arborvitae, and mugo pine and tall exotic grasses such as pampas grass.
- ✓ Where permitted, most wildland shrubs and trees should be removed from this zone and replaced with more desirable alternatives. Individual specimens or small groups of wildland shrubs and trees can be retained so long as they are kept healthy and free of dead wood, are pruned to reduce the amount of fuel and height, and ladder fuels are removed.
- ✓ For some areas substantial removal of wildland vegetation may not be allowed. In these instances, wildland vegetation should conform to the recommendations presented in steps 2 through 4. Please become familiar with local requirements and restrictions before removal of wildland vegetation.
- ✓ Tree limbs within 15 feet of a chimney, encroaching on powerlines, or touching the house should be removed.

The Three R's of Defensible Space:

Removal: This technique involves the elimination of entire plants, particularly trees and shrubs, from the site. Examples of removal are cutting down a dead tree or cutting out a flammable shrub.

Reduction: The removal of plant parts, such as branches or leaves, constitute reduction. Examples of reduction are pruning dead wood from a shrub, removing low tree branches, and mowing dried grass.

Replacement: Replacement is substituting less flammable plants for more hazardous vegetation. Removal of a dense stand of flammable shrubs and planting an irrigated, well maintained flower bed is an example of replacement.

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National Fire Protection Association

Arkansas Firewise Steering Committee



Creating **Defensible Space**

> Six Steps to Greater Fire Safety

Step One: How big is an effective defensible space? The size of the defensible space area is usually expressed as a distance extending outward from the sides of the house. This distance varies by the type of wildland vegetation growing near the house and the steepness of the terrain. On the "Defensible Space" chart below, find the vegetation type and the slope percent which best describes the area where your house is located. Then find the recommended defensible space distance for your situation. If the recommended distance goes beyond your boundaries, contact the adjacent property owners and work together on creating a defensible space. The effectiveness of defensible space increases when multiple property owners work together. The local assessor's office can help you find who the adjacent property owners are if you don't know. We do not recommend that you work on someone else's property without their permission.

Step Two: Is there any dead vegetation within the recommended defensible space area? Dead vegetation includes dead trees and shrubs, dried grass, dried flowers and weeds, dropped leaves and needles, firewood stacks, and dead branches, either lying on the ground or still attached to living plants.

Step Three: Is there a continuous dense cover of shrubs or trees present within the recommended defensible space area? Sometimes wildland plants can occur as an uninterrupted layer of vegetation as opposed to being patchy or widely spaced individual plants. The more continuous and dense the vegetation, the greater the wildfire threat. If this situation is present within your defensible space area, you should "break it up" by providing a separation between plants or small groups of plants. Not only are steep slopes dangerous wildfire areas, they are also highly erodable. When removing shrubs and trees from steep slopes, keep soil disturbance to a minimum. Also, it may be necessary to replace flammable vegetation with other plant materials to minimize soil erosion.

Step Four: Are there ladder fuels present within the recommended defensible space area? Vegetation is often present at varying heights, similar to the rungs of a ladder. Under these conditions, flames from fuels burning at ground level, such as a thick layer of pine needles, can be carried to shrubs which can ignite still higher fuels like tree branches. Vegetation that allows a fire to move from lower growing plants to taller ones is refereed to as "ladder fuel." The ladder fuel problem can be corrected by providing a separation between the vegetation layers. Within the defensible space area, a vertical separation of three times the height of the lower fuel layer is recommended. For example, if a shrub growing adjacent to a large pine tree is three feet tall, the recommended separation distance is nine feet. To get this separation distance, the lower tree branches could be removed, the height of the shrub reduced, or both. The shrub could also be removed.

Step Five: Is there an area at least 30 feet wide surrounding your house that is "Lean, Clean, and Green?" The area immediately adjacent to your house is particularly important in terms of effective defensible space.

It is also the area that is usually landscaped. Within an area extending at least 30 feet from the house, the vegetation should be kept...

- Lean--small amounts of flammable vegetation
- Clean--no accumulation of dead vegetation or other flammable debris, and
- Green--plants are healthy and green during the fire season.

The "Lean, Clean, and Green Checklist" will help you evaluate the area immediately adjacent to your house.

Step Six: Is the vegetation within the recommended defensible space area maintained on a regular basis? Keeping your defensible space effective is a continual process. At least annually, review these defensible space steps and take action accordingly. An effective defensible space can be quickly diminished through neglect.

What is a defensible space?

Defensible space is the area between a house and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and to provide an opportunity for firefighters to effectively defend the house.

Recommended distances / Steepness of slope Vegetation type Moderately steep Very steep Grass Flat to Gently Sloping Wildland grasses, weeds, and widely scattered shrubs with 30 feet 100 feet 100 feet grass understory Moderately steep Very steep Shrubs Flat to Gently Sloping Includes shrub dominant areas such as sagebrush and bitterbrush 200 feet and juniper 200 feet 100 feet Moderately steep Very steep Trees Flat to Gently Sloping Includes forested areas. If substantial grass or shrub understaory is present, use those values shown above. 100 feet 200 feet 30 feet