



HOW TO ESTIMATE YOUR GRAPE CROP

There are 2 components of a crop estimate: total number of clusters in the vineyard block and the average cluster weight. Arriving at the total *number of clusters* is time-consuming but it is simple and it only needs to be done once during the growing season. I like to get my cluster counting done between fruit set and veraison.

Estimating the average *cluster weight* at harvest is the challenging part. You can use industry standards, but the average cluster weight of a given variety/clone can vary dramatically from vineyard to vineyard in a given year and from year to year in a given vineyard. This is due to weather, soils and canopy management. Thus, your crop estimate will be most accurate if you take and weigh cluster samples from your own vineyard each year. Because weather through the season greatly impacts cluster weights, the closer you are to harvest, the more accurate your estimate will be. However, most folks need some kind of estimate earlier in the season. For this reason, I suggest you do at least three cluster weight estimates between fruit set and harvest, tweaking your estimate as you get closer to harvest.

STEP 1: CLUSTER COUNT (DONE ANY TIME BETWEEN FRUIT SET AND VERAISON)

- Count all harvestable clusters on AT LEAST 5% (1 out of every 20) vines in each variety in each block....the more vines you sample, the more accurate your estimate will be.
 - Walk down every row counting vine locations. A vine location is the place where a vine SHOULD be, even if the vine in that location is missing or dead.
 - At every 20th vine location (for a 5% sample), count all harvestable clusters and write the number of clusters on a tally sheet. A harvestable cluster is any cluster in the fruit zone that your harvest crew would pick....do not count clusters from laterals or any cluster that would not be picked. *If there is no live vine or no clusters on the vine in the 20th vine location, mark "0" on your tally sheet.*
- Add up all the clusters you counted and divide by the number of vine locations you sampled to get the average number of clusters per vine location

EXAMPLE:

variety	Merlot	Cab Fr
	15	32
	19	35
↓ ↓		
	0	22
	14	31
total # clusters	1511	3490
avg clusters / location	11.6	26.8

- Multiply the average number of clusters per vine by the number of vine locations in that given block (number of vines you originally planted) to get the estimated total number of clusters per block

EXAMPLE:

variety	Merlot	Cab Fr
	15	32
	19	35
↓ ↓		
	0	22
	14	31
total # clusters	1511	3490
avg clusters / location	11.6	26.8
total # locations	1400	2000
total # clusters / block	16240	53600

STEP 2: CLUSTER WEIGHT

- If you are doing your crop estimate **BEFORE VERAISON**, use these industry standard harvest cluster weights:

VARIETAL	POUNDS
Cabernet Franc	0.23
Cabernet Sauvignon	0.19
Chambourcin	0.42
Chardonnay	0.23
Chardonel	0.36
Gewurztraminer	0.20
Lemberger	0.30
Malbec	0.23
Merlot	0.22
Petite Verdot	0.20
Petit Manseng	0.18
Pinot Gris	0.22
Riesling	0.18
Seyval	0.43
Traminette	0.24
Vidal	0.34
Viognier	0.22

- I suggest you sample your own cluster weights at **80% VERAISON** and again at **18 BRIX**. At each of these times:
 - Harvest 20 clusters from 5 different locations (total 100 clusters) throughout each varietal planting in each block, counting clusters as you drop them into the lug. If you drop them in and count them later, clusters become intertwined and break apart, making it difficult to get an accurate count.
 - Weigh all 100 clusters to the nearest 1/100th of a pound, subtracting the weight of the lug. Divide by 100 to get the average cluster weight (to nearest 1/100th of a pound).
 - If you are taking this sample at veraison, multiply the average cluster weight by 1.25 to get the estimated average harvest cluster weight.
 - If you are taking this sample at 18 Brix, multiply the average cluster weight by 1.1 to get the estimated average harvest cluster weight.
 - Enter your estimated average harvest cluster weight (lb) into your table, multiply the total number of clusters per block by the estimated average cluster weight to get the estimated harvest per block (lb). Divide by 2000 to get your estimated tons per block:

variety	Merlot	Cab Fr
	15	32
	19	35
	0	22
	14	31
total # clusters	1511	3490
avg clusters / location	11.6	26.8
total # locations	1400	2000
total # clusters / block	16240	53600
est avg cluster wt (lb)	0.25	0.23
est harvest/block (lb)	4065	12349
est harvest/block (ton)	2.0	6.2

That's your crop estimate: 2.0 tons Merlot and 6.2 tons Cab Franc.