

In The Zone

NAME _____

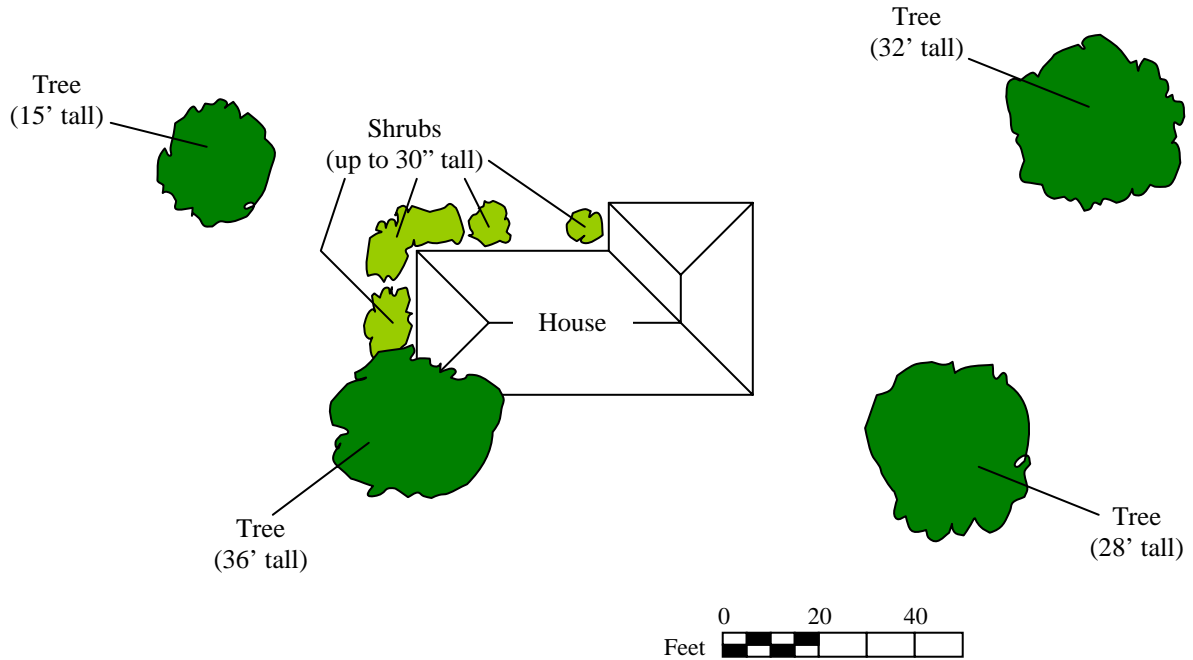
Read “Frequently Asked Questions about Defensible Space,” and then answer Question 1.

1. What is defensible space, and what does it do?

Creating defensible space around a home can be accomplished with a “zone concept.”

- **Zone 1** is the area within 30’ of the home (assuming the area around the house is flat). Zone 1 should contain only fire-resistant trees and plants. The area should be well irrigated to keep all plants healthy and to keep the ground moist. All trees and shrubs should obey the following guidelines:
 - Trees and shrubs should be spaced at least 30’ apart.
 - Trees over 18’ should be pruned to remove all branches within 6’ of the ground.
 - Trees under 18’ should be pruned to remove all branches up to 1/3 of their height.
 - All trees should be pruned so that no branches are within 10’ of the house.
 - Shrubs should be pruned so that they are no higher than 18”.
 - **Zone 2** is the area 30’ to 50’ from the home. It should contain low-growing, fire-resistant trees and plants. Trees and shrubs should be at least 10’ apart. Trees and shrubs should be pruned as in Zone 1.
 - **Zone 3** is the area 50’ to 100’ from the home. It is a mostly natural area that is regularly pruned. Highly flammable trees and shrubs should be removed.
2. Why are trees and shrubs spaced farther apart in Zone 1 than in Zone 2 or Zone 3? Why is it recommended that trees and shrubs be fire-resistant in Zones 1 and 2?
 3. Identify an object that is approximately 30 feet away from where you are currently sitting. Find another object that is 100 feet away.

4. The map below shows a house and its surrounding area. The ground around the house is flat. At the appropriate distances, draw lines around the house indicating Zones 1, 2, and 3.



5. In square feet, estimate the area of...

...Zone 1.

...Zone 2.

...Zone 3.

6. The shrubs near the house are between 12" and 30" tall. The four trees in the yard range in height from 15' to 36' tall, as indicated. What recommendations would you give the owner of this house to create defensible space?

FREQUENTLY ASKED QUESTIONS ABOUT DEFENSIBLE SPACE



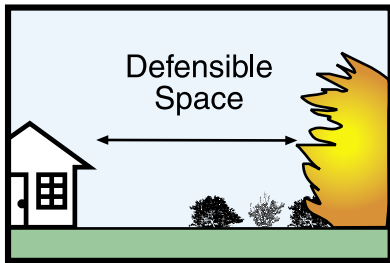
Photograph courtesy of Ben Hammack.

More and more homes are being built in high fire hazard environments.

