BIGHORN BASIN FIRESMART

BIGHORN BASIN FIREWISE COMMUNITIES/USA®

ISSUE #26 — EARLY 2018

NOTE: As required by Firewise USA™, this newsletter will stop using "Firewise." Facebook and other Bighorn Basin programs will now be known as "Firesmart."

2017 BIGHORN BASIN FIRESMART ACCOMPLISHMENTS:

- Completion of an update to the Washakie and Big Horn County Community Wildfire Protection Plans (CWPP).
- Structural Ignitability fieldwork assessing over 600 structures in Big Horn and Washakie County Communities-at-Risk.
- Public outreach with three issues of Bighorn Basin Firesmart Newsletter.
- A Firewise USA™ picnic with mountain cabin owners.
- Completed a 35.5 acre forest health project in Big Horn County.
- Wildfire Mitigation Plans and Technical Assistance provided.
- Slash piles burned and grass seed established on burn areas.
- Secured a 2017 Western States WUI Grant with funding to continue the Bighorn Basin Firesmart program through 2020.

2018 PLANS AND PREDICTIONS

- Implementation of 100 acre Annie Tolman Fuels Reduction Project.
- Wildfire Mitigation Plans as requested by home and cabin owners.
- Creation and dispersal of four issues of Bighorn Basin Firesmart.
- Firewise USA™ information sharing picnic with mountain cabin owners.

ADVANCE NOTICE OF THE 2018 MOUNTAIN CABIN-OWNERS PICNIC

Bighorn Basin Firesmart will be hosting the 2018 Firewise USA™ Picnic again this year at the **Willow Park Group Picnic Area** in the Bighorn National Forest. The picnic will be Saturday, **June 16 from 11 am to 2 pm**. Barbecue Lunch, discussions on wildfire risk reduction around homes and cabins, and friendly visits always occur at these picnics. Mark it on your calendars now!

Contact Bighorn Basin Firesmart if your home or cabin in Washakie County are at risk from wildfire. A forester will make an assessment of your property, and develop a Wildfire Mitigation Plan (WMP) for your property at no cost to you. An appraisal of current and potential forest insects and disease problems will be made during this assessment. Please call (307) 272-9533, or contact us at Firesmart@wytfs.com. You can also visit us on Facebook at: https://www.facebook.com/BighornBasinFiresmart/ or the website at: www.wytfs.com - Chris Weydeveld, Firesmart Coordinator.

This and all future Bighorn Basin Firesmart issues will go only to E-mail recipients. All issues will also be available on Facebook, at:
https://www.facebook.com/BighornBasinFiresmart/

THE BIG HORN BASIN FIREWISE USA ™ COORDINATORS ARE:

Big Horn County: The County Fire Warden is Brent Godfrey (307) 568-2324.

Washakie County: Chris Kocher, Fire Warden, ckocher@worlandfire.org, P.O. Box 504, Worland, Wyoming 82401, or (307) 347-6379. The Firesmart Coordinator is Chris Weydeveld, 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: Contact Dion Robbins, County Fire Warden, at (307) 431-2767, or hscdwarden@rtconnect.com.

Park County: The County Fire Warden is Russ Wenke, rwenke@parkcounty.us, 1131 11th Street, Cody, Wyoming 82414, or (307) 527-8551.

The Basin Firewise website : parkcountyfirewise.com **When you get there, surf the MENU to see what articles, photos, and short video clips are there. Check it out.**

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

If you have general or specific questions about Firewise, two good online sources of answers are: www.firewisewyoming.com and www.livingwithfire.com.

Do you have topics you would like included in future newsletters? Please submit your suggestions and comments to **Firesmart@wytfs.com**, or by mail to G. Wynn, 824 Country Club, Casper, Wyoming 82609.

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

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

"SHELTER IN PLACE" or "STAY and DEFEND or LEAVE EARLY"

This was an idea that had rural homeowners staying "sheltered" in their homes during a wildfire. It depended on participants being trained on how to protect their home, keeping a good inventory of emergency supplies, and having the home and all outbuildings Firewise. Most wildfire professionals generally rejected the concept, as it assumed that most rural residents had the physical and mental fitness for the job. They also pointed out that many of the recent firefighting fatalities in the U.S. were people defending their own homes.

