

Sheep in the Vineyards

Presented by Debby Zygielbaum

April 22, 2005

Sheep have been gaining in popularity as growers look for alternatives to conventional practices, such as early spring mowing. Mowing works well when the soil is dry, but in wet years like this one, growers are getting stuck in the mud! Lucky for us at Robert Sinskey Vineyards, sheep are all terrain vehicles – with some added benefits.

Sheep fit well with the Biodynamic concept of integrating animals into the farming system. Biodynamicists often talk about cows, but cows seemed too big to imagine in the vineyard. Well, we could imagine them in the vineyard, but we could also imagine the disastrous results! Chickens are another option, but they are too small for the scale of what we are trying to accomplish unless we wanted to use large numbers of them. So, we settled on sheep.

Sheep work well with the Sinskey farming style, helping us to meet our organic, and pending biodynamic, certification as well as forming an integral part of our soil management program. The purpose of this talk will be to share some of our experiences with you. I will talk about the reasons to we use sheep and what problems to avoid as well as the logistics of keeping sheep in your vineyard.

Sheep really do fit well in our soil management program at Sinskey. Sheep manure is higher in NPK than either cow or horse manure. This is a general rule as it can vary with feed. Further: “Because sheep make use of ingested sulfur compounds to produce wool, their manure does not have the unpleasant smelling sulfides found in cow manure.”¹ Sheep manure falls in “separate pellets, or in pellets that hold together in a clump, and . . . does not even need aging.”² That means it does not lay on top of the cover crop and smother it. Also, since the manure “contains many of the valuable elements taken from the soil by the plants eaten by the sheep, it is convenient that they spread a lot of it on the pasture.”³ So sheep manure generally smells better, has more readily available nutrients and they spread it around for you. What a deal! Plus, we suspect that the manure is also good for our soil microbes.

Another benefit – especially this spring! – is that by grazing down the cover crop, sheep help us with frost control. This cold, wet spring had a lot of growers worried, but we were sitting pretty on the ranches where we had sheep grazing. The appropriate number of sheep can graze a three to four foot cover crop down to ground level in one to two weeks. Sheep did let us get into the vineyards for a “mowing” pass earlier than we would have been able to with tractors.

Sheep also stimulate the cover crop and really select for clovers. For example, on a ranch where we had not seeded nor seen crimson clover for several years, we had a bumper crop of crimson clover this year after grazing sheep. Sheep also make for good neighbors – people really love sheep! We had one neighbor who had not been very friendly suddenly start phoning and giving regular reports on our sheep when we grazed them nearby. We now have a much better relationship! Along those same lines, we use our sheep for marketing as well as community outreach; we recently sent out a flier about our sheep to our wine club. Our vineyard crew also enjoys working with the sheep; it provides a break from the routine plus a lot of them grew up with livestock.

I’ve discussed some of the benefits of sheep in the vineyards, so now let’s look at some potential problems.

(i)

¹ Simmons, Paula. *Raising Sheep the Modern Way*, Updated and Revised Edition. Garden Way Publishing, 1995, p.236.

² *Ibid*, p. 236

³ *Ibid*, p. 237

I often get asked if we have problems with compaction. So far, it has not been an issue for us, although we have seen a potential with larger numbers of sheep, i.e. 200 or more in a herd. However, it really does depend on the site and the soil type. It is one of those questions that will have to be answered on a site specific basis. Also, sheep are in the vineyard for only three months at a time, which does not give much of a chance for compaction to occur.

However, sheep will rub on vines as well as go under and through trellis wires. You should plan on doing a little maintenance on the irrigation and trellis system after the sheep have left. We have found that the amount of damage does depend on the stature of the sheep and, as a result, we chose medium to small breeds to graze in our vineyards. The amount of damage will also vary with the vine spacing and the row size. Anecdotally, we have noticed that lamb/ewe pairs are a little gentler on the infrastructure.

You will also need to take into account the cost of having sheep in your vineyards. We have found that renting sheep costs about the same as a mowing pass. So we pretty much break even.

Now that we've covered a few of the pros and cons of sheep in the vineyards, I wanted to review some of the logistics.

