

‘We Are in a Battle for the Forest’

Having gone to the For the Forest (a Basalt Nonprofit) conference at the Jerome Hotel in Aspen March 9, I met and talked with many concerned people including [former Aspen Mayor] John Bennett about the insect epidemics challenging our forests. I was pleasantly surprised when the panel stated up front, that the event was to seek ideas and inform. Afterwards I spoke from the audience about my experiences gathered from 12 years of documented results of soil amendments and soil microbes. But now I believe the panel only had an agenda touting the targeting of bark beetles with pheromones, one species for spruce, one for lodge pole and yet another for pinyon or aspens, with varying results depending on chance, using synthetic insect controls (Verbenone) or harvesting diseased trees after the fact.

Programs which had little success in other regions, have now become our main lines of defense?

I say let's get ahead of this mindset and be proactive, and look for people who understand agronomy and soil science. Real answers lie at the roots of the forest where these fragile soils impacted by low oxygen and low carbon vie with abundant minerals and complex air pollutants brought to earth by snows, wind and rain over the last 50 years. These negative impacts have begun to kill off the sparse soil microorganisms, which digest and distribute nutrients to plants. When soil-microbe life slows, the nitrogen, phosphorous and potassium soil elements which feed plants becomes imbalanced suppressing the (weaker) trace and phosphorous elements released to plants which are responsible for enzymes, sugars and flavor production. The results of low or no plant sugar/ calories is undaunted bark beetles, tent caterpillars and grasshoppers... in a feeding frenzy, never in danger of overeating and/or calorie craving bears and deer/elk in Aspen's city limits instead of feeding in the forest on nutritious tasty diverse wild foods. Many insects which have become forest problems (Ips Beetles, tent caterpillars, grasshoppers)... have no liver organ to digest sugars/calories in plant tissues and thus higher sugar percentages are toxic. The silver bullets that so many experts dismiss may be the Integrated Pest Managements of silviculture and the hardy yet simple soil microbe. The Colorado State University Forest Pest Control Study Guide states that "activities that promote tree vigor are the best means of preventing bark beetle and bores problems. Insecticides are a short-term solution best practiced on high value trees" (pp. 106, 107, 112, 113). So let's look at and explore these natural soil amendments and hardy microbes capable of economically rebalancing and reclaiming polluted dying soils. The reclaimed soils will help grow a wide range of resilient, vigorous trees and quality wildlife food with increased (brix) sugar and calorie levels.

These "natural" soil-amendment inoculations to rangeland and forest can be as simple as wind dispersal of dry product, as an energy to feed either microbes or specialized mineral digesting microbes, not unlike those found in Glenwood's Hot Springs Caverns.

Enough said. Let's not settle for limited ideas in our valley. We are in a battle for the forest, and we can start now by improving degraded landscapes, and impact these many problems, if we look to the soil for answers and apply them for solutions.

– *John Buerger, New Castle*