This policy got a reality check in Australia in 2009, when a series of fires burned more than 2,000 homes, and killed 173 people. **113 of the dead were found near their burned homes**, apparently killed while staying to defend their property.

The debate on this continues.

You can now keep up on daily news and events with Bighorn Basin Firesmart. Go to: https://www.facebook.com/BighornBasinFiresmart/

This page is a very basic condensed outline of how to reduce risk of wildfire damaging your home or cabin. Previous and following issues of this newsletter expand on details of each of the six items mentioned. The Johnson County example pictured may appear a little extreme, but provides a very good chance that the pictured home would survive a wildfire.

SIX STEPS TO EFFECTIVE DEFENSIBLE SPACE

[IN A NUTSHELL]

1. **Determine the size** of an effective defensible space for your situation— typically 100 feet. **

Then within this zone:

2. **Remove all dead vegetation.**

3. **Create a separation between trees and shrubs.** Thin dense pockets of trees. shoot for spacing of 10 feet between tree crowns.

4. **Reduce the ladder fuels.** Remove lower limbs from trees up to 10 feet above ground but no more than 25% of total tree crown. Remove ground plants to create separation between ground plants and tree limbs.

5. **Create a "Lean, Clean, Green" area** extending at least 30 feet from structures. Include a 3'-5' wide non-combustible area around base of each structure; cut dried grasses to 4 inches or less; remove tree limbs and shrubs (sagebrush) that are within 10' of structures. Store firewood outside this zone.

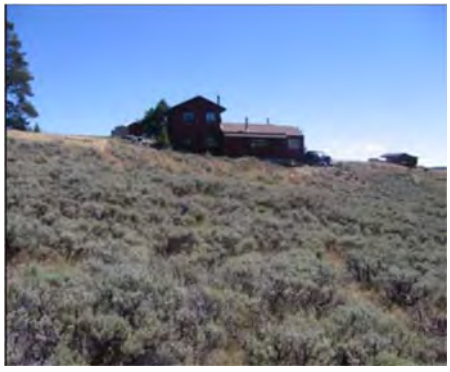
6. Then **Maintain** defensible space annually or as needed!! Repeat steps 2 through 5 every year and reevaluate the size of the defensible space—expand it if conditions warrant.

---

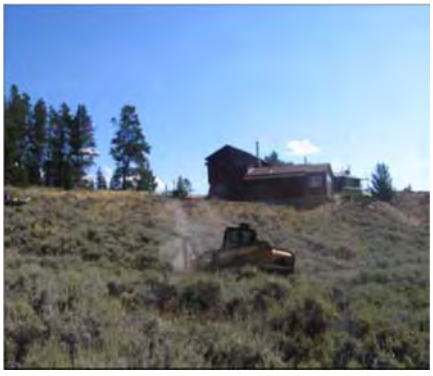
*BEFORE AND AFTER EXAMPLE FROM JOHNSON COUNTY**

Homes in grass and sagebrush environments can be seriously threatened by wildfire. Fires spread quickly in grass and brush especially when influenced by wind and slope conditions. Recognizing the potential for such fire threats to their homes, several homeowners in the vicinity of Dull Knife Subdivision shared costs to have approximately 28 acres of sagebrush ground with a mechanical masticator.

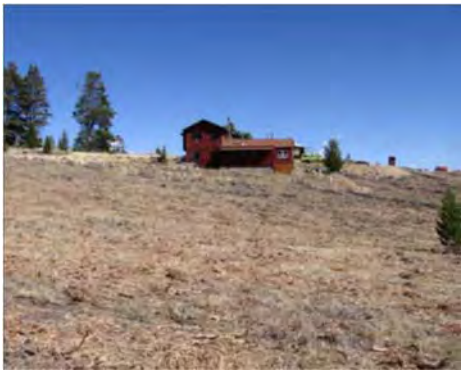
The result was a significant reduction in hazardous fuels that threatened a concentration of recreation residences. The anticipated rate of fire spread and intensity has been considerably reduced on the treated areas. The County Fire Mitigation Grant program covered 50% of treatment costs. [Applying the Six Steps for Creating Effective Defensible Space is still essential for assuring home protection.]



