

*HAWKES BAY AMATEUR WINEMAKERS  
AND BREWERS CLUB*



*May 2023*

Hi everyone, and welcome to the start of a fresh new club year.

We hope to see you all at the next Club Meeting on Wed 17<sup>th</sup> May, at the Deaf Clubrooms 22 Lee Road Taradale at 7.30pm.

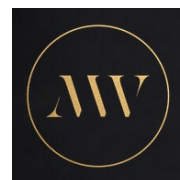
**Wednesday Evenings' speaker** is Darragh Hughes, winemaker, Maxim Wines, Lawn Road, Hastings.



What s an Irishman doing making wine over here? Does he relax with a Guinness?  
Come along and find out

7:30pm Wednesday 17 May

Cann't wait! Find out about Darragh and his wines at the Maxim Wine Web Site



<https://www.maximwines.co.nz/>

Last month we held our Club AGM. Your President, Treasurer and Committee must have done a pretty good job over the last year, as they were all re-elected, unopposed. There is still an opening for someone to help Michael in his other role as steward. This just needs someone who can make it to the meetings a few minutes early to help register the entries.

Another area that needed a bit of load sharing was the finding of Speakers for our Club-nights. Nigel did a great job of this last year, and we enjoyed visits from some very interesting speakers, but it has become harder for him to allocate time to. The plan is for the load to be shared amongst all of the committee, and if anyone else has ideas for speakers, please mention it at clubnight.

We finally managed to hold the Dusty Gringo Challenge after the formalities were done, and Nigel's clone was voted the best.

There was a triple draw for the raffle, and the winners were Michael, Nigel and Jill who was visiting us for the first time.

### **Trophies:**

The winners of last years points cup trophies were as follows:

Winemaker of the Year: Brian.

Beermaker of the Year: Jim.

Runner up Winemaker of the Year: Bob.

Runner up Beermaker of the Year: Nigel.

Novice Beermaker of the Year: Will.

Novice Winemaker of the Year: Will.

Baker of the Year: David.

Liqueur Maker of the Year: Brian.

### **Annual Subscriptions:**

The subs were set to remain at \$30 for the next year, they are now due and can be paid to Michael on club nights or much more preferable is if you could pay them online to ASB 12-3145-0229205-00 using your name as a reference for the deposit.

### **Fat Monk:**

This is our fun monthly “show and tell” session for classes not being competed for in the points cup for that month. Basically, if you have any fermented beverage that you want to show off, or have some feedback on, bring it along for everyone to digest and vote on. We have shifted this session to the start of the night, to encourage more focus on the discussion and sharing of knowledge and ideas.

### **Club Website:**

Don't forget our Club website, <https://www.wine-and-beer-hb.org.nz/> , especial for details of the up and coming Nationals Competition which are posted as they emerge. Remember, the more visits the site gets, the more prominent it becomes, which we hope will help with club growth.

There is a place at the bottom of the page where you can add your email address to subscribe.

### Subscribe to Blog via Email

Enter your email address to subscribe and receive notifications of new posts by email.

Join 11 other subscribers.

Subscribe

### Meta

- [Register](#)
- [Log in](#)
- [Entries feed](#)
- [Comments feed](#)
- [WordPress.org](#)

### **Raffle**

Still \$2 a raffle or three for \$5.

### **Upcoming events;**

- 17<sup>th</sup> May is club night, we meet at the Deaf Clubrooms 22 Lee Road Taradale at 7.30pm. Our speaker is Darragh Hughes, winemaker from Maxim Wines.

- The classes for our points cup judging are:

W2	Medium Red Grape.
W10	Dry White Fruit.
L1	Essence based Liqueur
B5	Brown Ale or Mild
	(1:Northern,2:Southern,3:Mild)

- Sunday 21<sup>st</sup> May we are having a Club lunch outing to Crab Farm Winery. Meet at 12.00pm, 511 Main North Road Bay View
- June Club-night, one of our Club members has volunteered to give a talk on their experiences with Kombucha making.
- The Club Outing to tour Abbey Winery and Brewery will possible happen in June.
- Nigel is working on getting us a speaker from a prominent Brewery, Cidery and Gin Distillery at a later date this year, watch out for more detail.
- 6<sup>th</sup> to 8<sup>th</sup> October is the date now set aside for the National Competition.

CHEERS !

And see you all on Wednesday.

Jim.



## “HOP, TOPIC”

This Month, we carry on with from Octobers excerpts from Marc Sedams “Guide to Water Treatment”.

### Salt of the Earth — and Water

If your local water supply is fairly soft, or your brewing water has been treated to remove or reduce undesirable minerals through one of the methods mentioned above, the water is now ready to be further adjusted by the addition of mineral salts.

