

Walnut Blogletter 21

January 2015

Hi Nick

Thanks for the newsletter. Quite topical for me, as with the early part of the winter here in Canterbury so wet, we had very high water table for weeks on end. Have lost three ten year old trees and one looking a bit sick so I am guessing it will be gone this time next year. All Rex. To be fair it was a hard ask. Those three would have had standing water around the bole of the tree to 10 or so cm for weeks.

For the rest of the orchard , currently looking like a pretty good crop. Have escaped all the hail and no late frosts

Regards

Simon Collin

We were wondering if you can help put us onto someone who can.

> We have walnut trees which have been in for three years now
> (Rex) a couple of trees have



or

developed this scale type imperfection on some of the leaves. Do we need to do anything about it or is it normal??.

> Regards

> Paul & Donna Kelly

Paul, Janet and Tony,

Regarding your walnut leaf disease, it is Downy leaf spot, *Microstroma juglandis*. It can look alarming, but is nothing to worry about. The disease is widespread and worldwide. It infects just about all members of the walnut/pecan/hickory family, but does not appear to affect growth or cropping. University of California walnut management books do not even mention it, it is so unimportant. It is more prevalent in a wet spring, and is more obvious on young trees. I can remember when I first noticed it on my trees, and thinking I had a major problem, but I don't even notice it any more.

Of much more concern would be the size of the leaves in your photos. Each walnut leaf on a walnut tree should be at least 30 cm long, each leaflet nearly the size of an outstretched hand, if the tree has had adequate nutrition. There is evidence that Downy leaf spot is more prevalent on hungry trees. So don't spray the fungus, feed your trees.

All the best
nick

Nick, Thank you for your speedy and informative reply.

Although our spring started relatively dry we have certainly had a lot of damp days during the past month or so.

I shall have a look at our own leaf dimensions now !

Best wishes to Pauline and yourself for a safe and enjoyable Christmas

Regards
Tony

Although the spring started off a bit wet for some, it has morphed into a beautiful hot dry summer. Although we are a way off drought conditions here in the Bay of Plenty, I was wondering how everyone else was coping. Maybe you could share how you are or have coped with dry conditions and the effect on your walnut trees.

Californian drought

After seeing pictures of dead walnut trees on a news item about the drought in California, I Googled Californian drought to find the impact on their walnut industry.

(Reuters) - California is forecast to produce a record walnut crop this year despite the state's severe drought, and one analyst says some alarming water use practices have contributed to the robust yields.

Almost all of the walnuts grown in the United States come from California, where the 2014 crop is expected to be 545,000 tons, 11 percent bigger than last year's, according to the U.S. Department of Agriculture's National Agricultural Statistics Service. It also appears to be high quality.

But in a client note on Monday, BB&T Capital Markets analyst Brett Hundley questioned the methods being used to produce the bumper crop.

"Even amidst a crippling drought, we found that (California) walnut growers indeed had access to ground water, and the number of young walnut trees in the ground affords incrementally greater production," he said.

"During our recent crop tour, we were alarmed at the level of flood irrigation techniques being used," he added.

Many California farmers have struggled with severe cuts in supplies of surface water from rivers, lakes and other sources. To compensate, they have been pumping record amounts of water out of the ground, an activity that is not yet regulated by the state of California. -----

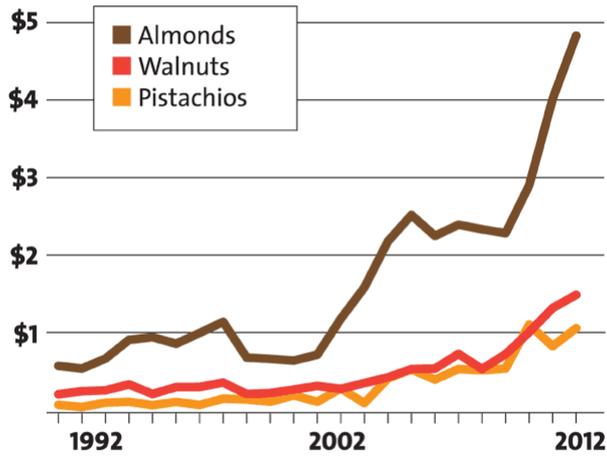
This clip from <http://www.motherjones.com/environment>

California has entered the age of King Nut: The state produces more than 80 percent of the world's almonds, and roughly 30 and 40 percent of the world's pistachios and walnuts, respectively. Most of the production takes place in the Central Valley, a swath of farmland in California's midsection.

