

I would like to request that this TAC board consider all available options for comprehensive control of poison parsnip (PP). Due to the scale of the problem and in consideration of a lack of readily available options, tractor mowing is not possible to avoid at this time. However, tractor mowing is something I believe we have the ability to assist by advancing a movement of manual field tools, i.e. the scythe. I think that if we as a board members are to take the time to properly weigh the positives and negatives of manual labor in addition to tractor mowing, we will find that it is in our interest to find, support, and develop a hybrid approach that would ultimately award bids to individuals who seek to maintain road side standards through manual labor in the same way we currently award bids to the conventional tractor method.

I recently spent some time with Panton's road commissioner, Richard Cloutier, to discuss plans for improving our strategies to combat proliferation of PP. Riding shot gun with Mr. Cloutier we discussed our similar concerns that much of the road side mowing regarding PP mitigation is being undone by the plants that are out of reach of his mower. The plants left behind by the tractor represent hundreds and thousands of seeds. These out of reach areas (margins) can be described in the following terms; utility poles and guy wires, guardrails, road signs, culverts, stone ledge, right of way disputes, fences, steep grades, wet/soft turf, and ultimately the physical limitations of the machines ability to reach the full extent of the roads right of way.

Panton currently owns a "fixed offset mower" with a reach of approximately 5ft to 6ft from tractor tire sidewall. At optimum harvest time for PP control, Mr. Cloutier rents a boom type mower that greatly enhances the tractors capability to mow into the problematic margins discussed above. Rental of the boom mower is \$1,800 per week and Panton uses it for two weeks per year. The cost to buy the boom mower is nearly \$20,000. Mr. Cloutier is the first to admit that even with the advantage of the boom mower he is still not able to mow PP with adequate efficacy. As we drove around looking at problematic areas as defined by Mr. Cloutier a picture was beginning to form that hand mowing following tractor mowing would be a physically realistic asset to the conventional mowing regime. Hand mowing would essentially provide a needed "clean up" service in the wake of the tractor. I think its worth stating that both Mr. Cloutier and I feel that in consideration of tax expenditures and the overall goal to combat PP, it is ultimately counter productive to run this much machinery (\$) and not do a complete job within the extent of the right of way. It can be argued that the current approach is "all for not".

I believe that it is not a stretch to articulate the need for some sort of cleanup/follow through behind the tractor. It is in our best interest that we do a thorough job when we invest this much time and money. The question then becomes; how do we best perform this cleanup service? I am inclined to suggest that hand mowing by a skilled individual offers both proven effectiveness and multiple benefits to our society in ways that mechanized counterpart's fail. The alternatives to hand mowing regarding PP mitigation include herbicide/chemical spraying and or any number of walk-behind or carried string mowers. For simplification lets call them weed whackers or WW. Any cost benefit regarding control with chemicals can be easily argued against by pointing out the undeniable risks to the user and pedestrians. In addition, herbicide use requires the added complication of a permitted/licensed user. And the consideration that the nature of the "margins" of the areas needing manual cleanup are generally closely, if not directly linked to, wetlands and greater water bodies. It would seem highly irresponsible to remove a plant only to replace it with toxic chemicals. This has consistently been a misguided approach and never the lessor of evils. Weed whackers can be very effective at completely mowing right up to any obstacle on rough terrain, slops and soft ground. However, the user is subjected to loud noises, unburned as well as burned fumes from fuels, hot engine components, and projectiles. When considering WW use for PP mitigation the operator is at great risk to be "burned" by the juices of PP because the juices are essentially atomized by the action of the WW.

