Beetle epidemic provides landowners fresh start

By Mark Ellison

We have been bombarded with doom-and-gloom articles and reports about the mountain pine beetle epidemic in Wyoming and the lasting negative effects on forests.

As a forester, seeing such widespread forest mortality is frustrating, and I imagine it is even harder for landowners who have experienced firsthand the epidemic on their own land. For those who have lost a large portion of forest to mountain pine beetle and are ready to throw their arms in the air, I have good news:

There are some positive results and opportunities that could arise in the wake of this catastrophe.

Mountain Pine Beetle Benefits?

Most pine forests that have sustained the greatest mortality levels were already out of whack; most were overcrowded, over-mature, and decadent, which lead them to be unhealthy and highly flammable. The beetles could be a catalyst to a healthier, more resilient forest. Several immediate benefits: an increase in grass, forbs, and shrubs in the forest understory; increased stream flow; rising groundwater levels; and an increase in wildlife habitat.

These benefits will seem of little consolation when compared to the forest canopy that was lost, but, if land-owners are willing to take advantage of the fresh start the beetles have afforded, their forests could become healthier and more resilient to future catastrophes.

What can a landowner do? First, take an inventory of your forest to see what's left – you might be pleasantly surprised. Are there larger pines that are alive and not





infested? Some may have survived and could provide some age diversity and a seed source for the next generation of pine trees.

Do you have smaller and younger pines on your property? The mountain pine beetle typically does not attack smaller diameter (less than 5 inches diameter normally and less than 3 inches in an epidemic) trees. These smaller-stature trees may be difficult to detect amongst the larger, dead trees; however, their future role could be significant.

Do you have other tree species on your property besides pine, such as aspen, Engelmann spruce, Douglas fir, Rocky Mountain juniper, or subalpine fir? If so, these species are unaffected by the mountain pine beetle epidemic and will now have more growing space and available resources to thrive.

Cleanup Phase First Step to Healthy Forest

After you have identified the "green" trees on your property, it's time to cleanup the dead trees while being cautious not to injure the live trees. The cleanup phase is hard work and pretty depressing as you will be cutting down most of the sizable trees on your property; however, you should be motivated you are taking the first step

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By not managing your forest, there are few wildlife benefits and reduced recreational values, and the forest is stagnant, unhealthy, and highly flammable, which could eventually lead to disaster.

toward shaping a more healthy and resilient forest and doing away with the many reminders of the old forest that failed.

Take a moment to reflect on the good memories you had in the shadow of these trees, then sharpen your chainsaw and let the sawdust fly! For information on felling a tree, go to barnyardsandbackyards. com, click on Archives, click on 2008 Issues, then Fall 2008. Click on "Tips for felling a tree keep you safe, the job easier."

Why cut down dead trees instead of letting Mother Nature run her course, especially when many landowners are doing nothing? The do-nothing approach failed miserably, so, why not learn from mistakes instead of repeating

history? Benefits to removing dead trees include improved conditions for tree regeneration, reduction in fuel loads, which make the property less susceptible to wildfire, reducing safety concerns from falling trees, and improving forage production for wildlife and livestock. Another added benefit is a limitless supply of firewood for you and your friends - consider an outdoor wood-burning furnace or a high-efficiency wood stove! Be careful to not bring the mountain pine beetles back with you when cutting firewood. See "Harvesting bark beetleinfested firewood" in the Summer 2008 Barnyards & Backyards edition online by following the same steps as above but go to the Summer 2008 link.

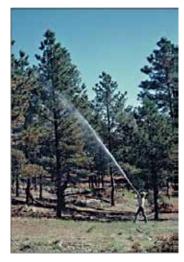
Plan to Enhance What's Left

Once the old forest is harvested and is only a memory, develop a plan to protect and enhance what's left and promote new trees. Consult a forester for specific recommendations. If mountain pine beetles are still active in your area, consider preventative spraying of the larger pines with a recommended insecticide. For more information, see http://slfweb.state.wy.us/forestry/ bbmanage.aspx. Hiring a certified commercial applicator is recommended, as they have the equipment, training, and experience to do the job right. If there are

pockets of smaller, densegrowing pines, consider thinning to promote the larger, more dominant trees. If aspen trees are present, evaluate their health, and, if necessary, enhance the aspen through a number of management activities, such as cutting competing conifers, cutting mature aspen to stimulate root suckers, and fencing the aspen to prevent grazing by wildlife and/or cattle.

Much of the work needed to promote new trees will be accomplished when harvesting the beetlekilled trees. Through harvesting activities, the soil is disturbed and the seedbed is prepared for seed germination. If the soil is highly disturbed, consider seeding with a native grass mix and monitoring for noxious weeds. By lopping and scattering the treetops and branches over the forest floor, sufficient numbers of seed from the cones are available for dispersal. With increased light reaching the forest floor, the cones are heated enough to release seeds. A new generation of trees should emerge and begin covering up the stumps and memories of the devastation the beetles wrought.

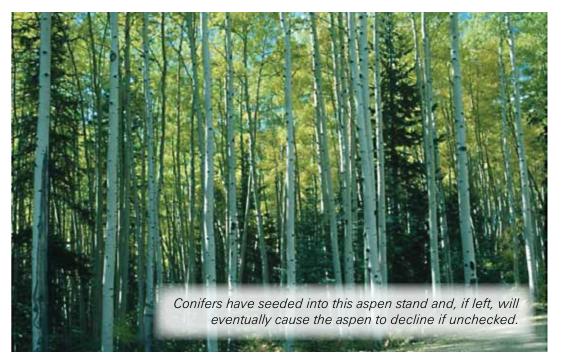
Although the beetle epidemic has been a disaster, the beetles have shown us how to better manage our



Preventative insecticides have proven effective at protecting pines from mountain pine beetles.

forests, and, if landowners heed what the beetles have taught us, they will help prevent future forest catastrophes.

For assistance conducting a forest inventory and developing a forest stewardship plan for your property, contact the Wyoming State Forestry Division office (http://slf-web.state. wy.us/forestry/offices. aspx) in your area. Offices are in Cheyenne, Douglas, Casper, Newcastle, Buffalo, Riverton, Pinedale, and Lyman. Cost-share assistance may also be available to assist in conducting forest management activities, such as thinning, fuels reduction, and aspen enhancement.



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