Before



During



After

*This page reprinted from Vol 4 Issue. 1 of ***Living With Fire.*** Thanks to Jim Shell, former Johnson County Firewise Coordinator.

** See Page 8 for a reminder diagram of the recommended Defensible Space around a home or cabin.

If your home or cabin is in a forest setting, there are steps that can be taken to promote survival of the conifer trees that are important to your landscape. While it is still necessary to have an implemented Wildfire Mitigation Plan (WMP) that does the prescribed tree thinning to reduce the fuel loading and laddering near your structures, this and the next page can be implemented to extend the life of your "favorite trees." The two processes are spring spraying of pine trees with insecticides, and using beetle-repelling anti-aggregate pheromones to disrupt potential attacks by tree-killing bark beetles. Use of anti-aggregate pheromones are considered safe to beneficial insects and humans.

Spraying pine trees with insecticides (*) is not a 100% solution, but **can** protect **some** individuals and groups of pine trees from bark beetles, if the trees have adequate spacing in relation to other surrounding trees. To be effective, a rule of thumb would be that the sprayed trees be at least a crown-width away from other trees, or in well-spaced two- or three-tree clumps. Annual spraying cost is estimated as about **$10** per tree. When considering options for bark beetle control, recognize that application of pesticides may also kill beneficial insects like honey bees and other pollinators.

SPRING SPRAYING OF PINE TREES

Get ready to apply preventive chemicals to your pine trees this spring. Wyoming State Forestry recommends that residents spray their pine trees starting in early June this year; even earlier if your area has a warm and dry spring.

While mountain pine beetle populations have dissipated in some forests statewide, firewood and raw log transport and natural beetle flight continue to place pine trees in communities and elsewhere at risk for attack. Preventive insecticides applied from the ground to the top terminal all the way around the circumference of the main stem using insecticides specifically labeled for mountain pine beetle have shown good results in keeping trees alive through this beetle epidemic.

All species of pine are susceptible including lodgepole pine, ponderosa pine, Austrian pine, Scotch pine, mugho pine, pinyon pine, and limber pine. Any pine tree with a trunk diameter of four inches or greater is a candidate for spraying, although it is usually best to only spray trees such as those on your landscape with the largest diameters or the nicest crowns. The most popular insecticides are chemicals with the active ingredient carbaryl. The trade names include SEVIN XLR Plus, Sevin SL, and Carbaryl 4L. Although these are not restricted-use pesticides, they are not over-the-counter products either, but can be purchased from a chemical distributor and are usually available at County Weed and Pest offices.

Other options include products with the active ingredient permethrin. Trade names for this product include Astro and Hi-Yield 38 Plus. These two products are available over-the-counter; check your local nursery and home improvement and garden stores for availability. Regardless of which product you use, read the label for instruction that specifically states preventive trunk-treatment application for mountain pine beetle.

Remember to apply the chemical to the main stem to the point of runoff. Avoid spraying on excessively windy or hot days. You might consider hiring a tree-spraying company licensed by the Wyoming Department of Agriculture. Feel free to call Wyoming State Forestry at 777-5495 if you need additional information.

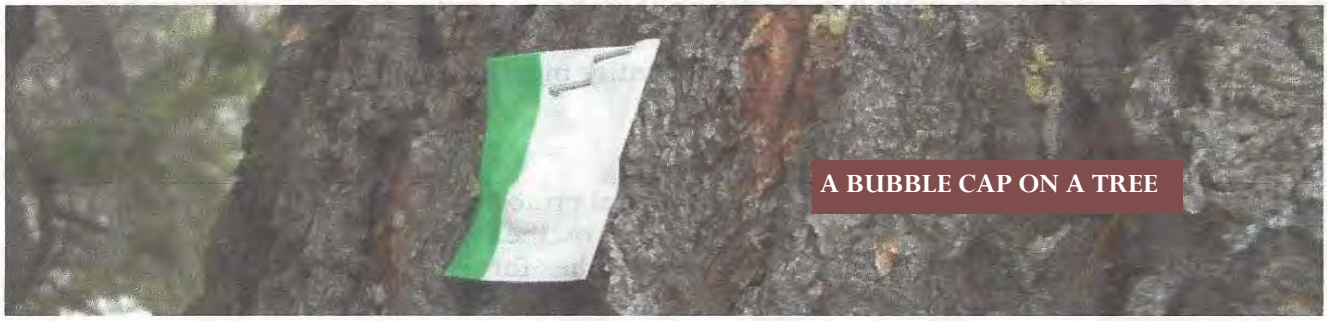
From the Spring 2012 issue of WYOMING TREE NEWS.

