



# BIGHORN BASIN FIRESMART



BIGHORN BASIN FIRESMART COMMUNITIES

## BIGHORN BASIN FIRESMART IS FOUR YEARS OLD

This issue starts year five of the newsletter. With 15 issues behind us, and the recent addition of 700 Washakie County Firewise participants, we have pushed the reset button, and will be repeating some earlier Firewise articles/pages as reminders to long-time readers, and new information for those Washakie County folks who are receiving their first exposure to the Firewise concept and practices.

## FIREWISE COMMUNITIES IN THE BASIN

Besides the Canyon Creek Country Firewise Community sub-division (see their Work Day report on page 5), the area of the Bighorns surrounding Deer Haven Lodge is working on an application to become the sixth Firewise Community in Wyoming. Other communities are being encouraged to prepare and submit applications. Your county Firewise Coordinator (Page 2 information) can assist in this process if you and your neighbors are ready to jump in.



## WILDFIRE MITIGATION PLANS FOR CABINS & RURAL HOMES

Page 7 is the request form for obtaining a Wildfire Mitigation Plan (WMP) for your homestead or mountain cabin. Firewise has almost twenty of these to complete this year, and can add yours to the list for fall, if the weather cooperates.



You can now keep up on daily news and events with Bighorn Basin Firewise. Go to:

<https://www.facebook.com/bighornbasin.firewise>

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**THE BIG HORN BASIN FIREWISE COORDINATORS ARE:**

**Big Horn County:** The County Fire Warden is Brent Godfrey (307) 568-2324. The Firewise Coordinator is Chris Weydeveld, [cweydeveld@wytfs.com](mailto:cweydeveld@wytfs.com), Technical Forestry Services, LLC, 6628 W. Riverside Dr. Casper, Wyoming 82604, or (307) 333-1098 (office), (307) 272-9533 (mobile).

**Washakie County:** Chris Kocher, Fire Warden, [ckocher@worlandfire.org](mailto:ckocher@worlandfire.org), P.O. Box 504, Worland, Wyoming 82401, or (307) 347-6379. The Firewise Coordinator is Chris Weydeveld, [cweydeveld@wytfs.com](mailto:cweydeveld@wytfs.com), Technical Forestry Services, LLC, 6628 W. Riverside Dr. Casper, Wyoming 82604, or (307) 333-1098 (office), (307) 272-9533 (mobile).

**Hot Springs County:** No Firewise Coordinator has yet been selected. Contact Jay Duvall, County Fire Warden, at (307) 921-1485, or [hscdwarden@gmail.com](mailto:hscdwarden@gmail.com)

**Park County :** Bernie Spanogle, Firewise Coordinator, can be reached at [pcfirerwise@gmail.com](mailto:pcfirerwise@gmail.com). or at 307-250-9387. The County Fire Warden is Russ Wenke, [rwenke@parkcounty.us](mailto:rwenke@parkcounty.us), 1131 11th Street, Cody, Wyoming 82414, or (307) 527-8551.

**The basin Firewise website is being updated. The next newsletter will have the new address.**

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**If you have general or specific questions about Firewise, two good online sources of answers are: [www.firewisewyoming.com](http://www.firewisewyoming.com) and [www.livingwithfire.com](http://www.livingwithfire.com).**

