

What to expect this year

Andrew Hodson
Mike Barley
Lesley Hodson-Kersey
HortPlus
hortplus@gmail.com

We are currently developing a system for Pipfruit New Zealand growers to compare the weather this year with the long term average. By long term we mean the last 30 years or so. This should be a useful tool when it is finished. However, forecasting what the season will be like is very hard. I have seen all sorts of methods ranging from witchcraft to pseudo-science. No method seems to work very well. I'll repeat that, no method works well. Seasonal forecasts are not very accurate and often written in gobble-de-gook that no one understands. Just because the cabbage trees are flowering early doesn't mean we are in for a hot summer. However the following graphs and commentary should give you some idea of what to expect from the coming year.

Figures 1 to 6 show the maximum, minimum and average monthly temperatures from selected sites around the country. By the way, AWS stands for Automatic Weather Station and EWS stands for Electronic Weather Station. Note that this is the daily average not how hot or cool it can get, so the information is $\text{maximum} + \text{minimum} / 2$. The information has been extracted from the NIWA climate database. You can do this yourself if you like. Just go to the free NIWA web site at <http://cliflo.niwa.co.nz/>, register and all the data is there. We have tried to cover the period 1971 to 2008 but this wasn't always possible for all sites. Te Puke for example just covered 1996 to 2008. The figures show what you can expect on average and the hottest and coldest it can get. I had a talk with a grower a few years back and he was sick of having "est" years. Coldest, hottest, wettest. I sympathise. When faced with this data to compare with the current season I like to assign the year to one of five categories. They are:

1. A lot colder
2. Colder
3. About average
4. Warmer
5. A lot warmer

Using this system you can assign this year to a class and manage your crop accordingly. Thinning of apples would be a good example. Looking at the graphs you can see how cold it can get down south in winter.

It is interesting to note that during our research we were surprised how unpredictable the weather can be. Growers probably already know this. Knowing what has happened in the recent past bears no relationship to what will happen in the future. So for example, we may be having a warm summer so far but that is no guarantee that the rest of summer will be warm. The climate seems to get into a pattern for some time then suddenly without warning it will change. While working for the MetService a few years back I took some time studying a graph of the Southern Oscillation Index. This index helps decide whether we are in a La Nina or El Nino weather phase. What struck me was how quickly the index can change. No wonder the climate scientists are cagey about predicting the sort of summer we will have.

As already mentioned this new comparative feature will be available to subscribers of Metwatch Online. You can get a free 14 day trial of this service by sending us an email. Pipfruit growers just need to login to the Pipfruit New Zealand web site.

