

Climate With An Attitude

Those of us (which includes most of us I expect) who love to talk/complain about the weather are alert to the late December behavior of the Humboldt Current that sweeps from Antarctica up the western side of South America. It is appropriately named for Baron Friedrich Heinrich Alexander Von Humboldt (1769-1859) German naturalist who studied South American volcanoes, tropical storms and the increase in magnetic intensity from the equator toward the poles.

With Germanic attention to detail, his resulting description of the physical universe, "Kosmos", required five volumes. From time to time when the Humboldt Current approaches the coast it reverses itself and because this happens at Christmas time, it is inappropriately named for the Christ Child, El Nino. El Nino Southern Oscillation or ENSO is the warm surface current that flows in the equatorial water. When the trade winds ease or reverse they allow the warm surface waters that have accumulated in the Western Pacific to flow back and warm the waters off the coast of South America two or three degrees Centigrade.

This may seem a small difference to us but it can affect the weather in Australia and Southeast Asia, rainfall in Africa as well as the frequency and ferocity of Atlantic hurricanes. The usual behavior of the Humboldt Current pushes warm water away from the coast of Peru, bringing up the cold water replete with nutrients that boost anchovy production, the basis of the Peruvian fishing industry.

In an El Nino year this does not happen: for example, in the 1982-83 season the catch was reduced by 600%. Because of the change in mean sea-level there is an increase of as much as 20 inches in some places resulting in widespread flooding. Although El Nino occurs at intervals of two to ten years, it is unpredictable. Some scientists think it is becoming more frequent with the result that weather patterns are tossed upside down so often that recovery times are truncated. There is a related phenomenon called La Nina when the ocean current is abnormally cold.

Some of the most dramatic weather changes over the millennia have taken place in Peru, a land of tropical glacier-topped mountains as well as deserts, resulting in increasing interest in the scientific climate studies being done there. The findings from ice cores taken from the glaciers in Peru as well as those from the Tibetan plateau, Kilimanjaro, European Alps, North American Rockies are parallel with the findings from the study of tree rings, lake and ocean sediments, coral reef formations and mineral deposits in caves. By reading the marks left behind by centuries of weather, scientists are better able to predict the results of currently occurring changes in climate. Familiar though we are with the photographic comparisons that show glaciers all over the world retreating, that is only part of the troublesome equation as these glaciers are not only receding but they are becoming thinner. The changes seen may be understood scientifically but their affect is more important socially as agriculture, industry, energy sources, and just plain people compete for use of diminishing water supplies.

Go Outdoors and Do What?

If you feel a need to work off too much good food or to have a respite from too many good visitors, prune the grape vines. Most of the grapes grown for home use produce fruit on one year branches, those that emerged last spring and summer. Those that provided this year's harvest must go. What that means is your arbor goes from fat to skinny. It is downright unnerving to attack all that growth: you fear you have killed the plant!

Carefully single out the one-year arms emerging from the sturdy trunk and spread them laterally and tie them to the wires. One vine on each wire may look insufficient but it is enough. Study the older canes and cut them back until only two plump buds remain. Those buds will become the branches for the crop of 1012.

Once you have the one-year old canes tied down and about the same number of renewal spurs, the rest goes. This is where it is good to have a craft-person friend to collect those prunings for cherished grape vine wreaths.

Merry Christmas and bless us every one.