In the 1980's, the term "defensible space" was coined to describe vegetation management practices aimed at reducing the wildfire threat to homes. This article responds to some of the commonly asked questions about defensible space.

WHAT IS 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. Sometimes, a defensible space is simply a homeowner's properly maintained backyard.



WHAT IS THE RELATIONSHIP BETWEEN VEGETATION AND WILDFIRE THREAT?

Many people do not view the plants growing on their property as a threat. But in terms of wildfire, the vegetation adjacent to their homes can have considerable influence upon the survivability of their houses. All vegetation, including plants native to the area as well as ornamental plants, is potential wildfire fuel. If vegetation is properly modified and maintained, a wildfire can be slowed, the length of flames shortened, and the amount of heat reduced, all of which assist firefighters to defend the home against an oncoming wildfire.

THE FIRE DEPARTMENT IS SUPPOSED TO PROTECT MY HOUSE, SO WHY BOTHER WITH DEFENSIBLE SPACE?

Some individuals incorrectly assume that a fire engine will be parked in their driveway and firefighters will be actively defending their homes if a wildfire approaches. During a major wildfire, it is unlikely there will be enough firefighting resources available to defend every home. In these instances, firefighters will likely select homes they can most safely and effectively protect. Even with adequate resources, some wildfires may be so intense that there may be little firefighters can do to prevent a house from burning. The key is to reduce fire intensity as wildfire nears the house. This can be accomplished by reducing the amount of flammable vegetation surrounding a home. Consequently, the most important person in protecting a house from wildfire is not a firefighter, but the property owner. And it's the action taken by the owner **before** the wildfire occurs (such as proper landscaping) that is most critical.

DOES DEFENSIBLE SPACE REQUIRE A LOT OF BARE GROUND IN MY LANDSCAPE?

No. Unfortunately, many people have this misconception. While bare ground is certainly effective in reducing the wildfire threat, it is unnecessary and unacceptable due to appearance, soil erosion, and other reasons. Many homes have attractive, well vegetated landscapes that also serve as effective defensible space.

DOES CREATING A DEFENSIBLE SPACE REQUIRE ANY SPECIAL SKILLS OR EQUIPMENT?

No. For the most part, creating a defensible space employs routine gardening and landscape maintenance practices such as pruning, mowing, weeding, plant removal, appropriate plant selection, and irrigation. Equipment needed includes of common tools like a chain saw, pruning saw, pruning shears, loppers, weed-eater, shovel, and a rake. A chipper, compost bin, or a large rented trash dumpster may be useful in disposing of unwanted plant material.

HOW BIG IS AN EFFECTIVE DEFENSIBLE SPACE?

Defensible space size is not the same for everyone, but varies by slope and type of wildland vegetation growing near the house. See the article entitled "Creating An Effective Defensible Space" for specific information.



Photo courtesy of Dave Hill

DOES DEFENSIBLE SPACE MAKE A DIFFERENCE?

Yes. Investigations of homes threatened by wildfire indicate that houses with an effective defensible space are much more likely to survive a wildfire. Furthermore, homes with both an effective defensible space and a nonflammable roof (composition shingles, tile, metal, etc.) are many times more likely to survive a wildfire than those without defensible space and flammable roofs (wood shakes or shingles). These conditions give firefighters the opportunity to effectively and safely defend the home.

DOES HAVING A DEFENSIBLE SPACE GUARANTEE MY HOUSE WILL SURVIVE A WILDFIRE?

No. Under extreme conditions, almost any house can burn. But having a defensible space will significantly improve the odds of your home surviving a wildfire.

WHY DOESN'T EVERYONE LIVING IN A HIGH WILDFIRE HAZARD AREA CREATE A DEFENSIBLE SPACE?

The specific reasons for not creating a defensible space are varied. Some individuals believe "it won't happen to me". Others think the costs (time, money, effort, loss of privacy, etc.) outweigh the benefits. Some fail to implement defensible space practices simply because of lack of knowledge or misconceptions.

<p>HOW DO I CHANGE THE VEGETATION ON MY PROPERTY TO REDUCE THE WILDFIRE THREAT?</p> <p>The objective of defensible space is to reduce the wildfire threat to a home by changing the characteristics of the adjacent vegetation. Defensible space practices include:</p> <ul style="list-style-type: none"> • increasing the moisture content of vegetation. • decreasing the amount of flammable vegetation. • shortening plant height. • altering the arrangement of plants. <p>This is accomplished through the "Three R's of Defensible Space." The article "Creating An Effective Defensible Space" provides detailed information about changing vegetation characteristics for defensible space.</p>	<h2 style="text-align: center;">THE THREE R's OF DEFENSIBLE SPACE</h2> <table border="1" style="width: 100%;"> <tr> <td style="text-align: center; color: blue;">Removal</td> <td>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.</td> </tr> <tr> <td style="text-align: center; color: orange;">Reduction</td> <td>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.</td> </tr> <tr> <td style="text-align: center; color: green;">Replacement</td> <td>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.</td> </tr> </table>	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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