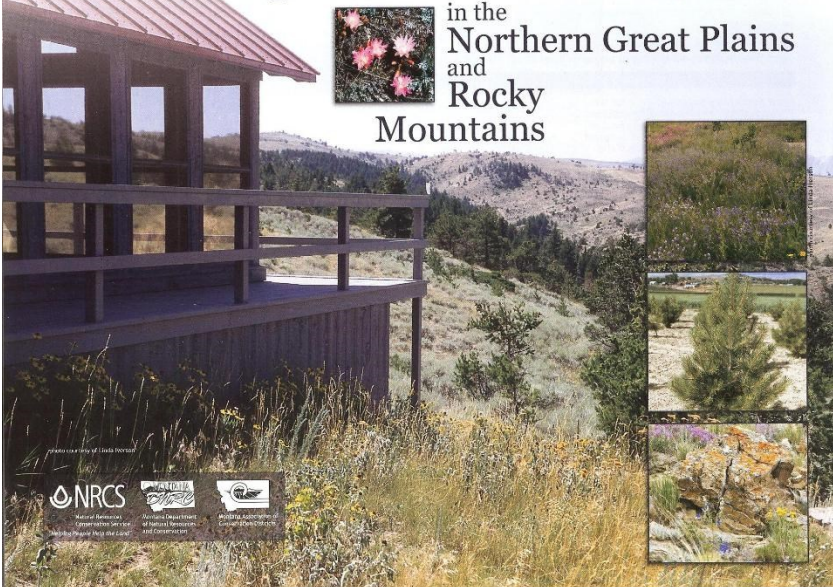
Do you have topics you would like included in future newsletters? Please submit your suggestions and comments to [firewise@wytfs.com](mailto:firewise@wytfs.com), to Chris Weydeveld at any of the above phone numbers, or by mail to G. Wynn, 824 Country Club Road, Casper, Wyoming 82609.

Thanks for providing this newsletter go to the Wyoming State Forestry Division, the Big Horn and Washakie County Fire Wardens, and the U.S. Forest Service. They provide the funding.

**This newsletter is provided as a service of your county’s Firewise Coordinator. If you choose not to receive future issues, please respond to [firewise@wytfs.com](mailto:firewise@wytfs.com), or to Big Horn/Washakie Firewise (6628 W. Riverside Drive, Casper, Wyoming 82604) by mail.**

# Creating Native Landscapes

in the  
Northern Great Plains  
and  
Rocky  
Mountains



This is obtainable from your local Natural Resources Conservation Service (NRCS) office. The recommended plants are not all considered acceptable for a Firewise application, so appropriate Firewise plant listings should be consulted when making selections for your site. The Firewise Wyoming publication “**PROTECTING YOUR HOME FROM WILDFIRE**” has a long list of plants for a Firewise landscape. The publication can be acquired at any Wyoming State Forestry Division office, or requested from your county’s Firewise Coordinator (See above).

# EMBER STORMS

Contrary to expectations, most houses that burn in Wildland Urban Interface wildfires are *not* ignited by the heat of flaming trees. The primary source of home ignitions is the “**Ember Storm**” that can occur in front of any wind-driven fire. While embers a mile in front of a fire are not unusual, in extreme cases, firebrands and embers have been observed *more than 10 miles* ahead of flames during high winds.

As you can see in the film clips mentioned below, an ember storm resembles a heavy rain or snow event; except, instead of rain drops or snow flakes, the storm is millions of flaming embers; each carrying the same amount of fire as a lighted match. And anything they touch that could be ignited with a lighted match, WILL ignite.

And ember storms are not just something that happens in a forest fire. Once any structure is ignited, it will contribute more embers and firebrands to the downwind ember storm. Flying embers have been the cause of fire burning through large urban subdivisions, destroying all of the homes. And this is not just something that happens in California.



The INSURANCE INSTITUTE FOR BUSINESS & HOME SAFETY has an ongoing program to conduct studies on the best materials and designs for *Firewise* homes. To do this, they have built models and full-size homes in their big laboratory, and subjected them to ember storms. To view the results of some of the tests and results, here are a few locations that your computer search engine should easily be able to find.

[IBHS Wildfire Ember Storm Test Demonstration Photos](#)

[Today Show piece on IBHS ember testing](#)

[IBHS Research Center Ember Storm Test Highlights](#)

[Mitigating the Effects of Ember Storm Conditions - IAFC ...](#)

[IBHS Tests Ember Storms' Impact on WUI](#)

Or, you can just do a computer search with the phrase “EMBER STORM.” You will get hundreds of “hits.” This same information is available without the video clips, in the Wildfire magazine and other publications that may be available at or through your local public library.



Tips to minimize the chance of an ember storm burning down your home or cabin, are most of the components of Firewise, and are included in all past and future issues of Bighorn Basin Firesmart. Sometimes they are the LITTLE THINGS THAT MATTER. At other times they are full page articles such as the Firewise Mulch story on the next page.