A single almond [requires a gallon of water](#) to grow—bad news in the midst of California's [worst drought in half a millennium](#). But with ever-rising demand in a nut-crazed world, farmers continue to expand orchards, pumping water out of the ground to make up for the dried-up surface water. These charts tell the story:

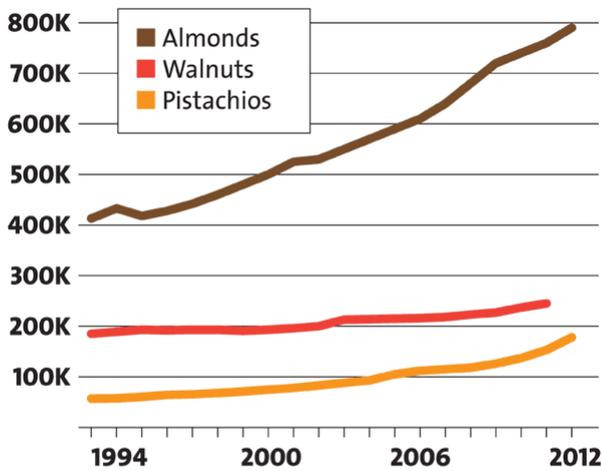
California's Nut Boom

(in billions of dollars)



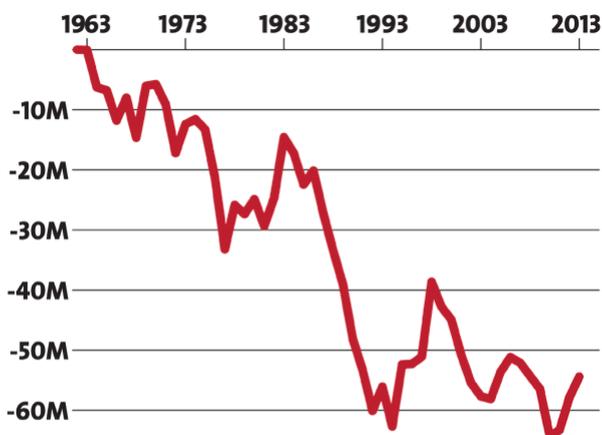
As the State's Orchards Keep Expanding...

(in acres)



...the Central Valley's Groundwater Keeps Dwindling

(in acre-feet)



Sources: United States Geological Survey; USDA; Jay Famiglietti, NASA/UC Irvine

Mother Jones

Excerpt from <http://westernfarmpress.com/>

In 1987, research showed zero percent of those who purchased walnuts did so for health benefits, said Michelle McNeil, senior marketing director, international, with the California Walnut Commission and California Walnut Board.

In 2013, she said, 84 percent believe walnuts are healthy and health is the No. 1 reason for buying them.

McNeil said foreign markets are a key to sales and that India and Korea opened their doors to walnuts from the United States in the past two years. But China, opened in 2008, is the leading market for more than 200 million pounds.

Walnut Factory News

The biggest topic on the walnut front this summer is Jenny and Malcolm's decision to sell their business, A Cracker Of A Nut, and the formation of a growers group to negotiate purchasing it.

The temporary name is Walnut NewCo <http://walnutnewco.wordpress.com/>

Alzheimer's

Have you heard of the Irish cure for Alzheimer's disease. It works but it kills you. No, really, this is no joke. The Williams Inference Centre reports of a vaccine developed by an Irish drug company, Elan. The vaccine appeared to have cleared the sticky deposits called beta-amyloid plaques from some patients' brains when the trial was abruptly stopped amid concern for patient safety.

However progress is being made in this major research field. Of interest to tree croppers is that, "What is good for your heart is good for your head!" "Diets rich in unsaturated fat - found in olive oil, canola oil and various nuts - were associated with up to an 80% reduction in Alzheimer's risk.." reports the Centre.

Wasps

Having just found another wasp nest in the orchard, or rather it found me, I thought it would be a good time to reprint this item from a NZTCA branch newsletter.

