

# HOME WILDFIRE PROTECTION GUIDE



*A lone chimney resulting from the 1989 Black Tiger Fire is a constant reminder to all about the wildland/interface potential.*

## A Letter To Routt County Residents

*It is no longer a matter of "if" but "when"  
Are you prepared?*

Wildfires are striking homes throughout the United States, and, unfortunately no area is immune from the threat of wildfire. This is particularly true within the forested homesite areas in our community.

In order to deal with this threat to the local communities, the Routt County Wildland Fire Council was established in 1992. The Wildland Fire Council consists of the Routt County Sheriff's Office, U.S. Forest Service, Bureau of Land Management, Colorado State Forest Service, Routt County Emergency Management, Routt County Road & Bridge, City of Steamboat Springs Fire Department, West Rout Fire Protection District, North Rout Fire Protection District, Oak Creek Fire Protection District, and the Yampa Fire Protection District.

The mission of the Routt County Wildland Fire Council is to provide guidance, public education, mitigation options, assistance in the development of an overall wildland/urban interface fire plan, integration of all emergency management resources responses, assistance to the Routt County Sheriff and to increase the level of preparedness for wildfire within Routt County.

Many homes in Routt County are at risk from wildfire. It is no longer a matter of "if" but "when". Are you prepared? It is our intent that this publication will give you the information you need, and the motivation to implement the recommendations, so that you will be prepared.

**Routt County Wildland Fire Council**  
P.O. Box 773598  
Steamboat Springs, CO 80477-3598

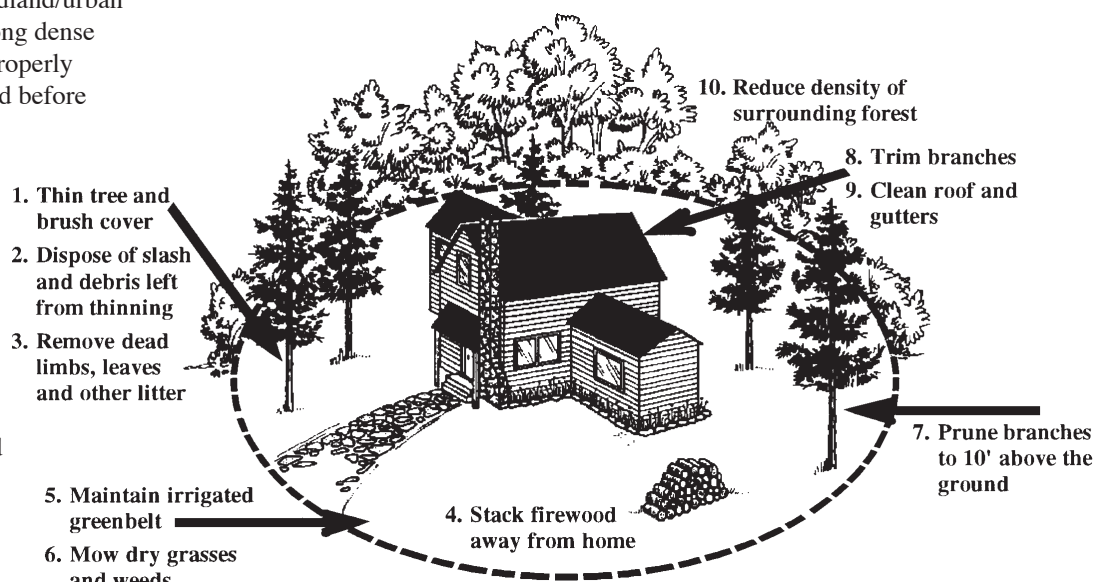
## Defensible Space Around Woodland Home Is Best Protection From Wildfire

Wildland fire is a vital concern when combined with the wildland/urban interface. The isolation of a single dwelling nestled beneath and among dense brush, grass, or timber can be detrimental to the structure. Without properly preplanning for an occurrence, a structure can be hopelessly destroyed before volunteer fire departments arrive.

The easiest way to help mitigate these situations is by creating "defensible space" around a structure. "Defensible space" refers to a minimum of 30-foot radius around a dwelling. This space is basically a break in the fuel. This space would help reduce the rate of spread and the radiant heat produced from a wildland fire, and therefore, give firefighters a "defensible space" in which to save the structure.

