

## Lindsay's Vineyard Chronicles

What's been going on in the vineyard this season?

Friday June 2

After a mild winter and warm start to the growing season, we experienced budbreak about 4 days ahead of schedule compared to last year. Itasca (white variety, north block) and Marquette (red variety, west block) were the earliest, officially breaking bud the 11<sup>th</sup> of May. Both varieties took advantage of the sunny days to push shoots quickly.

Over the next couple days, all our Frontenacs (noir, blanc, and gris, middle block) broke. The big straggler this year was Petit Pearl (red variety, south block and west block), still mostly tucked in on May 17<sup>th</sup>.



Figure 1: Marquette 5/15/23



Figure 2: Petit Pearl 5/17/23

Petit Pearl's late-budding tendency turned out to be a savior, as we experienced an unseasonable hard freeze in the early morning hours of May 18<sup>th</sup>. Dipping to an astonishing 22F around 4am, this type of freeze will devastate the succulent young shoots of grapevines. Our 2+ acres of Petit Pearl sustained almost no damage, while our earlier budding varieties sustained significant loss. Air drainage among the vineyard blocks seems to have saved some pockets of vines from any damage at all. We were delighted to note that all Frontenac varieties bounced back very quickly, and they're looking as healthy as ever!

[Grapevine phenology lesson: during pruning we select the healthiest one-year-old wood (*canes*) to keep for this year's growth. Each node along the cane holds a bud,

which produces the succulent green shoots that we see growing in the vineyard today. Each bud can grow up to three shoots, putting out a primary first, sometimes followed by a secondary and tertiary. This growth habit, luckily for us, is more common in hybrid and wild grapes than in traditional vinifera varieties. Our freeze damage mostly affected the early primary shoots, which means that many buds will recover and put out at least one more shoot. Primary shoots are stronger and more fruitful than secondaries or tertiaries, but we still expect to rear a healthy crop of fruit this season!]



*Figure 3: freeze damage Itasca*



*Figure 4: healthy shoot post-freeze*

### What's up this week?

This week we've been working on undervine maintenance, sucker selection, and shoot thinning. The frost did not slow down the weeds, so we've been working on cutting down the ever-persistent goldenrod bushes, and hand-weeding around individual vines.

We're also focused on securing new growth that is emerging from ground-level of the vines. These young green shoots are called 'suckers', and since they zap a lot of energy from the plant, typically we'd knock them off as soon as they emerge. But, these suckers can be very useful for establishing new trunks when vine wood gets damaged (by a hard freeze during peak sap-flow in late May, for example!). This process involves weeding around the base of the vine, selecting a well-positioned sucker, and tying it upright to the trunk (using a photodegradable tying material).

Shoot thinning is done to remove any of the secondary and tertiary shoots emerging from buds. Keeping too many results in an overcrowded canopy very quickly, and keeping our canopy open with a lot of airflow is one way we fight against pests and fungal disease.

Baby clusters are making their appearance! Have a look in any of the blocks and you'll see emerging cluster inflorescences on our young shoots. These 'clusters' are actually tightly closed flower buds, which will begin to bloom in about two weeks (or less!). Bloom leads to pollination, which leads to fruit set and berry formation, so we still have a long way to go to actual grapes! But, seeing the inflorescence emerge reminds us that harvest is, indeed, only a breath away!!



*Figure 5: one bud, one too many shoots*



*Figure 6: future grapes!*