



The View from the Tractor

or gear Heads Unite!

Winegrower — Nick Peay

As you turn the page and your eyes alight upon the grape grower's article, you probably expect musings on the pending harvest; envisioning misty mornings, yellowing leaves, heaping mounds of glistening clusters in quarter ton bins. Instead, I want to share with you what it is like to get my Big Spring Chore out of the way. That chore is the undervine cultivation that eliminates weed competition and incorporates last fall's compost amendment into our

soils.

The implement I use to control weeds is a Gramegna CS4-100, a power harrow. It has two horizontally rotating heads with six inch tines pointing downwards. The heads rotate rapidly, violently pulverizing the grass/weed root structure and beating up the blades/flowering bodies although not shredding them into fine bits. That would be nice, a shredder for the leafy bits on the topside, but that is beyond the capability of this machine. The power harrow is attached to the back of our crawler tractor via the three point hitch—two lower arms and a centered top arm. What drives those two rotating heads are three gears bathed in oil inside of a gearbox connected to a drive shaft that is located in the middle of the three point hitch on the back of the tractor. On



tractors this drive line is called the power take off or PTO.



The harrow is not only behind the tractor, but also extends out to the right three feet or so. I drive the crawler very close to the vine row so that the implement can work the soil under the vine. I make one pass down one side of the row then a second pass down the other side, tilling a space a foot and a half wide at each pass. I run the tractor at ~2500 rpm's, moving *very* slowly, and the force involved to tear up weeds is large: a mistake might result in the removal of a large 20-year old vine, or a ¼ inch steel training rod, or a 12-gauge stamped steel line post, without so much as a hiccup. (I caused Vanessa a slight bit of alarm when I came in one evening with traces of dried blood coming out from under my ball cap, the result of getting too close and hitting a line post, which gave me a good whack on the head.) Essential to avoiding such a fate is a large hydraulic ram which, when activated,

moves the gearbox with its rotating heads laterally, to the left, out of the way of the vine. The ram is activated by a sensor rod, a curved steel wand that activates a hydraulic valve when the rod encounters

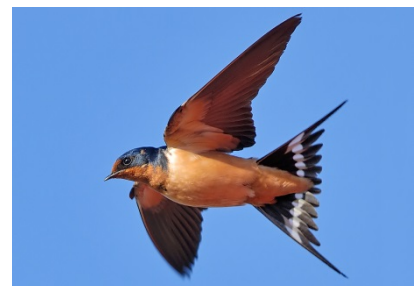
something solid.

Once the vines awake for the season in March, the rains begin to slacken, the sheep move on, and I embark on the season's Big Spring Chore. Under ideal conditions, I once managed to till three acres in one day. More often I till about two acres per day. With 52 acres to till, that comes out to 26 days, and with the diverse responsibilities of a small business pulling at me for attention, I rarely get on my tractor five days in a row. There are considerations to the ideal timing for undervine cultivation. The intent is to remove competing growth under the vines for the remainder of the growing season. Starting early when the soil is saturated with winter rain is easy on the machine, cutting through the earth like beaters through whipped cream, though perhaps the soil humidity will allow weeds to bounce back. Further if there is still a good bit more rain to come, my completed rows are likely to produce new weeds. Inevitably, there will be more rain, usually light, and I will find myself out in it, on the tractor, wondering if I ought to go inside. (Madmen and fools? Or is that the noonday sun?) A few times it has hailed on me, once so violently that I ducked inside. The hail here is not the damage causing kind that you hear about in the growing regions of France. For some reason, their hail pellets are large, bigger than marbles, as big as golf balls, sometimes even as large as baseballs. Ours are the size of peas or smaller. On the other hand, if I wait too long to begin I will end my task later in June when the ground is dry and harder, the weeds and grasses are quite tall and tough, and my tilling kicks up a bit of dust.