Additional criteria for "defensible space":

- There should be easy access for firefighters and their equipment. This includes adequate width of 20 feet and height of 15 feet as well as adequate turn-around space.
- Remove branches which overhang within 15 feet of the chimney and roof.
- Enclose openings under eaves (soffit) and overhangs.
- Utilize non-combustible roof material.
- Keep debris clear of decks and porches. Enclosure around the base is key. Screen porches are helpful.
- Develop an outdoor water supply with a hose and variable nozzle. This could be a pond, hydrant or even a well. A pump might be needed.
- Have ABC-class fire extinguishers in several locations.
- Clear vegetation within three feet of hydrants.
- Reduce woody vegetation around fuel sources (i.e. propane or gasoline tanks).



- Keep powerlines clear. If underground powerlines and/or telephone lines exist, they should be marked.
- Post name and address signs in a clearly visible location from the road.

**W**ILDFIRE! That word may conjure up an image of blazing forest in Yellowstone or the mountain wilderness, but your home is at risk of wildfire whether you live in the middle of the forest or the center of a subdivision. The loss of the Steamboat II home of Steve and Kim Losasso dramatically and tragically demonstrated this in May of 1996.

The morning dawned with the promise of a lovely spring day. That week Steve graduated from his law enforcement certification program and the couple learned they were expecting another child. Though still in mud season, Steve and Kim dedicated time to doing yard work. Steve raked the yard. Since the day was calm and clear, Steve determined it was safe to burn a small amount of grass clippings - still damp - in an old barbecue pit. Though soggy and very slow to start, Steve managed to burn several handfuls of grass and debris. His clean up finished, Steve dumped two buckets of water on the pit, washed out his wheel barrow and dumped that water into the pit. He then went into town to do errands, leaving Kim inside cleaning up and feeding their youngest daughter while their sons played with neighbors. Kim set down a quick lunch and went to phone her sister when she saw smoke rising from the side of the house.

Within minutes, a sheet of flame enveloped the wall of the house. Kim called 911 - and the dispatcher instructed her to immediately evacuate the home with her daughter. Kim grabbed her youngest child and escaped to the street, handing her daughter to a neighbor baby-sitter and running back into the house to save her pet cat of 15 years. She remembers a wall of flame - like a solid orange curtain - across the sliding glass doors. She again escaped to the street, where Steve returned from errands to find his home enveloped in smoke and flames. Not realizing his family was safe, Steve ran toward the house in an attempt to locate them - fortunately neighbors refused to allow him to venture inside. By this time, probably less than five minutes after Kim spotted the first traces of fire and smoke, the structure was engulfed in a roaring fire fanned by gusting winds.

Despite the best efforts of the Steamboat Springs Volunteer Fire Department - rapidly on scene with two dozen firefighters - the house was lost. The culprit was apparently a wind-blown ember. It drifted from the barbecue pit where Steve had been burning leaves, into a pile of firewood stacked neatly beside the house under a deck. While the early portion of the day was calm, intense winds whipped up in the afternoon, igniting the ember, spreading the flames and contributing significantly to the intense nature of the fire. Without the strong winds, the fire may have been easily extinguished by the volunteer firefighters. However, with the winds the fire was unstoppable.

What can you learn from this terrible event? Steve and Kim are open and frank in discussing their tragedy, and readily share what they learned from this experience in the hope of preventing you from suffering such a loss.

One point Steve stressed from his experience was the need to take any preventative measures possible to avoid a fire. Steve stated, "You can never be completely prepared - but - do as much as you possibly can." Every bit of preparation will pay off. Prepare today - it

## WILDFIRE A Local's Perspective

may prevent a fire from occurring, or should one break out, preparation may mean the difference between life and death.

When prevention fails and flames strike, remember that fire is fast, deadly, and ruthless! Your first action should be to evacuate a burning structure and get to safety. Don't worry about alerting authorities or calling 911 - get to safety first, and then call 911 from neighbors, a car phone, cell phone, or a safe place. Don't look for the pets, don't try and save belongings - GET OUT! Save lives, not materials. In referring to all their lost belongings, Kim emphasized "It was all just stuff; we can replace stuff, but we could never get over losing a child."

Once outside a structure, do anything possible to stop or slow the fire from outside - but never attempt to enter a burning building. Most often, garden hoses or bucket teams are ineffective in trying to control any but the smallest blaze. When the initial structure is fully engulfed or lost, be prepared to concentrate on saving surrounding homes by hosing down the exposed surfaces and roofs of neighboring structures.

