

Mountain Pine Beetles (MPB) have now been an active part of our landscapes for the past three seasons. Last year saw diminished insect numbers in Teton County. Experts say that a cold spell in the winter – below -20°F for at least 10 days – could damage the larvae enough to have a significant effect on populations. It is hard to say if we experienced this in the 2010-2011 winter or not. We have rarely seen an insect or disease move with such sweeping force, decimating all in its path.

Beetles will hit the trunk primarily and burrow in. Once inside the phloem layer, just under the bark, they will lay their larvae which will then feed around the tree girdling it. This flight usually happens in August and September. The phloem layer is part of the vascular system of the tree. When beetles cut it off, the tree can no longer move sugars down to the roots, or water and nutrients up to the leaves.

For the last two years, several mountain pine beetle traps were set out to discover when the little insects would be flying. The peak flying time was the second week of August. While each year was different, I anticipate we will see similar results this year. The time to put out Verbenone pouches or spray preventative chemicals in by the Fourth of July. Often, we are seeing trees infected last fall showing red or brown needles in the spring.

While now is not the time to control, now is the time to check and recheck your trees and take some action. In looking for damage, the most common form is pitch tubes or reddening/browning needles. Pitch tubes are small tube-like structures with a hole in the center. They look like a piece of popcorn has been glued to the tree. These tubes are about the size of your pinkie and about the same length. Most of the trees I have seen have 12-30 pitch tubes on one tree.

If you are finding pine beetle damage on your trees, how extensive is it? If you have more than a dozen pitch tubes, there is little chance that your tree will survive. You will start to see the reddened or browning needles soon, if you haven't already. Once you see these symptoms, the tree is dead. The most important thing you can do to save uninfected trees is to remove them and either burn or chip them before early July. Simply cutting the tree down will not stop insects from leaving the trunk in the summer and making a home in the nearest pine tree.

There are two main methods used for preventative control. The first is to spray a chemical on the trunk of all the pine trees you have. The main chemical being sprayed is Carbaryl, such as is found in the product name Sevin. This is a common chemical we often see used around the home and garden. Two formulations, Sevin XLR and Sevin SL, are labeled for mountain pine beetle. Both are effective for up to six months against this insect. This insecticide should be mixed according to the label, then applied to the trunk of the tree from the ground up to when the trunk is less than five inches in diameter, or you cannot get

any higher! Once done, this will not need to be repeated until next year. MPB will be a continuing concern for those who have pine trees.

The second control method is to use a pheromone called Verbenone. Just like us, there are scents that will attract us, and scents that will repel us. This is a chemical signal to the insects telling them to leave the tree. This pheromone is sold by several companies in a pouch form. To apply this pouch to the tree, simply staple the top and the bottom onto the trunk at head height. You should put it on the north side of the tree to increase longevity and moisture in the pouch. Check with your local garden supply store and ask if they carry such a product.

Just like us, mountain pine beetles have a preference for what they eat. They obviously prefer pine trees, but even among those, if given a choice, they have a preference. All pines are susceptible, but especially those that are old, weak, and already struggling for life. Look at your trees as spring comes. Do you have some dead or dying branches that need to be removed? Is there some damage you can see that isn't beetles? Improving the health and overall wellbeing of our trees may be the best defense. A good watering once a week can also help trees fight off such insects.

If you have any questions about mountain pine beetles, please feel free to contact my office. With some luck, we will have had a stiff enough winter to reduce beetle numbers. Enjoy your spring!