



**Welcome to [vegetableseeds.net.au](http://vegetableseeds.net.au)**

**October 2015 Newsletter**

**EL NINO or The Current Of The Christ Child**

Welcome to [vegetableseeds.net.au](http://vegetableseeds.net.au) newsletter October 2015.

Weather dictates Agriculture, Horticulture and Aquaculture.

We have to accept what the weather will throw at us and we have to learn to adapt, but the vagaries of the weather can cause stress to those who work on the land and at sea.

## **Why worry?**

1982-83 was an eventful period for many people in the world. Something odd was going on in the Pacific, from Christmas Island to the coast of California.

Marine life was abandoning millennia old habitats, beaches washed out to sea. Up in the Sierra Nevada snow 9m deep threatened to turn California's central valley, the richest fruit growing region in America, into one vast lake. Floods in Mississippi damaged nearly \$1 billion worth of property.

Here in Australia the worst drought of that century was beginning which cost \$2 billion dollars to grain and livestock farming. Sheep were selling for 1/100<sup>th</sup> of their pre-drought value, and on 8th February 1983 the climax of a withering dry spell saw a dust storm pile soil on Melbourne and bush fires in the suburbs.

Floods occurred in Ecuador, causing \$1/2 billion crop and property damage. Fishing regions suffered.

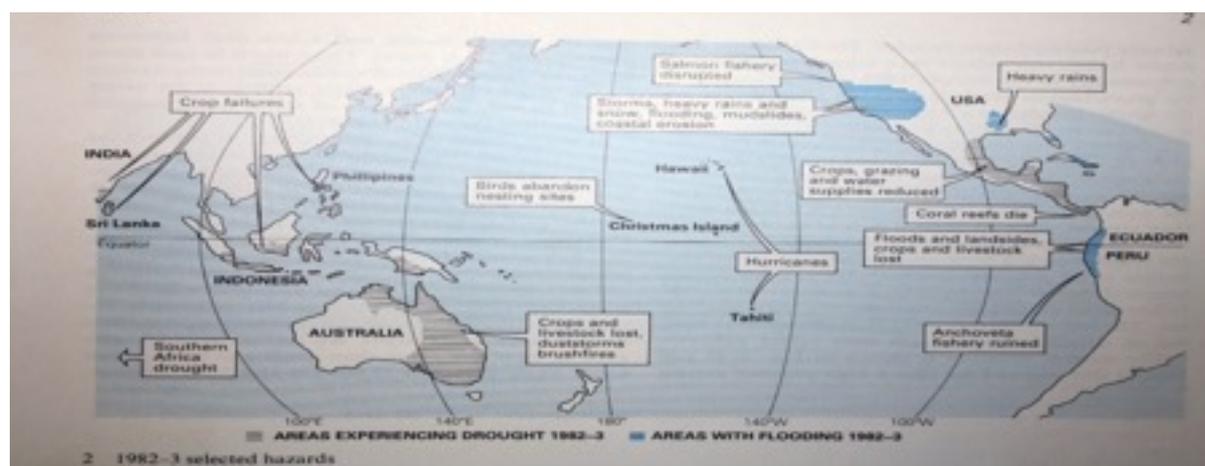
Tahiti saw a hurricane, the worst in 75 years leaving 25,000 homeless. Christmas Island was abandoned, 17,000 sea birds normally nest there.

The ocean waters over large areas became too warm for algae which lived symbiotically with coral polyps, so coral reefs began to die.

It is estimated all this cost the world \$10 billion dollars. So, we had atmospheric hazards like drought and floods, ecological hazards like the loss of reefs, and geomorphological hazards like floods which cost the economy and us dearly.

## What caused this disaster?

### Map 1.



El Nino is a phenomenon occurring off the coast of Peru, the local fishermen call it Corriente del Nino or the Christ Child Current, as it usually occurs around Christmas.

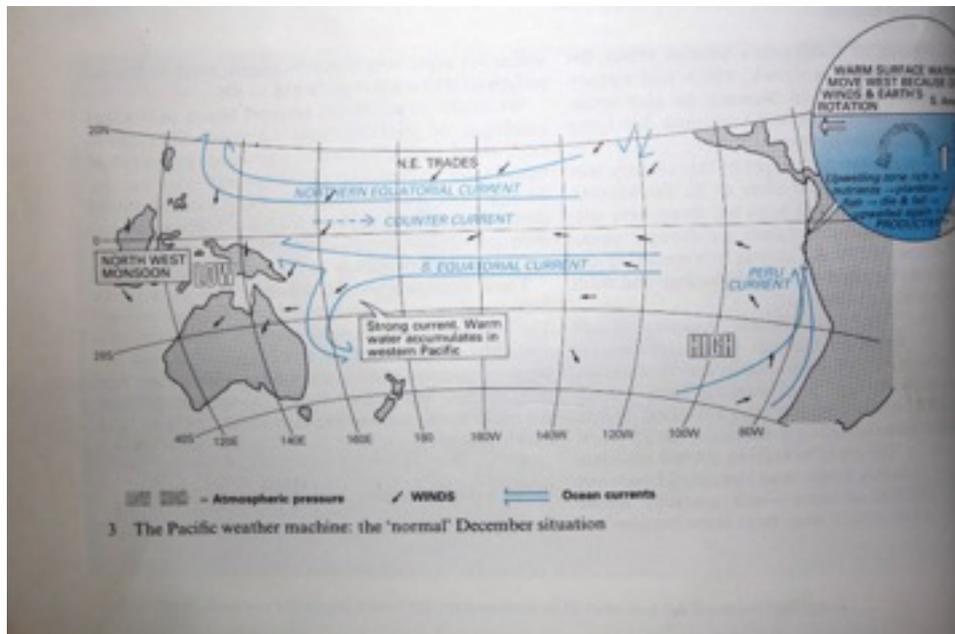
It is basically a warming of the equatorial Pacific.