The Losasso home was located in an area served by hydrants; even so the fire proved too much for the efforts of a modern firefighting force with a ready supply of water. Homes located away from hydrants or ready sources of water are particularly exposed to fire hazard. Homeowners without such water supplies should consider establishing suction supply hydrants in underground tanks or nearby ponds or streams.

If fire strikes and your home is lost, recovery can be long and difficult. To assist in recovery, the most important

tools are adequate insurance, detailed records, and outside assistance from volunteer agencies and support groups.

As Steve repeatedly states, "You can't be over-insured." Become very familiar with the terms of your home insurance; get it out today and review the details. Understand what is covered by insurance, and that the limit on replacing losses may include the cost of services (such as cleaning salvaged materials).

Detailed and accurate records are essential, and not just for insurance purposes. Mortgage, car, and other insurance payments don't stop. Utility, telephone, and cable providers must be notified to cease services and billing. School requirements and job responsibilities don't disappear. Life must go on, and good records will help you continue through this difficult time.

In order to best help fire victims - don't ask, just help. Few victims readily accept assistance, and when asked "Are you okay?" or "What can I do?" most victims

will not respond with a specific request for assistance.

Since most assisting agencies rely on volunteers, consider becoming a volunteer. Help in any way you can,



whether it's joining a volunteer fire department, assisting in a Red Cross food drive, or serving with a neighborhood or church organization. Only you can prevent fire, and only people like you can help victims recover.

Wildfire strikes anytime, in any conditions - wet season, snow, rain. Even with a rapid response by trained firefighters, a ready supply of water for initial attack, and sufficient personnel - fire can still completely destroy a home in a brutally short amount of time. Prevention is the key to avoiding fire or minimizing losses due to fire, and good planning is vital in prevention. Sit down today and review your prevention measures, safety procedures, and insurance policies. Don't wait for the fire to act, for fire certainly will not wait to strike until you are ready. Wildfire - it can happen to you.

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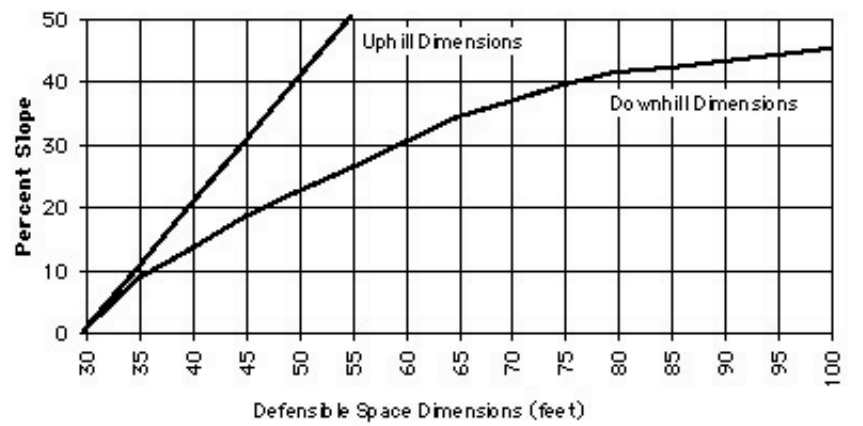
## Is Your Address Visible?

In order to respond efficiently to an emergency call, streets and addresses must be properly marked and visible from the road. Buildings that cannot be seen from the road should display their addresses on a 5 to 7 foot post no more than 25 feet from the road. Six inch reflective letters on a contrasting background is ideal.

## How Slope Affects Defensible Space

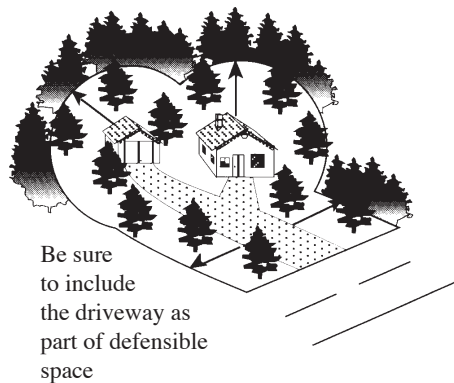
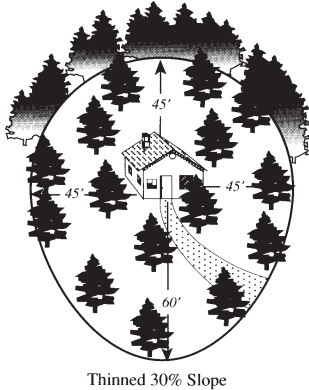
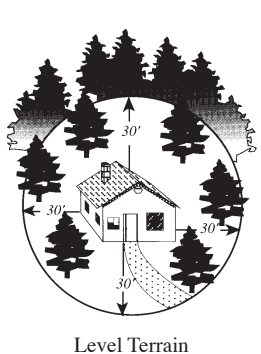
As heat rises, fuels on slopes preheat and ignite quickly, causing wildfires to travel faster upslope. Therefore, create larger defensible space around homes on slopes – particularly on the downhill side. Give special attention to ladder fuels on all sloping terrain.