* PAGE 8 HAS A SHORT LIST OF BASIC THINGS TO DO IF YOU PLAN TO USE PESTICIDES

THESE TWO PAGES EXPLAIN BARK BEETLE PHEROMONES, AND HOW LANDOWNERS CAN USE THEM TO PROTECT INDIVIDUAL PONDEROSA AND LODGEPOLE PINE AND DOUGLAS-FIR TREES, AND GROUPS OF THESE TREES, FROM BARK BEETLE ATTACK AND THE RESULTING DEATH.

YOUR COUNTY'S FIREWISE COORDINATOR STRESSES THAT PHEROMONES AND SPRAYING PINE TREES WITH INSECTICIDES ARE *NOT* SUBSTITUTES FOR THINNING TO REDUCE TREE SUSCEPTIBILITY TO BARK BEETLE ATTACK. PHEROMONES AND/OR SPRAYING ONLY OFFER PROTECTION DURING THE YEAR THEY ARE APPLIED.

Bark Beetle Pheromones



A BUBBLE CAP ON A TREE

Many bark beetles mass-attack in order to overcome a tree's natural defense mechanisms. They communicate via chemical messages, called pheromones, and can emit an aggregation pheromone that solicits other beetles to attack the same tree. As the tree becomes too full to sustain additional offspring, they switch to emitting an anti-aggregation pheromone, essentially sending a "no vacancy" message to other beetles. Chemical ecologists have successfully isolated anti-aggregation chemicals that act as naturally occurring repellents. Two separate pheromones are available to manage mountain pine beetle and Douglas-fir beetle. Please note, these chemicals are species-specific so the correct pheromone must be used to target a specific beetle.

Pheromones are only effective in **preventing** beetle attacks; they cannot save a tree after it has been attacked.

Pheromones can be acquired from:

Mountain. pine beetle

Forestry Distributing, Inc.
ForestryDistributing.com
P.O. Box 18298
Boulder, CO 80308
303-747-6414
Toll Free 800-603-6271

Douglas-fir beetle

http://www.forestrydistributing.com/en/

Homeowners and landowners applying verbenone or MCH on their own property do not need a license to purchase or apply it.

PHEROMONE BUBBLE CAPS ARE ABOUT $2.00 EACH. UNLESS DONE BY THE LANDOWNER, LABOR IS ABOUT $20/TREE. EVERY PINE TREE NEEDS BUBBLE CAPS. DOUGLAS-FIR ONLY NEEDS PHEROMONE CAPS ON A GRID WITHIN THE STAND OF TREES.

COMPLETE INSTRUCTIONS COME WITH BUBBLE CAPS.

Bark Beetle Pheromones—Continued from Page 5.

VERBENONE for mountain pine beetle

Verbenone works against mountain pine beetle only; **not** pine engravers, red turpentine beetle, or western pine beetle. If you have current beetle activity in the immediate vicinity of the tree(s) you wish to protect, be sure to accurately identify mountain pine beetle versus western pine beetle or red turpentine beetle. *

- **Apply between June 15th and July 1st.**
- Read the pesticide label and use proper personal protective equipment as directed!
- Protect individual trees by placing two pouches on the stem; one each on the northwest and northeast side, if accessible. Use three pouches for trees larger than 24 inches circumference at chest height.
- Protect landscape trees by placing approximately 30 per acre in a grid pattern; 30 pouches per acre will be spaced approximately 40 feet apart. The aim is to permeate the stand with the verbenone. If following a grid pattern, it is not absolutely necessary to hang verbenone on a host tree if only a non-host tree (Douglas-fir, juniper, etc.), snag, fencepost, etc. is available.
- Packets last for **only one season** and need to be replaced each year that protection is desired.
- More information here: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5373188.pdf

MCH for Douglas-fir beetle

Methyl-cyclo-hexanone (MCH) works against Douglas-fir beetle only.