Now comes the scythe. There is no sparkplug to foul, no plastic cord to jam and leave behind in trace amount where ever it mows, no fuel to purchase or mix with oil (discarded plastic containers), no chance to spill fuel in wetland/water ways, no disturbing noise or dangerous projectiles, no hot engine to burn skin, and most relevant to PP mitigation; hand mowing does not atomize the plants juices as it cleanly slices through the stalk. As we compare the scythe to the WW especially in this discussion of effective cleanup behind a tractor, it's important to note that the scythe never needs to be shut off and restarted between tasks or idled as the user walks from one area to another. The European scythe is lighter then the WW. In short, the overwhelming benefits I have come to find through using the Scythe all boil down to its beautiful simplicity. When properly compared to its "competition" it exposes the burden of WW complexities to the user and the environment.

In all fairness, the scythe does present a danger in that the user is wielding a razor sharp 2ft long blade which must be routinely honed during use and occasionally peened (hammered sharpened) before or after a days work. This should be judged in comparison to the high velocity nylon cord and or brush blade of the WW. Hand mowing is no doubt a skill that requires a bit of dedication to become proficient. That said the required skill to perform cleanup duty is not necessarily of great technical proficiency. This means that to a skilled hand mower, clean up on this scale should not represent a huge challenge. To a hand mower in training, armed with a properly fitted scythe and a little field time, one should be able to progress in a "reasonable" manner with an understanding that due to the many pluses offered by hand mowing, speed is a "concession".

Its important to state that this work is undeniably tuff no matter how one does it. There is no easy way to undo the many marches of invasive species, PP represents one of thousands of invasives that we will either have to battle or accept. As our society goes forward we should be constantly asking ourselves if these battles we choose to fight are doing us more harm then good? The approach I'm suggesting seeks to address that very question by presenting this most holistic option while we uncover a sustainable relationship with this plant. Our predictable knee jerk reaction to employ chemical/fossil fuel "solutions" in virtually every situation must be seen as a dangerous limitation to our societies advancement. Providing safe and healthy options for manual labor whenever and wherever possible will not only offset carbon emissions but also create employment while addressing our crippling health crisis (perhaps a whole other discussion).

To those who are inclined to disregard my initiative as being idealistic and or uninformed, please consider the following as an offering of my credibility. My father is one of eight children from a family of farmers turned construction workers, and ironically (in a small way) back to farming. I am one of four children, born and raised here in Addison County where I continue to live and plan to die. Most of my earliest memories involve machines of one form or another. Because of my father's nostalgic appreciation for the machines he grew up with and how they transformed backbreaking jobs into physically manageable occupations, we never had new things. Which meant we had to learn how to fix rusty fuel tanks, leaky gaskets, dead batteries, seized hardware, and on and on and on. This upbringing repairing machines lead to a career of restoring and mending antique and vintage, street and racing cars. I was and will always be a gear head, and although I may not know how to fix every problem I am presented with, I do have a pretty good idea of what it takes in labor and resources. It is from this understanding of "what it takes" to keep our machines running that I began to see the appeal of non-mechanized labor whenever possible on my developing 13 acre farm. And then about five years ago my younger brother Judd convinced me to take a serious look at hand mowing with a European scythe, just for fun, as a hobby. For the record, Judd has spent as much time in virtually every type of farm and construction machinery as anyone I know. From well drilling in Montana on mountain slops to quarrying here in Vt.

This pursued suggestion by Judd has ultimately put my relationship with machines in a completely new perspective and I submit that our value metric for evaluating logical, appropriate use of machines is flawed. It is not that machines are necessarily wrong; they are not good or evil. What I do see as wrong in terms of humanities big picture is that for nearly every task we are presented with "gasoline" is the default solution.

I make a motion that we find ways to meaningfully incorporate hand mowing into our portfolio of invasive plant mitigation and general roadside maintenance. I make this suggestion as someone who loves the land and people where I live, as someone who has a thorough understanding of the strengths and weaknesses of our conventional methods. I have not come to my conclusions by Internet research alone but rather through actual life experience. I feel confident we can find value in hand mowing because I have experienced it myself, by teaching myself how to fit the scythe to the user, how to sharpen and maintain the blade, and how to move the body. At this time I would not consider myself an expert, more that I am scratching the surface of hand mowing's true potential.