Figuring out the timing of when to put the sheep on and take them off the vineyard is pretty important. If you put them on too early, you risk permanent cover crop damage as well as problems with too much mud. If you put them in too late, the cover crop might be too tall and lignified and they either won't graze it as well or they will just tromp it down. You also need to take the sheep out at the correct time or they will eat the young buds and leaves, causing damage to your crop. We generally end up putting the sheep in the vineyard sometime in December or January and pulling them out at budswell, which is usually mid-March.

You also need to figure out how many sheep you need, or can get, in your vineyard. You will need enough to graze your cover crop down to the desired level in your desired time frame. If you do not have enough sheep, you can also control the area size. A good way to do that is electric fencing. You will need make sure you or the grazer has enough panels of fencing as well as enough labor to move the fencing and the sheep around. If you don't have enough sheep and can't control the area size, you could still put some sheep in and just use them for their nutrient cycling benefits.

Electric fencing is an effective and easy means to create controlled grazing cells. The fence also serves to deter predators such as coyotes and domestic dogs as they tend to try to go through or under the fence rather than over. This causes them to get a handy electric snap on the nose and, trust me, I've seen many a herding instinct shocked right out of a dog!

You will also need to exclude sheep from sensitive areas such as pump stations or wells. Sheep love to rub and will find such spots alluring. Portable corrals, such as the hobby panels we purchased at Martin Ranch Supply in Santa Rosa, work well. These portable panels will serve many purposes for you, especially if you own a herd.

Speaking of which, you will need to decide whether you want to rent or own your sheep. Both methods have advantages and disadvantages. If you are renting a herd and you have a herder on site, then you will have very little responsibility beyond hiring the shepherd and telling him/her when to put the herd in and take them out. If there is no herder on site, you will be responsible for making sure the sheep have things like enough water and they are in good health. You might also need to move the grazing cells around. If you rent sheep, you might also be able to get larger numbers than you could comfortably manage if you owned a herd. Sometimes, though, we have had problems with flaky herders who have promised a herd of sheep on a certain date and then disappeared when it came time to deliver.

If you own a sheep herd, you will definitely have more responsibilities. You will need to make sure you have the means to move the herd around to different sites, i.e. investing in a livestock trailer might be a good idea. You will also need to provide veterinary care for your herd. Sheep are fairly

low maintenance, but they do require vaccinations, parasite control and feet trimming. If you decide to have a breeding herd, you will also need to vaccinate, tail bob and castrate the babies – as well as have a place such as a barn for the ewes to lamb and be able to keep the breeding ram separate from the flock. Be prepared for lambing problems. In general, 80% of births are fine, but it's the last 20%, such as prolapses and the lamb turned the wrong way, that will give you a headache. You will also need to keep detailed records in order to track the success of your breeding ewes. As I mentioned, some sort of portable corral would also be a good idea. You will need to know the details of flock management, such as good pasture rotation is generally three months.

Whether or not you plan to own or rent, I highly recommend finding the book *Raising Sheep the Modern Way* by Paula Simmons, updated and revised edition. It has become an invaluable resource for me!

Here are just a few more odds and ends to think about when keeping sheep in your vineyards. Sheep will need a salt lick. Make sure it is a salt lick for sheep and not one for other livestock – sheep are highly sensitive to copper and other salt blocks are often too high in that nutrient. When I am asked why sheep are chewing on the trunk and cordons of vines, the answer is “no” when I ask if there has been a salt block provided for the herd. So keep in mind that sheep should not be chewing on the bark and if they are it is probably a sign that they lack nutrients.

Sheep will also need access to water. Not such a big deal in the winter time since the grass is so wet, but they will still need some. You should also plan to strategically locate the bedding down area – which is often by the water and salt lick – as large herds can have quite an impact. If you wanted that vineyard avenue grassed for the season and you have 200 sheep laying on it every night, you won't have it grassed for long!

Our experience with sheep at Robert Sinskey Vineyards has been a positive one. Just this year alone sheep have really saved us from some extensive frost damage! Also, working with the Sinskey sheep has been a good part of the job.