

ENVIRONMENTAL REPORT – March 20, 2010

Mountain Pine Beetle is still progressing through our area. Lodgepole pines are mainly being attacked in mixed forests with a smaller number of ponderosa. It is expected that the beetles will switch to ponderosa when the desired size lodgepoles are depleted. This siege can go on for 10 years (or more?). There are other insects also attacking trees in our area: pine engraver (ips beetles); western spruce budworm ; pine sawfly and ponderosa needle miner.

However, MPB remains the biggest threat in our area. MPB are showing signs of varied behavior and we can no longer depend on the old adage that the trees will fade in May to June and the beetles will fly in July to August. Both can happen sooner or later than these times. There are trees in the Retreat that have already changed color due to having been attacked last fall. Treatment of attacked trees (cutting and elimination of logs) should take place before the end of April. Treatment to prevent new attacks (pheromone or spraying) should also be done before the end of April.

Many companies are racing ahead to develop new methods for battling these beetles. Many of these methods have proven to be useless and many have still to show that they are practical and effective.

Emamectin benzoate, which is an injection into the trunks of trees, is not registered for use against mountain pine beetle. The MPB larvae feed on the phloem tissue of the tree and this insecticide has limited movement to the phloem. Research by CSU showed that treated trees became infested by MPB.

Pheromones are essentially powerful scents that insects use to communicate. Verbenone is an antiaggregative hormone that tells MPB that the tree is full and the insects are diverted to other trees. Verbenone must be used early before there is any hint of an aggregative hormone signaling a successful attack in the area. Verbenone cannot treat a whole forest or acreage but can be used when MPB populations in an area are low.

Chitosan ODC is in the news. It is basically a product of chitosan from shellfish, which improves the health of trees and helps the trees to produce more resin which pushes the MPB out or drowns them in the galleries. This product has not been tested adequately in trees of the size which MPB prefers and cannot be considered effective at this time.

Beetle signal device - Several newspaper and website articles have reported on a device which attached to individual trees and emits scrambled beetle sounds and signals. Supposedly these sounds cause the beetles to act erratically and perhaps not to mate or lay eggs. These devices do not appear to be available at this time and would only be for high value trees.

Herbal treatments using rosemary and lavender have been touted to deter the MPB. How they are used was not given in the article that appeared in newspapers. Would surely make the area smell nice, however.

There is a new product on the horizon, unnamed as of now, which is undergoing the approval process. The product is from Arborjet and purported to actually eliminate the beetles as they chew into the cambium of the tree. It is not a contact agent but must be ingested by the beetle. We wait and see on this one.

It is our duty as owners to do our best to take care of our property. Plant different species of trees to create diversity and interest. Take the proper actions for trees that are already infested. Protect your high value trees as best you can. As an added note, Estes Park will accept infested logs at the Recycle Center. They prefer logs as long as eight feet to be repurposed into fence posts. Shorter logs will be burned in the air curtain burner.

Peggy Burch, RLA Environmental Committee

Beetle Symposium, May 8, in Estes Park
E.P. Safety Fair, E. P. Fairgrounds, May 22

Contractors that worked in the Retreat last year include:

- * Tiger Tree Inc. 307-460-4767
- * Kincaid Tree Surgery 970-484-8733