- **Apply by April 15th.** Earlier applications of MCH may dry out prior to beetle flight, so try to hang as close to this date as possible.
- Read the pesticide label and use the proper personal protective equipment!
- Protect individual trees by placing two pouches on the stem; one each on the northwest and northeast side, if accessible. Use three pouches for trees larger than 24 inches circumference at chest height.
- Protect landscape trees by placing 33 per acre in a grid pattern; 30 pouches per acre will be spaced approximately 40 feet apart. The aim is to permeate the stand with the MCH. If following a grid pattern, it is not absolutely necessary to hang MCH on a host tree if only a non-host (pine, juniper, etc.), snag, fencepost, etc. is available.
- Packets last for **only one season** and need to be replaced each year that protection is desired.
- More information here: http://dnrc.mt.gov/divisions/forestry/docs/assistance/pests/pheromones/mch_handbook_11_15_508.pdf

***Red turpentine beetles attack only the lower six feet of a tree. Western pine beetle is <u>not</u> a concern in the forests in and surrounding the Bighorn Basin.**

THE NATIONAL INTERAGENCY FIRE CENTER (NIFC) PREDITION IS THAT THIS SPRING, WYOMING *WON'T* HAVE THE WILDLAND FIRE POTENTIAL OF OUR NEIGHBOR MONTANA.

DRONES & WILDFIRES DON'T MIX

Officially these are "Unmanned Aircraft Systems," but most of us know them as "drones." While the radio-controlled versions have utility for emergency and natural resource management, and for news gathering, as they have gained popularity as hobbyist toys, they are having impacts on wildland firefighting. The National Interagency Fire Center (NIFC) shares these three statements:

1- Drones are fun, but potentially dangerous in the wrong place.

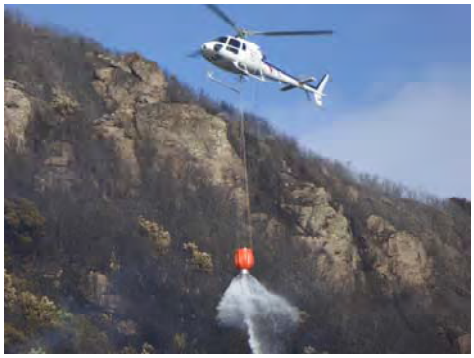
2- If You Fly, Someone Could Die.

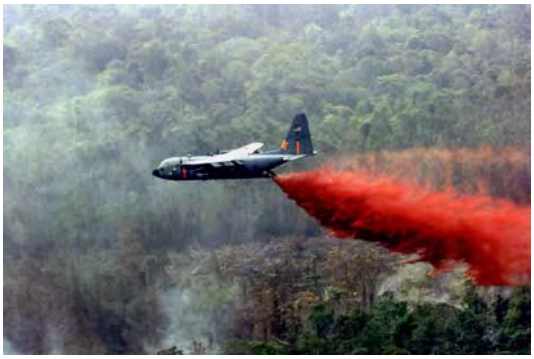
And if that isn't enough:

3- Flying a Drone Near a Wildfire is Breaking the Law

(43 CFR 9212.1(f), resisting or interfering with the efforts of firefighter(s) to extinguish a fire).

