

Tussock Moth – Perry Park Q&A

July 21, 2015

Some Questions and Answers related to the recent issue of the Tussock Moth (Presented by Keith Worley):

- Will the trees come back? *If completely defoliated, no. Severely defoliated trees will be weakened enough to be susceptible to attack by a variety of Douglas-fir bark beetles. Next winter's snowpack and spring rains will have an impact on tree survival.*
- Will we have to spray again? *Yes, unless it is determined next spring the epidemic has collapsed of its own accord (internal disease, a virus, the most common cause of collapse.)*
- Will there be fire danger because of the dead trees (if indeed they are dead...) *Yes, until the dead needles fall off. Once the needles fall off, the crown fire potential may actually go down. A lowered crown fire potential will be replaced by a different fire suppression issue: lots of heavy fuels that will make extinguishment difficult.*
- Who paid for the spraying? *Perry Park Metro District paid for the application on lands within its district boundary. Haystack Ranch and Sandstone Ranch each paid for their applications. **No National Forest lands were sprayed.***
- Why isn't the Pike NFS spraying its infested trees? *Their response is typically: This is a natural phenomenon and should be allowed to run its course. Their laissez faire policy contradicts their concern about unnatural forest conditions caused by 100 years of fire suppression policy. Keep in mind local, on the ground officials have their hands tied by rules and regulations that can only be changed by Congress.*
- Did the spraying occur at the right time? *Unfortunately, no. It should have been applied six weeks earlier. However, the epidemic did not present itself until the week of June 22nd. By then, most of the damage had occurred. The caterpillars were already in Stages 3, 4*

and 5 of their life cycle. Optimum application is in Stages 1 or 2. Also keep in mind we had to deal with bad weather for over a week that added to the delayed application.

- *Was this spray application a waste of money? In my opinion, no. There was some insect mortality, though not sufficient to knock down the epidemic.*
- *Will we spray earlier next year? Absolutely. In fact, we'll try to time the application to also control Spruce Budworm, another Douglas-fir defoliator common in our DF forests.*
- *Why weren't we made aware of the Tussock Moth presence before it was almost too late? No one believes the trees went from good to bad almost overnight! Ah, armchair quarterbacks will always decry why didn't someone else do something sooner? An aerial survey of the area last year did not show any significant buildup. Both the USFS and CSFS were taken off guard by this outbreak.*
- *Now, of course, the caterpillars have worked their way down into PP areas closest to the highland infestations. People are really worried about that—though they've found some interesting and apparently effective ways to combat it: soapy water, wasp spray etc. Is it true that these guys are on their last legs? Yes, by the time readers see this, it will be too late for any pesticide applications this year. They will be pupating, and turning to moths that will be laying their eggs for next year's feeding frenzy. They are no longer feeding, so not susceptible to pesticide applications (unless you spray it directly on them).*
- *I found Tussock Moth caterpillars climbing on my house. Should I spray? I have checked numerous locations all over Perry Park. In 90% of these follow ups, TM are present, but have not done any significant tree damage, and/or are moving to locations for pupation. I recommend a well-timed application next spring to catch them when most susceptible to either chemical or biological controls. Keep in mind that TM are always present. Seeing a few every year around your property, like I do, does not necessarily warrant spraying.*
- *Is there a preventive spray I can use? Unfortunately, no. The chemical half-life of most applications will not be effective next spring. Be aware there will be unscrupulous tree sprayers who will try to sell you this type of "preventive" treatment. Please let me know*

ASAP if you're aware of any companies doing this. It is not illegal, but is highly unethical.

- *Why did you recommend using a biological control instead of a chemical pesticide? We used *Bacillus thuringiensis*, or Bt. There are a number of chemical pesticides that would have been more effective. However, aerial application would have been impossible, given where the outbreak occurred in our neighborhoods. The risk to our community water supplies, and secondary impacts to humans, wildlife, and birds preclude the use of aerial applications in residential settings.*
- *Do you recommend use of chemical pesticides like carbaryl (Sevin) or permethrin (Astro) for TM control on the trees around my house? In most cases, yes. However, Bt can be just as effective. Plus, you do not kill off all the beneficial insects like ladybugs, lacewings and TM predators. One serious side effects of chemical applications is the explosion of aphids and other pests that were held in check by natural controls. Plan on seeing fewer birds since there will be less food (bugs) available for them.*
- *Should I spray my ponderosa pines? No. Concerns that TM will begin defoliating all our pines are greatly exaggerated. Tussock moth caterpillars will feed on pines in the immediate vicinity of current TM outbreaks when all Doug-firs are completely defoliated. This was observed in the Upper Cheyenne area, in the middle of the epidemic. In the same areas, you also see pines that are doing fine, and will live on to seed a new forest with a higher percentage of ponderosa pines. Again, if you run into an unscrupulous tree sprayer that recommends you spray your pines, let me know.*
- *What's the plan for next year? The Metro District will be working to develop a plan to protect our forests from further TM damage, and measures individual property owners can take to protect their trees. This may include how we deal with the enormous numbers of dead trees that will occur in the Upper Cheyenne area. The primary source of information to residents will be the District website at www.perrypark.org, or The Sentinel. Residents should not rely on the social network sites since these tend to be famous for inaccurate information. Also, plan to attend the PPMD Firewise meeting next spring.*

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