The increase in defensible space size is based on increased rate of fire spread at the listed slopes. If you live on slopes other than those listed, use the slope chart to help determine your side and downhill dimensions. However, if the forest surrounding the defensible space has not been thinned, double



Example: If your home is situated on a 20-percent slope, defensible space dimensions would be 40 feet uphill and to the sides of your home, and 47 feet on the downhill side.

## Defensible space examples:



*This defensible space can save a home.*



## Routt County Fire Statistics - 1996

### State and Private Land

Number of fires reported: 31  
Number of acres: 335

### Federal Land

Number of fires reported: 8  
Number of acres: 4

## Water Supplies Make A Difference

Without water, fire suppression can be extremely difficult. Developing water sources for use by fire professionals during an emergency can be advantageous to both subdivisions as well as individual homeowners.

This water supply is critical because of the time involved for fire agencies to travel and get additional water. While water is carried on fire apparatus, the supply can be diminished in a matter of minutes. Hydrant systems, cisterns, ponds and streams are all examples of viable water sources for use by fire services.

While above-ground and natural sources may not always be available year-round, these water supplies can make the difference between a "save" and a "loss".

Developing an underground

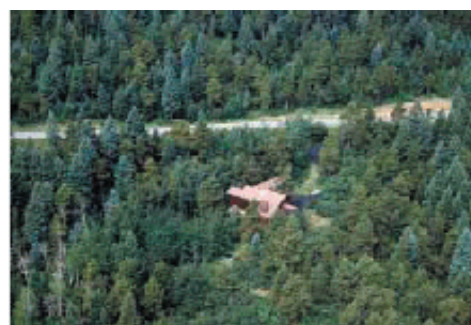
storage tank of at least 1,000 gallons is a good and viable option. Provided it is below the frost line, it can be used year-round. This type of system can be accessed by a fire apparatus or be used with a secondary pump.

Dry hydrants are another option. They are similar to normal hydrants, except that they are not pressurized. These hydrants require the apparatus to draft from a source, usually a lake or pond.

Access to a water source is very important and should not be ignored. The quicker a fire department can utilize a stable water source the quicker they can concentrate on fire suppression.



*This lack of defensible space is a disaster waiting to happen.*



## Wildfire Hazard Maps Benefit Routt County

Wildfire hazard maps and hazard reduction planning being utilized throughout the state are now becoming a part of Routt County. Wildfire hazard maps identify specific wildfire hazards. These hazards are rated based on the vegetation type as it pertains to fire behavior. For example, oak brush is more volatile than aspen.

These maps are currently being modified from ones created in the 1970s and will be entered into the county's geographic information system (GIS). Approximately 75% of the county is currently mapped.

The benefit of these maps combined with GIS will allow for a readily available information source to be used for growth and development planning, fire prevention, and fire suppression planning.

## Prescribed Fire – What Is It?

What is a prescribed or controlled burn? It is a calculated and carefully planned burn initiated by humans. It takes place under predetermined conditions or it is a lightning-started fire that is permitted to burn in a predetermined manner.

Prescribed or controlled burns are used to manage certain types of landscapes. These include reducing fuel buildup or manipulating vegetative conditions.

Before burning, fire managers create a fire plan that considers elements such as humidity, fuel moisture content, wind speed, slope and air temperature, and quantity and availability of fuel (natural buildup of leaf litter and woody growth). As part of the plan, fire managers determine how hot the fire will burn and in what direction the fire will travel.

Prescribed or controlled burns can reduce the amount of ground fuels. This reduction lowers the potential of large and uncontrollable wildfires. If future wildfires should happen, the fires would be less intense and easier to control.