## FIREWISE AND MULCH

Mulch is defined as any material applied to the surface of soil for a decorative landscaping or as moisture retention cover. It is commonly used instead of grass, around the outside walls of homes. Some mulches are **GOOD** Firewise—others are **BAD**. Examples of mulches currently promoted for around your home, or as landscaping.

<u>PRODUCT</u>	<u>FIREWISE APPLICATION NOTES</u>
Gravel, Sand, or Cinders	Good if kept clear of vegetation, leaves, and conifer needles
Round River Rock	Good if kept clear of vegetation, leaves, and conifer needles
Tree Bark	Ignitable by flying embers. Should not be used near homes or outbuildings
Wood Chips	Ignitable by flying embers. Should not be used near homes or outbuildings
Shredded Tires	Ignitable by flying embers. Should not be used near homes or outbuildings
“Pine Straw”	Ignitable by flying embers. Should not be used near homes or outbuildings
Other Organic Material	Ignitable when dry. Should not be used near homes or outbuildings

Even when impregnated with fire retardant chemicals, all but gravel, rocks, or cinders can be ignited when dry, and will carry fire when ignited. They should never be used near structures.

As part of the application of suitable mulch near structures, or around propane tanks, soil sterilents or landscape cloth underlayment should be done before applying the mulch. This will minimize the growth of unwanted vegetation in the mulch. Neither treatment will completely eliminate the need for periodic weeding and removal of the usual leaves and tree needles.

If mulched borders are around window wells, the wells should be tightly covered, and cleaned at least annually to remove blown-in leaves.

Some examples of good Firewise mulching.



Coarse gravel pad under a deck



Covered window well and cinder mulch



Gravel and sand under & around storage shed



Fine gravel around foundation

### 2014 BIGHORN MOUNTAIN FIREWISE PICNICS

The Big Horn and Washakie County Firewise programs, in cooperation with County Fire Wardens and the Bighorn National Forest, had two well-attended picnics for Bighorn Mountain cabin-owners. More than fifty attended for a program of Firewise updates, Q&A sessions on the Forest Service cabin lease situation, and the Forest’s fuels treatment projects in the neighborhood of the cabin groups in the north and south ends of the Bighorns. The Willow Park picnic was “rain-shortened,” but informative.

A highlight of the Willow Park gathering was the cabin-owners group taking the first steps to become a Firewise Community.



### CANYON CREEK COUNTRY FIREWISE COMMUNITY WORK DAY

Canyon Creek Country held their 2014 work day August 9. That Bighorn Mountain subdivision was a busy place all day, with projects to remove roadside brush and trees; replace the decking on an important access bridge across Canyon Creek; pile hazardous woody fuels; perform needed maintenance on the community fire station; and conduct training on the community fire trucks. These folks are taking their fresh **Firewise Community** designation seriously.





## Another Firewise page courtesy of the Oregon Department of Forestry

Fire needs three fundamental elements for it to occur:

1. There must be fuel
2. There must be oxygen
3. There must be heat

Remove any one of these elements and fire will go out — or fail to start.

Since you cannot control the amount of oxygen in the atmosphere, and have limited control over natural sources of heat (such as lightning), it becomes all the more important to focus on the element you can control: fuel.

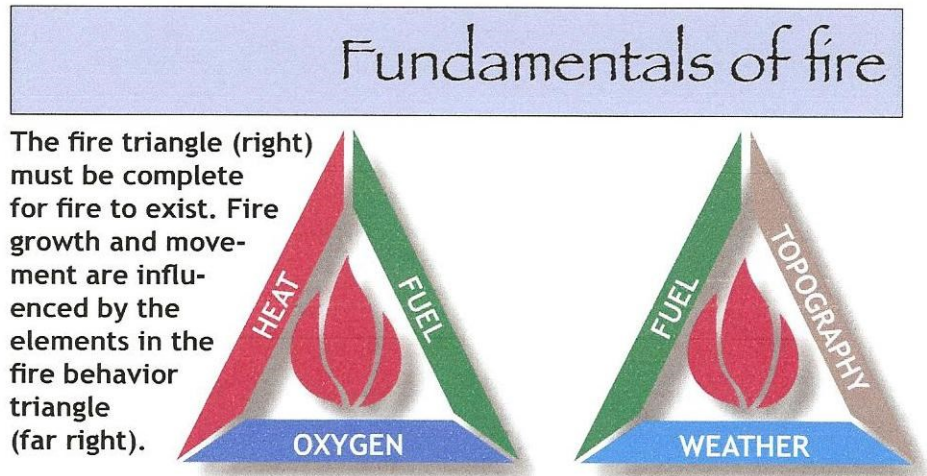
A fire's behavior — how it moves — is also controlled by elements in its environment. Basically, fire behavior is influenced by:

1. Available fuel
2. Weather factors, such as sun and wind
3. Topography

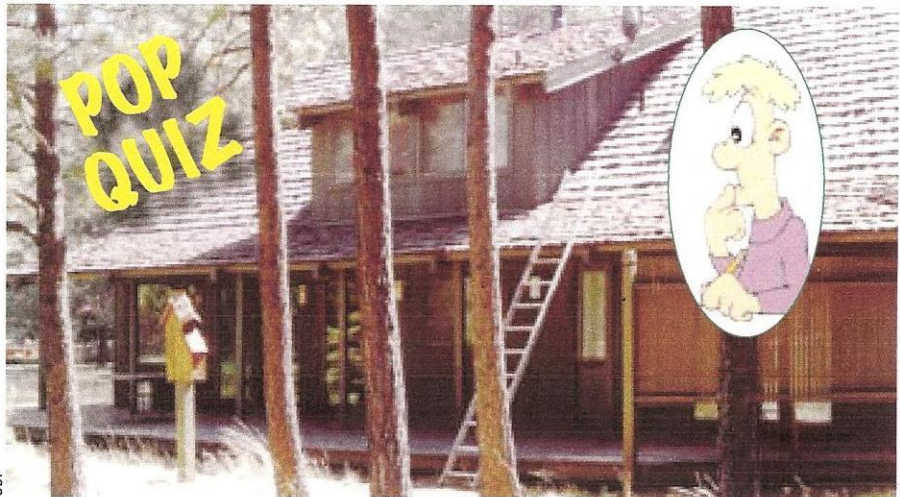
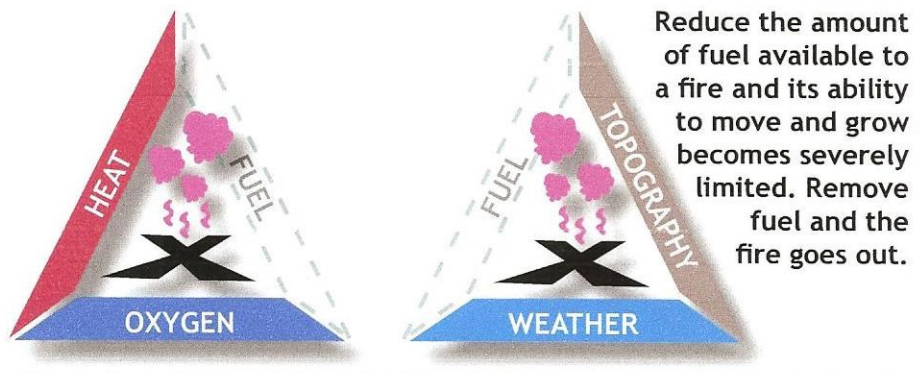
You cannot change the weather, and — in most cases — you can't flatten mountains or fill in valleys. But you can control the amount of fuel available to a fire.

The common denominator in the fundamentals of fire and the fundamentals of fire behavior is fuel. This is something that you can control that will reduce the likelihood of a fire starting and spreading. ❁

**Pop Quiz Answers:** 1 - H. Nearly everything in this photo will burn, except the metal ladder and the metal vent pipes. The glass won't burn, but it will burst — letting fire into the house — especially if the deck catches fire. 2 - C. The shake roof is this home's greatest liability. Firebrands from a wildfire a mile away could set this house on fire, and the resulting intense fire could burn the house to its foundation in minutes. 3 - F. The trees are of least concern. Green, healthy tree crowns can protect a roof from airborne sparks and firebrands. These trees have had their lower branches removed, making them less likely to transfer fire from the ground to the crowns.