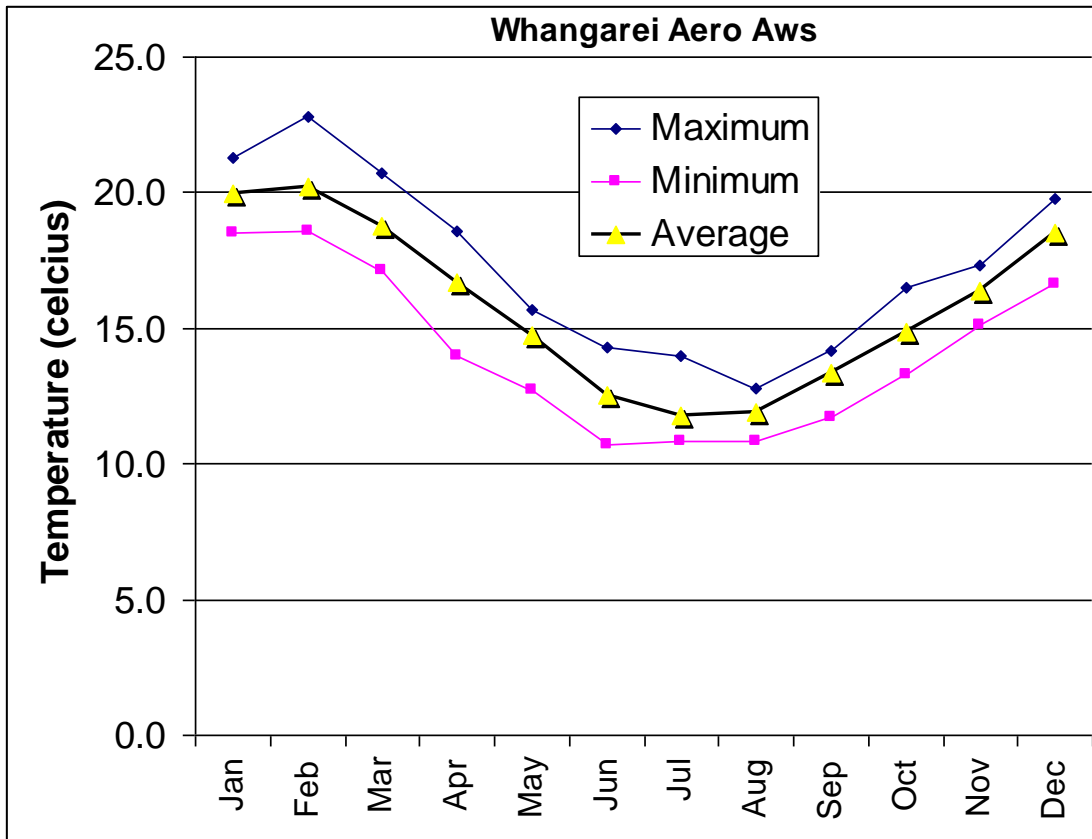


Figure 1

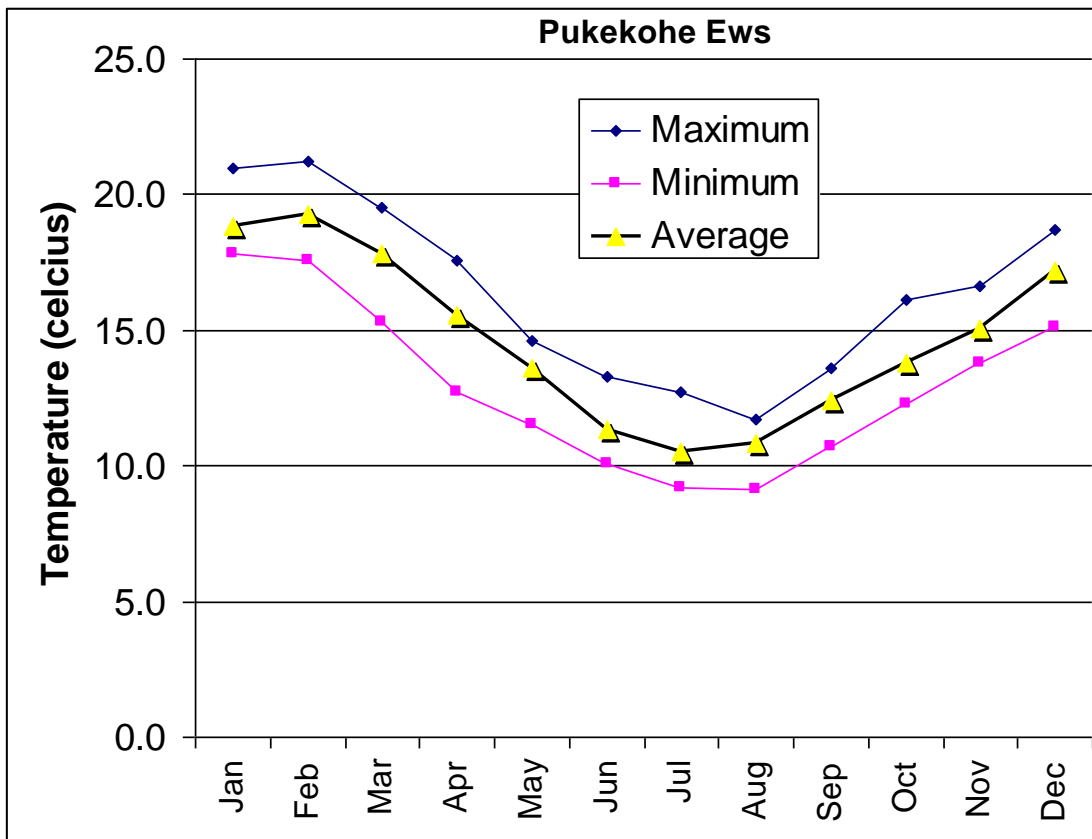