The calculation and addition of brewing salts is one area in which a practical knowledge of the metric system greatly simplifies the process. Why? Because ppm, the unit of measurement for mineral content, is equal to mg/L. Five gallons of beer is equal to 18.9 L, so you already know the final volume of your wort (give or take some adjustments for make-up and sparge water). From here, it is relatively simple to determine the number of milligrams of salt necessary (if you know the percent composition of each ion in the salt) to reach the desired concentration.

**Quantity:** The amount of salt to add depends on the molecular weight of each salt and whether it has “water of hydration” associated with it; that is, water that was trapped within the crystalline structure of the mineral during its formation. Hydration essentially dilutes the concentration of ions per given weight of salt. **Epsom salt**, for example, has seven water molecules of hydration, which provide 33% of the total weight in 1 g of salt. Occasionally you will see a salt listed as anhydrous (abbreviated “anh”), which means that all water of hydration has been driven off, and the resulting 1-g mass consists of minerals only. Anhydrous salts should be kept tightly sealed as they will adsorb water from the air.

For this reason, salts should be measured by weight (grams or ounces) and not by volume (teaspoons or tablespoons) for complete accuracy. Few brewers, however, have access to accurate gram or partial-ounce scales, so I have included the approximate weight of one teaspoon of each common salt in Table IV, “Salt Ion Contribution Scale,” on page 68. For example, 1 g of a freely soluble mineral salt in 1 U.S. gallon of room-temperature water will increase the total dissolved solids by 264.2 ppm at room temperature. To know the increase of each individual component of a particular salt, you must know the relative composition of each ion as a part of the total composition. A summary of the increase (in ppm) of each mineral from the addition of 1 g of salt in a standard 5-gallon batch is also given in Table IV, on page 68.

**Table V: Comparison of Famous Brewing Waters\***

	Durham, NC†	Plzen	Munich	Dublin	Dortmund	Burton-on- Trent
Calcium (ppm)	16	7	75	115	250	295
Magnesium (ppm)	2	2	20	4	25	45
Sodium (ppm)	4	2	10	4	70	55
Sulfate (ppm)	25	5	10	55	280	725
Bicarbonate (ppm)	12	15	200	200	550	300
Chloride (ppm)	9	5	2	19	100	25
Hardness (as CaCO <sub>3</sub> )	48	30	250	300	750	850
Water character‡	soft	soft	carbonate	carbonate	hard	sulfate

\*Values provided for brewing waters were compiled from references 1,2,4,5,6 and could be +/- 15%.

†Durham data from reference 8.

‡Water character information from reference 1.

**Method:** Mineral salts show different solubilities (carbonates from chalk are especially affected), so adjusting the water before dough-in will better solubilize the salts. A preferred method of adding salts is to dissolve them in 1 gallon of water, adjust the pH, and add the “salt water” to the larger volume of brewing water, also pH-adjusted. Most salts can be added directly to the brewing water this way (though some brewers prefer to add carbonates only as needed during the mash to adjust pH).

It should be noted, however, that chalk (CaCO<sub>3</sub>) is insoluble in basic or neutral pH. It can be added to the grist at dough-in, where a more acidic pH exists, or to pre-acidified water. After the first temperature rest is reached, check the pH and adjust if necessary.

Another reason to add salt to the brewing water is to remove more carbonates from temporarily hard water. If a considerable amount of carbonate remains after boiling, for example, you can add a calculated amount of another calcium-containing salt (gypsum, calcium chloride, or lime) to precipitate calcium carbonate from solution. Two words of caution: First, the amount of calcium added should not be greater (in ppm) than the water's total alkalinity, with sufficient calcium remaining for the positive mash reactions listed in Table I on page 64 (generally at least 50 ppm of calcium should remain in water after the precipitation of the carbonate).

Second, the amount of anions added in conjunction with the calcium must be closely monitored so that unsuitable flavors are not added. You may not be able to add enough calcium without throwing off the overall balance of the water (such as too many sulfates or chloride). The best method to remove excess carbonates without affecting flavor is through the use of slaked lime [Ca(OH)<sub>2</sub>], since the anion of the salt is hydroxide. If using hydrated (or slaked) lime, monitor the pH of the liquor carefully; only a small amount is necessary to affect pH. Consequently, the use of slaked lime to reduce carbonates should be the first step in the treatment, followed by vigorous boiling and aeration, then acidification to a desired pH for the remainder of the mineral treatment schedule. Lime can be found in any garden supply shop (check the label to make sure it contains only calcium hydroxide with a trace of magnesium hydroxide). Food-grade lime can also be found as "pickling lime" where canning supplies are sold. Avoid creating "dust" when adding to water — the powder can burn the eyes, nose, and throat.

Next time.... we should wrap up this rather dry topic.

Jim.