Other benefits of prescribed or controlled burns include:

- insect pest control
- wildlife habitat improvement
- addition of nutrients for trees and other vegetation provided by ashes
- removal of undergrowth, allowing sunlight to reach the forest floor encouraging growth
- clearing of congested forest areas to assist in planting
- removal of undesirable plants that compete with wanted plants for nutrients



Fire, in a natural or prescribed form, is crucial to the maintenance and health of forest and grassland communities.

### Important Numbers

- Routt County Emergency Management. (970) 276-4138
- Routt County Sheriff's Office (970) 879-1090
- Steamboat Springs Fire Department (970) 879-0700
- West Routt Fire Protection District (970) 276-3511
- North Routt Fire Protection District (970) 879-3850
- Oak Creek Fire Protection District (970) 736-8104
- Yampa Fire Protection District (970) 638-4227
- Colorado State Forest Service (970) 879-0475
- U.S. Forest Service (970) 879-1870 (970) 638-4516
- Bureau of Land Management (970) 824-8261

**FOR A FIRE  
EMERGENCY DIAL 911**

## Open Burning - What To Do

Agricultural burning plays a vital role in the agricultural and ranching community by removing agricultural refuse and replacing nutrients in the soil.

Currently open burning is not allowed within the Steamboat Springs City limits, except for large recreational fires (permit from Steamboat Springs Fire Dept. – 879-2060 x 216). This is due to the close proximity of multiple structures as well as the density of people with respiratory problems affected/aggravated by smoke. However, those living outside the limits and choosing to burn have two options. In either case, please help emergency crews as well as neighbors limit the amount of excess concern or expenditures by doing the following:

1. Obtain a permit.
  - If you are burning rubbish, wood or other flammable material, or wood/herbaceous material for defensible space, contact Environmental Health (879-0185) for an *Courtesy Air Quality Permit*.
  - If you are burning agricultural refuse, contact Routt County Communications (879-1110) for a *Courtesy Open Burning Notification*. This involves the size of area to be burned, location, time, and property involved.
2. Be aware of expected weather conditions for burn day.

**Additional  
Assistance is Available  
For a Courtesy Homeowner  
Inspection Call  
276-4138**

## Wildfire Prevention And Survival

By: Belinda Mahosky, Sleeping Giant Agency

We'd like to believe it can't happen to us. Yet, every year, over 4,000 Americans die in fires, the vast majority of them in their homes. About 100,000 homes are lost annually along with 40,000 family pets and irreplaceable family treasures. Property damage amounts to billions of dollars.

If you have a fire in your home, how would you be able to get back your valuable property? Usually, after a fire has occurred, it is very hard to remember all your personal possessions in your home. You have just experienced a very traumatic occurrence in your life.

To make this process easier, take time to inventory all your personal property. Along with this, take pictures, even do a video of each room. Keep receipts of major purchases and store all of these items in a place other than your home. Most importantly, check with your insurance agent to make sure your valuable personal property is adequately insured.

The insurance industry has three main areas they review in determining how safe your home is to insure:

- Availability: How far is your home from the nearest

fire department? Are the roads to your home accessible year-round? How long do you think it would take for the fire department to respond to your residence? Is your home address clearly marked?

- Water Supply: Look to water sources near your home that can supply a constant water flow to fight a fire. If the dwelling does not have a hydrant nearby, are other water sources available? Look for natural water sources such as rivers, lakes, creeks, etc. Could the fire department draft from these sources year-round and still reach your home?
- Accessibility: Check to see if it would be difficult for a large fire fighting vehicle to maneuver through your driveway. Is the drive too steep, narrow, or winding? Is the driveway plowed during the winter months? Are there small or narrow bridges leading to your home? Is the clearance adequate?

Please remember to consider these fire protection guidelines before purchasing or building a home. It will help you get adequate insurance protection and at the same time keeping your insurance premium down.

### **Thanks to the following organizations in helping provide this supplement:**

Routt County Wildland Fire Council  
Sleeping Giant Agency, Inc.  
State Farm Insurance, Debbie Aragon  
Western Security  
Routt Fire and Safety

### Lessons Learned About Wildfire

1. Wildfires occur in all seasons of the year.
2. Wildfires occur in all fuel types. Grass, brush and trees are all equally susceptible.
3. Wildfires occur in all sizes. A small fire is just as capable of destroying your house as a large fire.
4. Wildfires may move with incredible speed.
5. Seldom are there enough trained personnel and necessary equipment to protect every structure. Professionals are forced to choose which homes can be defended and which can not. The actions you take now to protect your home will make a difference.