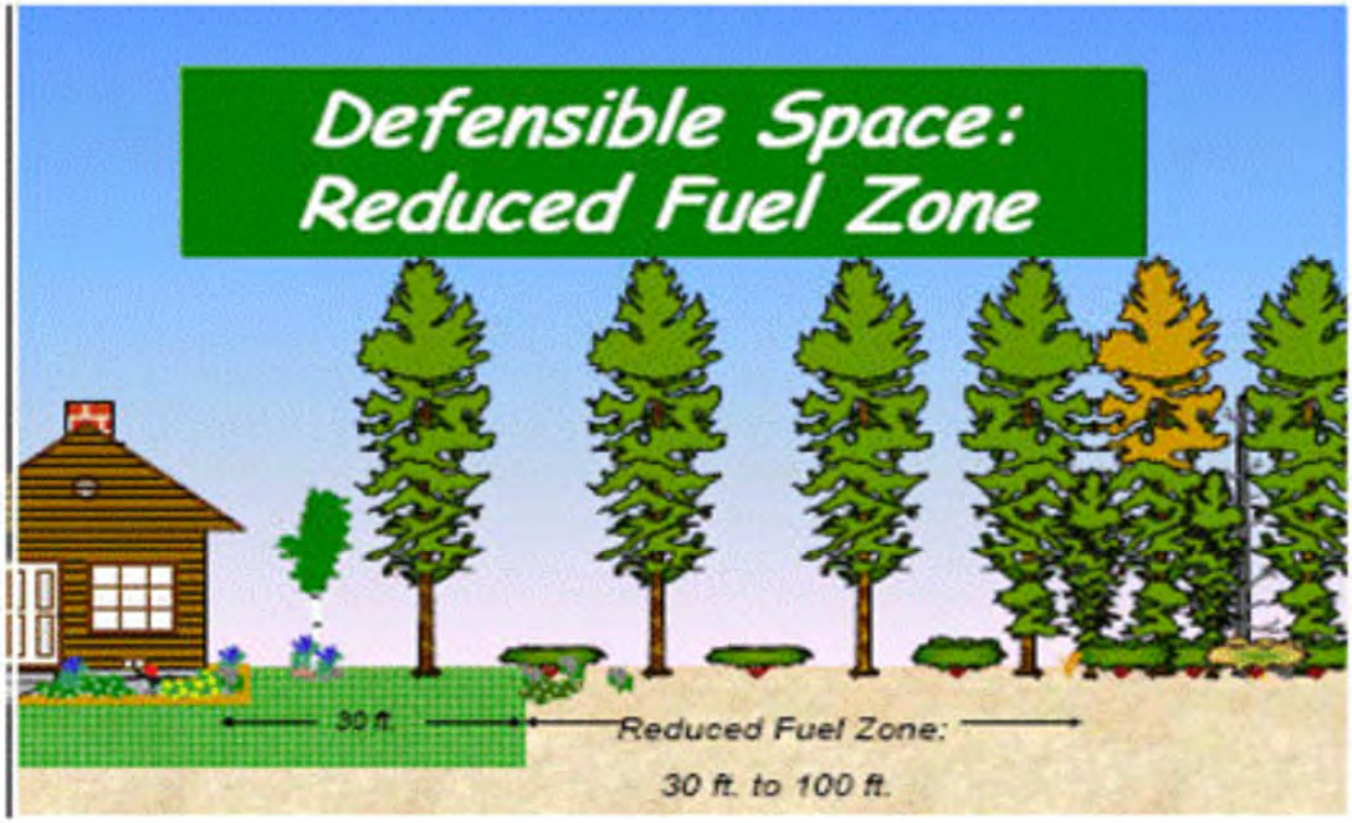
In more than one 2018 instance, firefighting aircraft had to be grounded when hobby-type and camera-quipped drones were being flown near wildfires by the curious, and by members of "the media." Besides disrupting the firefighting coordination between air and ground troops, which likely allowed more acres and structures to burn, and increased danger to firefighters, there is the double danger of 1) *being a hazard to firefighting aircraft*, and 2) *curtailing medivac of injured or endangered firefighters*. And flying these machines even several miles from a fire can be a hazard to aircraft.





The Wyoming State Forestry Division has consolidated the County Wildfire Protection Plans for Wyoming counties. You can view them at:

https://sites.google.com/a/wyo.gov/forestry/fire-management/fire-grants-assistance/fuels-mitigation/county-wildfire-protection-plans



PESTICIDE USE AROUND YOUR HOME OR CABIN

If herbicides are a part of your home or cabin Defensible Space project, here are three things to remember:

1) *Contact your County Weed and Pest office for current herbicide recommendations for the specific job you are planning to do.*
2) *If you hire the work done, the contractor must have an appropriate applicator's license. Again, contact your County Weed and Pest office for exact requirements.*
3) *If you do the work yourself, read and follow herbicide label directions carefully, wear recommended protective clothing, and dispose of the empty containers and unused material properly.*

SPRING AND FIRE SEASON ARE ON THE WAY. IT'S NEVER TO EARLY TO REVIEW AND UPDATE YOUR EVACUATION PLAN FOR YOUR MOUNTAIN CABIN.