As a child, every Saturday morning I would find on the breakfast room table an 8 1/2" x 11" piece of paper with the names of the three kids across the top and their chores for the weekend underneath. Chores included cutting the grass, turning the compost, hedging bushes and walks, and weeding. Always weeding. It was endless and the least favorite task for all of us. The repeated instruction from my father "pull from the base and get the roots, otherwise, why bother" still echoes in my brain. But the chores had to be done if you wanted to do anything else over the weekend. And yet, here I am, spending all day every day for at least 4 weeks weeding. Funny how life turns out.

I wear ear protection to quiet the clackity-clack racket the tractor makes. This limits my choice of hats. Ball caps work, of course, but more shade for my neck is useful. I have a couple of odd looking billed things with fabric draped down my neck in the back. And no music or books on tape for me, I am listening to the machinery, monitoring the sounds, listening for something that doesn't sound quite right. Such a vigorous mechanical workout wears on the machinery and inevitably there will be a trip(s) to the shop for repairs. My Gramegna parts supply network is robust, and UPS serves me well (thank you again for subsidizing the rural community with your crosstown UPS shipments). I get lots of thinking time out there on my tractor, just me and my thoughts. This contributes to my hermit-like attenuated social skills. You may have noticed my tendency to talk up a storm if you visited me during my Big Spring Chore.

We are way out in the wilds of the Far Sonoma Coast (you may have read elsewhere!), which means wildlife abounds. Hiding in the wet grass are mayflies, clumsy looking things and tasty morsels if you are a bird. At dusk and dawn and on cloudy days, the swallows circle and dive behind the tractor enjoying the feast. We get both barn and cliff swallows, so distinctly different in their plumage, but yet



seemingly inhabiting the same niche out here. The barn swallows have that typical 'swallow tail,' deeply forked, long in proportion to their body length. They also have striking yellow-orange bellies, while the cliff swallows are white on the belly and have shorter, shallow-forked tails. While they intermingle behind me as I till, I suspect their main difference is where they build their nests. Amazing flyers both, they are my companions when the weather suits them.

Also scared out of their spring time homes are the rodents - different kinds of mice and the occasional mole dart out of the grass in terror away from the advancing tiller, and wouldn't you know it, the keen eyed red-tailed hawks have taken notice. Even with the cacophony of the tractor and the tiller, the hawk will linger nearby, sometimes no more than twenty feet away perched on a line post. Of course, should you stop the tractor and attempt to photograph your feathered friend he or she will give you a look of discomfort - "why are you looking at me? Go back to what you were doing" - and then will fly off. Since I have made a suitable environment for more rodents by planting a vineyard, it is nice to think that I am fattening the hawks by providing them with easy suppers. They are designed to beat their wings slowly when they fly soaring



on thermals, diving to hunt, in great contrast to the stunt-flying swallows. The poor hawks have to put up with being hounded by smaller birds like the red-winged blackbirds which gang up on them and try to move them along out of their territory, away from their nests which contain tasty eggs and fledglings that the hawks will gladly eat. Yes, I am guilty of disproportionate admiration of the charismatic fauna.

Ah yes, the red-winged blackbird, with its crimson shoulders bordered by yellow bars, it is quite happy to visit me in the early spring, mate and raise its young in the tall grasses in my vineyard. A seasonal visitor, it usually moves on while I am tilling, but inevitably I find I destroy a nest or two. Sad, to be sure, but again I have created an environment where more can thrive than before my vineyard was here, so net the population is ahead. These are noisy birds, although their call is not altogether unpleasant, sort of sooooweee, and quite social. They leave and I am still tilling, and their departure is a nagging reminder that I need to finish!

This year I finished on June 6th. That is pretty good since it took a while for the rain to stop and the vines to wake up. Last year I finished before Memorial Day, which is really good, but think how fast it would be if I were to use synthetic herbicide? I could spray everything in three days. Organic undervine weed management takes more time, but I wouldn't do it any other way with the long term health of the vineyard and its environment on the line. And it gives me plenty of time to reflect on the vineyard and the multitude of life it hosts. A rich reward for long days spent on the seat of my tractor.