## The common denominator is fuel



1. What sources of fuel for a fire do you see in this photo?

- |                    |                     |
|--------------------|---------------------|
| A. Tall, dry grass | E. Wooden posts     |
| B. Wooden deck     | F. Trees            |
| C. Shake roofing   | G. Pine needles     |
| D. Wooden siding   | H. All of the above |

2. Which fuel is of greatest concern?

3. Which fuel is of least concern?

**BIG HORN BASIN FIREWISE MITIGATION PLAN APPLICATION**

PROPERTY/CABIN OWNER: \_\_\_\_\_

PROPERTY/CABIN PHYSICAL LOCATION/ADDRESS: \_\_\_\_\_

PROPERTY/CABIN OWNER MAILING ADDRESS: \_\_\_\_\_

PROPERTY/CABIN OWNER TELEPHONE: \_\_\_\_\_

PROPERTY/CABIN OWNER E-MAIL ADDRESS (OPTIONAL): \_\_\_\_\_

PROPERTY PRIMARY USE – CHECK ALL THAT APPLY:

- \_\_\_\_ YEAR-ROUND RESIDENCE/RENTAL
- \_\_\_\_ SEASONAL OCCUPANCY RESIDENCE
- \_\_\_\_ COMMERCIAL OR BUSINESS
- \_\_\_\_ AGRICULTURE

NUMBER AND KIND OF STRUCTURES ON THE PROPERTY: \_\_\_\_\_

CHECK THOSE WHICH APPLY:

\_\_\_\_ PLEASE CONTACT ME TO ARRANGE A MITIGATION PLAN FOR MY PROPERTY

\_\_\_\_ I WANT MORE INFORMATION ON THE FIREWISE PROGRAM

\_\_\_\_ OTHER: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

*If your property is included in the Firewise program, would you allow Technical Forestry Services to use photos of it in future Bighorn Basin Firesmart newsletter and promotional programs? Photos would not be identified with addresses or homeowner’s names. Please check the one that applies.*

\_\_\_\_ YES. You may use photos of my property/cabin

\_\_\_\_ NO. Do not use photos of my property/cabin

LANDOWNER/CABINOWNER SIGNATURE: \_\_\_\_\_

LANDOWNER/CABINOWNER PRINTED NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

Submit application directly to:  
**Technical Forestry Services, LLC, 6628 W. Riverside Drive, Casper, Wyoming 82604**

*Big Horn/Washakie Firewise*  
*6628 W. Riverside Drive*  
*Casper, Wyoming 82604*



**IF THIS IS YOUR FIRST BIGHORN BASIN FIRESMART, WELCOME TO THE FIREWISE PROGRAM IN THE BIGHORN BASIN COUNTIES COVERED BY THIS NEWSLETTER.**

This quarterly newsletter will connect you to the **Firewise** concept for protecting your home and recreational-use residence from wildfires in the Wildland-Urban Interface (WUI). Topics will include ways to make your home, cabin, and landscape **Firewise**; picture stories of **Firewise** successes and failures; websites and publications related to **Firewise**; announcements of Firewise picnics for mountain cabin owners; and reports on the progress of the *Firewise Communities* program within the basin.

When requested, the Firewise Coordinator for your county (See Page 2 for names and contact information), will conduct a **Firewise** evaluation for your rural home, cabin, or woodland, and prepare a plan for your property, at no cost to you. Page 7 is a request form for that service.

**NOTE:** Effective Firewise evaluation visits must be done when the ground vegetation is visible, so response to any new requests may not be scheduled until next spring or summer.

If you would like more information about the **Firewise** program, contact your county's Firewise Coordinator, or visit the websites mentioned on Page 2.

If you do not wish to receive future copies of this newsletter, send a "NO THANK YOU" message to [firewise@wytfs.com](mailto:firewise@wytfs.com), or contact your county Firewise Coordinator.