



Ten Frequently Asked Questions About Defensible Space

**Ed Smith, Natural Resource Specialist
University of Nevada Cooperative Extension**

As northern Nevada communities grow, the likelihood of homes being threatened by a wildfire also grows. A critical factor in determining whether or not a home will survive a wildfire is the type, amount, and maintenance of vegetation surrounding the house. In the 1980's, the term "defensible space" was coined to describe vegetation management practices aimed at reducing the wildfire threat to homes. This fact sheet addresses some of the frequently asked questions regarding defensible space.

QUESTION ONE: WHAT IS DEFENSIBLE SPACE?

Defensible space refers to that area between a house and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for fire fighters to effectively defend the house. Oftentimes, a defensible space is simply a homeowner's backyard.

QUESTION TWO: 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, what is growing adjacent to their homes can have considerable influence upon the survivability of their houses. All vegetation, including naturally occurring native plants and ornamental plants in the residential landscape, is potential wildfire fuel. If the vegetation is properly modified and maintained, a wildfire can be slowed down, the length of flames shortened, and the amount of heat reduced, all of which contribute to a house surviving a wildfire.

QUESTION THREE: WHY IS DEFENSIBLE SPACE NECESSARY? WON'T THE FIRE DEPARTMENT PROTECT MY HOUSE?

Some individuals incorrectly assume that a fire truck will be parked in their driveway and fire fighters will be actively defending their homes if a wildfire approaches. During a major wildfire, it is unlikely that there will be fire fighting resources available to defend every home. Even with adequate resources, some wildfires may be so intense that there may be little that fire fighters can do to prevent a house from burning. The key is to reduce fire intensity as a wildfire nears the house. This can be accomplished by reducing the amount of flammable vegetation surrounding a home.

QUESTION FOUR: DOES DEFENSIBLE SPACE REQUIRE A LOT OF BARE GROUND AROUND A HOUSE?

No. While bare ground would certainly provide an effective defensible space, it is not necessary and looks bad. Bare ground may also cause soil to erode. Many homes have yards that are both effective defensible spaces and attractive landscapes with little or no bare ground.

QUESTION FIVE: 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. The necessary equipment consists of common tools like a chain saw, pruning saw, pruning shears, loppers, weedeater, shovel, and a rake. A chipper, compost bin, or a large rented trash dumpster may be useful in disposing unwanted plant material. Annual maintenance will likely be required to retain an effective defensible space.

QUESTION SIX: HOW BIG IS AN EFFECTIVE DEFENSIBLE SPACE?

Defensible space size is usually expressed as the distance from the house in which vegetation is managed to reduce the wildfire threat. The necessary distance for an effective defensible is not the same for everyone, but varies by slope and type of native vegetation growing near the house. An example of defensible space distances is presented on the back page of this publication. Contact your local fire marshal for suggested defensible space distances specific to your area. If your recommended distance exceeds your property boundaries, contact the adjacent property owner and try to work cooperatively on creating a defensible space. The effectiveness of defensible space increases when multiple property owners work together.

QUESTION SEVEN: WHAT SHOULD I DO TO MAKE MY PROPERTY DEFENSIBLE?

Within the recommended defensible space distance, conduct the following activities:

- Remove dead vegetation (i.e., dead trees and shrubs, dried grass and flowers, dead branches, fallen leaves, etc.).
- Remove lower branches from mature trees to a height of eight feet from ground level. Also, remove small trees and shrubs growing under mature trees.
- Remove tree branches within 15 feet of a chimney or stove pipe. Keep vegetation clear of power lines and decks.
- Remove the majority of native shrubs and trees within 30 feet of the house. Retaining a few well maintained native shrubs and trees within the 30 feet is acceptable. Avoid leaving native trees in front of large windows and adjacent to decks.

- Beyond 30 feet, remove native shrubs to provide a separation between shrubs of approximately three times the shrub height (i.e., if shrub height is 2 feet, then 3 x 2 feet = 6 feet separation). Thin mature native trees to provide a separation of at least 10 feet between tree crowns.
- Selectively thin and maintain remaining native vegetation at a shorter height through pruning.
- Selecting ornamental plants for use in the defensible space should emphasize:
 - herbaceous plants (i.e., non woody plants such as turfgrass, perennial and annual flowers, etc.) over shrubs and trees.
 - shorter growing plants over taller plants.
 - deciduous plants over evergreens
- Avoid extensive plantings of coniferous plants (e.g., junipers, pines, and spruce).

QUESTION EIGHT: DOES HAVING AN EFFECTIVE 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 (e.g., composition shingles, tile, metal, etc.) are many more times likely to survive a wildfire than those without a defensible space and flammable roofs (i.e., wood shakes or shingles).


QUESTION NINE: 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.

QUESTION TEN: 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 that "it won't happen to me". Others think the costs (i.e., time, money, effort, etc.) outweigh the benefits (i.e., improved protection for property). But some have failed to implement defensible space practices because of lack of knowledge or misconceptions. For those individuals wanting to learn more about defensible space, contact your local Cooperative Extension office or fire marshal.

Source: University of Nevada Cooperative Extension Fact Sheet 96-39

 <p>UNIVERSITY OF NEVADA COOPERATIVE EXTENSION Bringing the University to You</p>	<p>The University of Nevada, Reno is an Equal Employment Opportunity/Affirmative Action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and sexual orientation in any program or activity it operates. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States.</p>
--	---