Figure 2

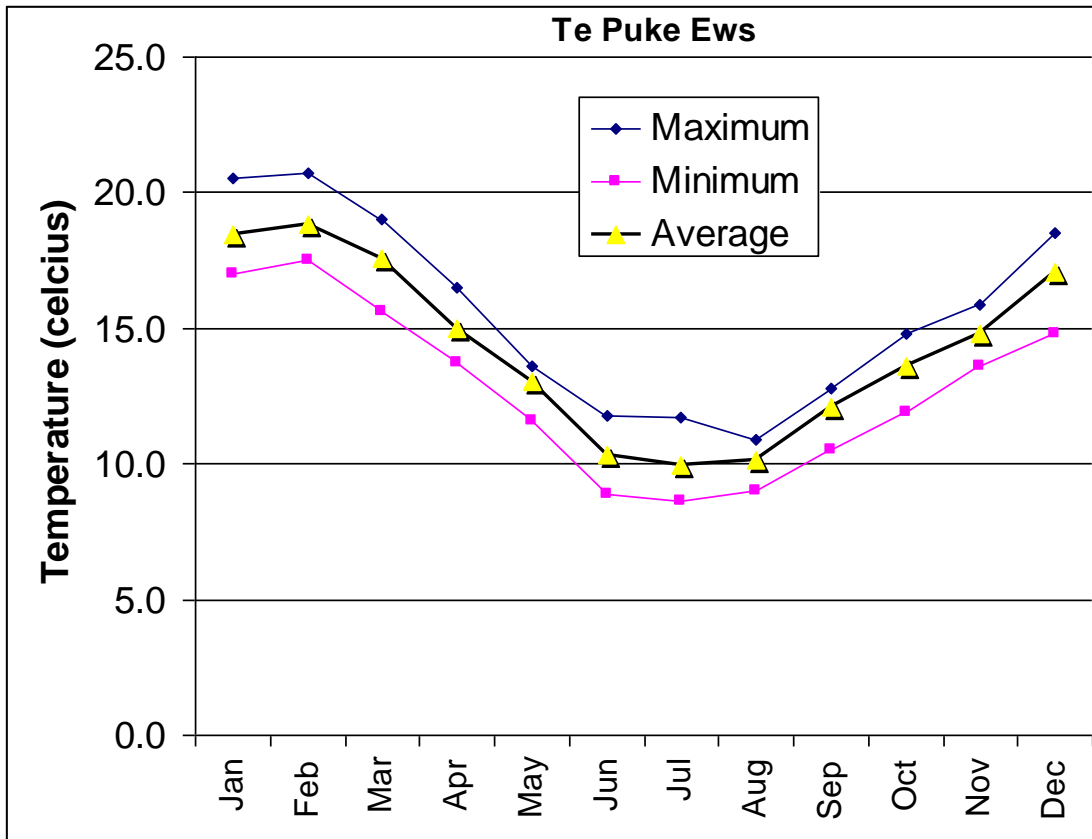


Figure 3