Of course it is a lot more complicated than that, and involves air pressure, precipitation, and sea surface temperatures in the equatorial east pacific.

The one that preceded 1982 was in 1976, so they occur at irregular intervals.

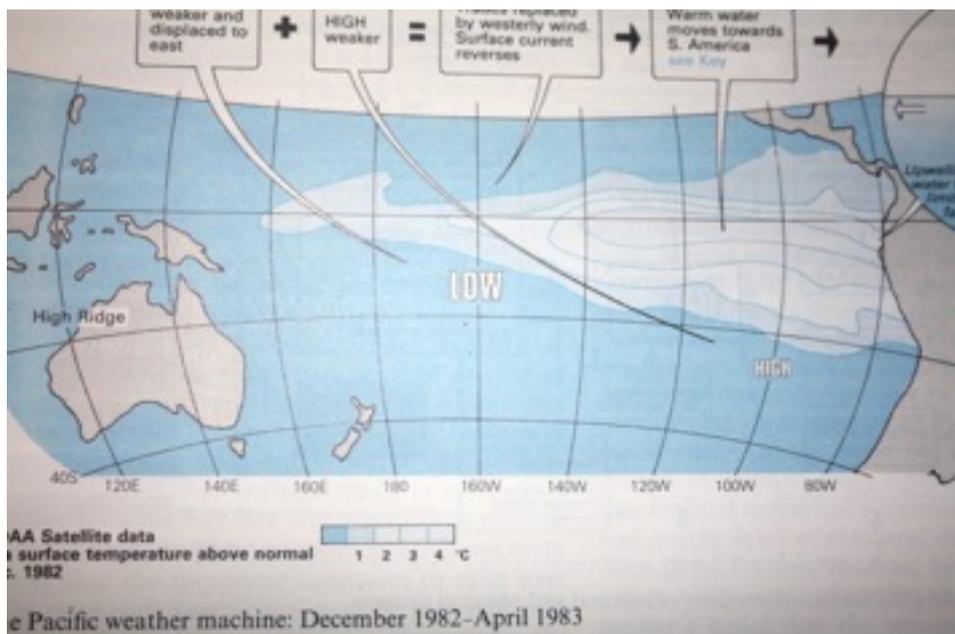
# The Pacific weather machine.

Map 2.



Normally there is a high pressure system in the Eastern Pacific and a low one over Indonesia producing the trade winds, which move the ocean so the warmer water occurs in the Western Pacific and the sub-waters return as an undercurrent only warming off shore Peru and Ecuador slightly.

Map 3.



In 1982 this pattern broke. High pressure over Eastern Australia deflected rain bearing storms. Further east, hurricanes could spin into the usually calm parts of Hawaii and Tahiti. The trade winds were replaced by easterlies so the ocean current reversed.

Does all this sounds familiar? In October 2015 we are in another El Nino and the farming communities in Australia, America and South America are pretty stressed. So are there any positives for us home gardeners?

You may recall in previous newsletters that I mentioned drought tolerant crops. The time may be right to think about trying some of these this year.

### **Tepary beans**

These interesting bushy plants thrive with very little moisture and produce numerous podded dry beans in mid to late summer. We have three types, the brown Tepary, bred in Tasmania, the blue speckled Tepary and the white Tepary, \$3.85 a packet.



Our Summer Green manure Pearl Millet needs very little moisture to get established. They have a mass of deep fibrous roots and retain soil structure ready for autumn planting.



When you think about it that makes sense because they come from some of the driest parts of Africa where they are used as a green manure. 500g for \$12.50

### **Edamame soy beans**

These are cool climate Edamame line developed for Tasmania which in a warm year such as this, will produce extremely high yields of beans. If there was ever a year to test them it is this one. 20 seeds for \$5.50. On a note about the price; please remember we don't buy these in bulk, we grow our own seed at Cressy, these are very rare varieties that you can't get anywhere else.



## Chillis, capsicums and tomatoes

If there was ever a year in which to experiment with the late season tomato varieties like Tropigro, Nematex, Kokomo, Campbells and Heinz it is this one.



The chillis and capsicums will certainly thrive and produce abundant rich flavoured crops in a long hot summer.

Our varieties include Chilli Inferno, Ring of Fire, Hot Portugal, and Hot Wax and the capsicums include Super Shephard, Yankee Bell and Antohi.

Our chilli and capsicum germination tests; my latest germination test of our chilli and capsicum seeds in August showed that some of my packet seed was not high germination. So I set about testing the seeds thoroughly and sowing various batches from several years again for seed this year.



When I asked my friend Steve Solomon why the seed was not strong from 2014 but some from 2011 were stronger, he reminded me that we had had cooler summer weather and cloudy skies in 2014.

Chilli and capsicum plants and fruit need a lot of long hot days to ripen and produce strong seed, which Tasmania does not always have. Ah! now it made sense.

Here are some photos of the batches of seeds for sowing from various years and my plants from these seeds to be planted out for fresh seeds next year.

Most of the seeds from 2014 did germinate, it just took longer than 14 days more like 21 days and they definitely needed a heat mat set at 20-25 degrees Centigrade.



A few ideas of what to sow and plant early October:

Carrots, lettuce, broccoli, spring onions,  
beetroot, peas.

What to sow and plant end October when risk of frost  
is very low and soil temperatures are warmer:

Cucumbers, zucchini, pumpkin, squash,  
sweet corn.

See our planting guide for comprehensive  
information.

**Happy gardening wherever you may be.**