When a wasp nest stings you up you soon realise that everyone has their own wasp nest story. But how many people know how to deal with wasp nests?

The Asian paper wasps are easy, - you just clap the nest between your hands, though best done in the



cool of the day while the insects are a bit slow. Big nests in late summer get the fly spray treatment, (below).

The reddy brown native paper wasp requires a little more respect. They only sting within a metre of the nest, but are fairly aggressive within that no-go zone. The most effective method for these critters is to blast them with fly spray. Press the nozzle one and a half metres away, and go in with guns blazing. Then knock the nest to the ground and stomp on it.

German wasps command RESPECT. A wasp nest killed a large Hereford bull a few years ago on the neighbouring farm. So, it pays to find these nests before they find you. You can increase the odds considerably just by keeping your eyes open, and it does pay to react quite quickly to buzzing around your ears. They usually warn you off before stinging unless you have actually stood in the hole, though later in the autumn they get more aggressive.

Finding a German wasp nest is easier than you expect if you know what to look for. Wasps entering and exiting a nest fly in a straight line. Most other insects, including wasps just hunting, meander. Therefore, if you see an insect flying in a straight line, one end of that line must be a wasp nest. It is also easier to spot insects flying than you expect, even with my eyesight, if you look towards, but not into, the sun. If you just glance up every now and again while you are working, you will spot most nests in the area.

That was the hard bit. Killing most German wasp nests is easy. Strap a spoon on the end of a stick, (about 2 metres long,) and simply tip a spoonful of insecticide powder into the hole during the day. The returning wasps land on the powder and take it into the nest, killing all the occupants. I have used Carbaryl, but am using something a bit stronger at the moment, that I found in my parents' garage while cleaning it out.

When I was about 15, I had a contract with the local apple orchardist to kill wasp nests, and shown how to do it. I was taken down to the local chemist to sign the poison book for 4 ounces of Sodium Cyanide. When I got home I transferred the grey powder from the paper bag into an old honey jar, and I was in business. I guess some things have changed for the better.

(As an aside, one change I regret is the outlawing of Myrex. This was the ultimate wasp killer, as you did not even need to find the nest. But it was banned because it is a DDT derivative. I find it hard to believe a significant amount of DDT was being put into the environment from killing a few wasp nests.)

One needs to mention the practice of pouring petrol into wasp nest holes. This is expensive and dangerous, especially if you light it. My father poured petrol into a nest on his boundary, one evening years ago. Later that night he heard a muffled explosion. On going to investigate he found the neighbour minus his eyebrows. He had also poured petrol down the same hole, and had lit it!

A proportion of nests have an entrance that goes up, not down, so you cannot tip powder into it. These are much more difficult to treat. I usually attack them at night. I have a sprayer I can change the nozzle to squirt instead of spray, into which I mix a couple of litres of insecticide solution. I also add a cupful of petrol for instant knockdown of the wasp sentries in the mouth of the hole. Then I pump the whole lot into the nest entrance. It usually works.

Finally, treat German wasps with respect. If the nest is too big, get the experts in to deal with it. And just because you have a wasp nest, does not mean you have to kill it. The paper wasps are of considerable benefit, keeping down the population of caterpillars and bugs in your garden. German wasps are a mixed blessing, killing insects but also attacking you and your fruit crops. If they are out of the way, and a bit difficult to get at, I usually leave them alone.

Nick Nelson Parker

I would like to welcome John and Jackie Thirkettle to the walnut blog. This was her response to the information that all back copies of the blog are available on the NZ Treecrops website.

<http://www.treecrops.org.nz/>

Hi thanks for that - have just requested a password etc so we can look at the blogs - all password protected now by the looks of it. Our nursery grows all sorts of fruit trees, with citrus the major crop, extensive range of natives and ornamentals, including camellias and rhodos. You can check it out on the web -

www.thirkettlenurseries.co.nz

John & I semiretired a few years ago and have team managing the day to day stuff on the nursery. We also have about 12-15 acres of fruiting trees - small quantities of avocado, macadamia, citrus, stone and pip fruit, figs, and a commercial planting of hazels. We planted about 400 walnuts last season.

Cheers Jackie

If you have made or are selling walnut equipment maybe you could email me about it. We all need to know what is going on in the industry.

nick nelson parker

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