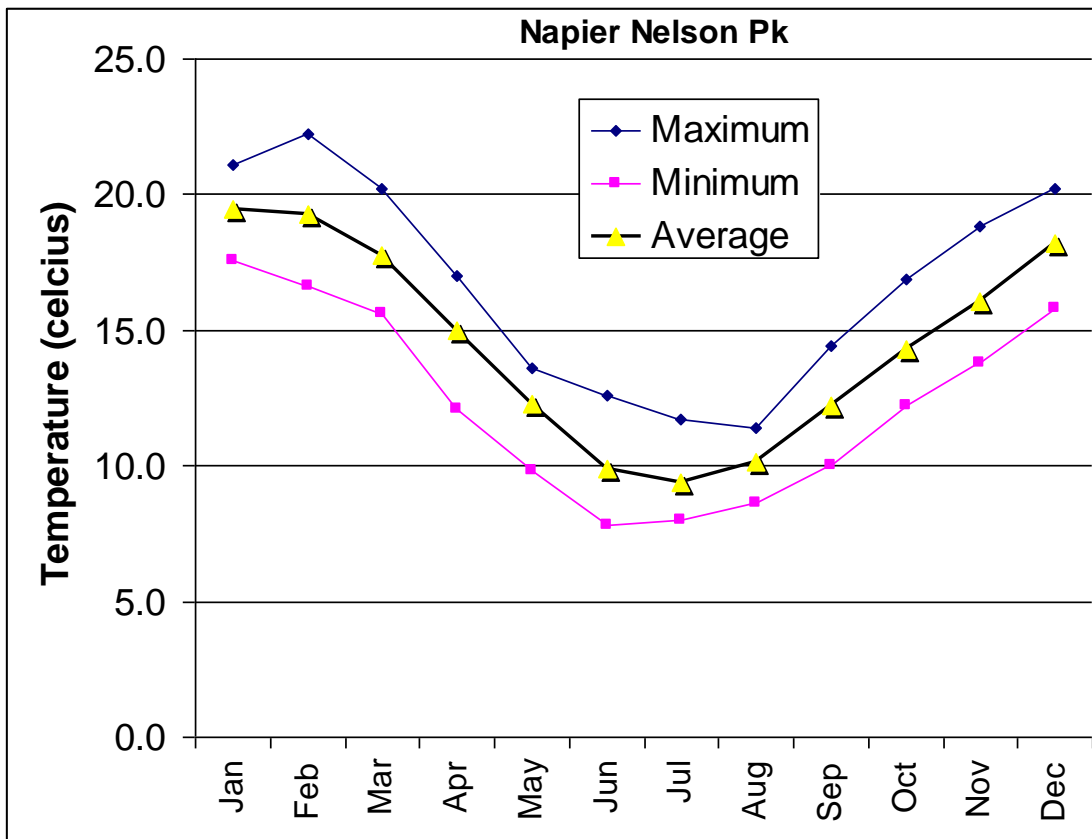


Figure 4

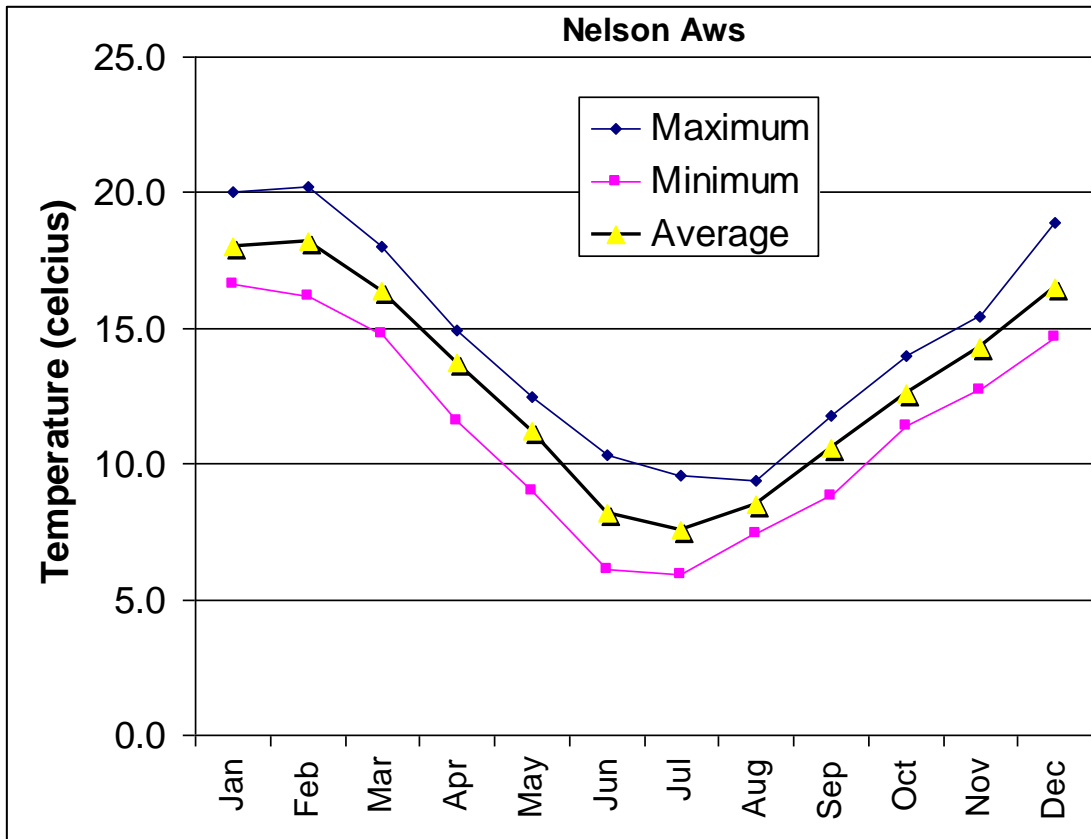


Figure 5

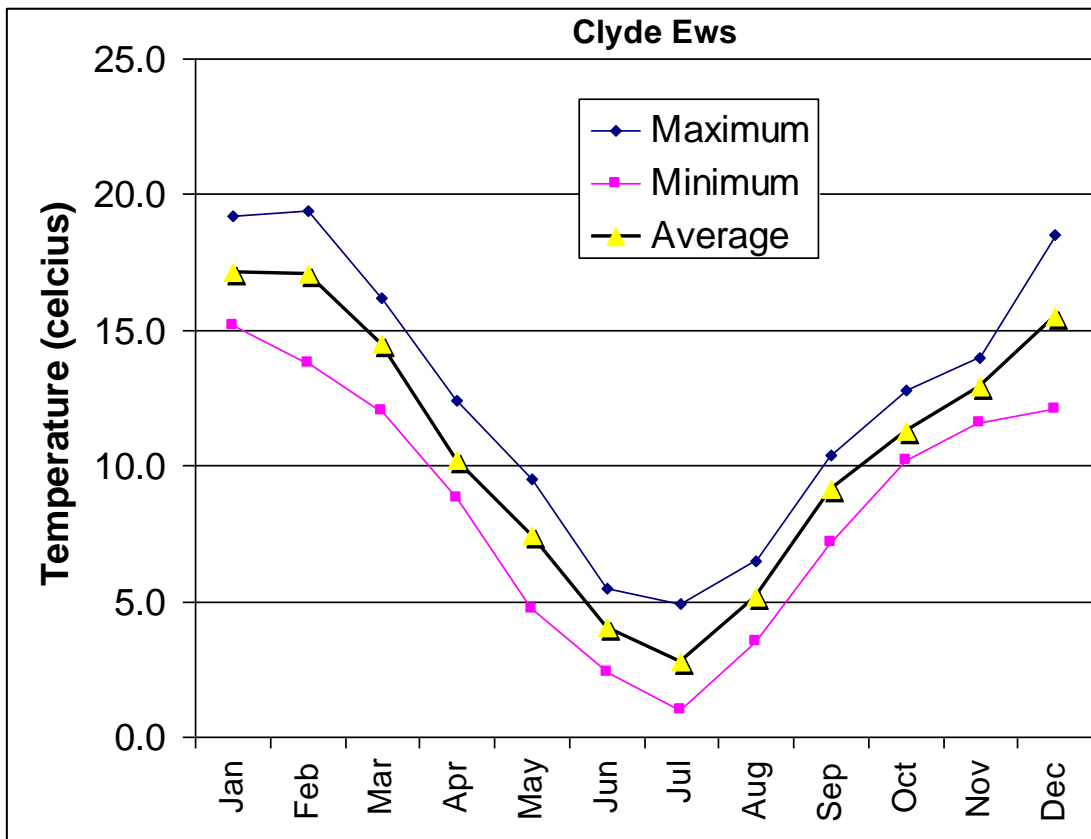


Figure 6