

SFF&F Project 19025 – Meeting the increasing demand for New Zealand Extra Virgin Olive Oil

Milestone MS02 Focus Grove and Field Days Report

March 2020

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Introduction

The purpose of the Sustainable Food and Fibres Futures project is:

To increase the production of established olive groves to meet the increasing demand for New Zealand Extra Virgin Olive Oil. The target is an additional 5kg (20%) per tree.

A second objective is to develop an alternate/more organic approach to improving grove production.

The project uses five focus groves in each main growing region that have demonstrated a commitment to best practice principles. These groves have already implemented the recommendations of the previous Sustainable Farming Fund Project and have demonstrated their success. They will now implement and trial new approaches, measure outcomes and host field days to share their experiences with other growers.

The project also includes a number of groves who wish to trial a more organic approach to improving tree health and benefit from increased crop loads. These groves will also implement and trial recommended new approaches, measure outcomes and host field days to share their experiences with other growers.

The methods use expert tree crops horticultural advice focusing in four key aspects of grove management.

1. Introducing practical, affordable tree pruning regimes that improve light distribution for stimulating flowering and fruit growth, aiding effective spray coverage and inducing adequate annual shoot growth to provide the required bud sites for new flower production – on an annual basis.
2. Introducing an appropriate nutritional programme that will ensure there are sufficient nutrients for plant growth which will impact on yield.
3. Improving tree health by disease control using affordable protectant spray programmes to manage foliage diseases that defoliate olive trees, a primary cause of low productivity in NZ groves.
4. Developing an alternate/more organic programme methodologies that will improve tree health to manage foliage diseases as above.

This report outlines the progress made by the Focus Groves and is based on the second round of Focus Grove visits and Field Days held in March 2020, carried out by the specialist consultant engaged as part of the project; Dr Stuart Tustin from Plant and Food Research.

This report is based on the comments from the Focus Grove visits by the project consultant and Focus Grove owners coupled with discussion at the Field Days with attendees.

Focus Groves Status

Northland

Olives on the Hill

There were 14 attendees from Auckland, Northland, Waiheke Island and Bay of Plenty, who were welcomed to Olives on the Hill with a sumptuous morning tea by owners Chris and Linda Smith.

This grove is one of the original Focus Groves and has benefited from continuous improvement to overall grove health and increased grove production. Olives on the Hill produces more than double the harvest tonnage of the regional average.

Chris explained that Boron had been applied in line with the previous soil test. He had applied Protek at flowering as per the recommendations. The Manzate spraying has stretched out to 6 weeks because of no rain. The only rain has been light drizzle since January. There was an issue in Northland with spraying because of lack of water.

There has been heavy pruning, evidenced in large piles of limbs, which has been successful in getting trees restructured. Mulching is showing to be very effective. Plus the limbs are sold as firewood. Graham Taylor from number 29, Waiheke Island said their grove has had a heavy prune and is looking good. He said they also spread the mulch around the trees.

Chris said there had been excellent flowering which has translated to excellent fruit set. In fact the crop load is probably looking better than last year. He confirmed that the Ascolano hand harvested in 2019 had resulted in 42kg per tree.

Stuart emphasized that extension growth is for next year's crop. Poor extension means poor crop. He said that there was only a little disease apparent which reiterates the need to keep on top of disease by proactive spraying.

The three sectors of the grove - Frantoio, Ascolano and Leccino blocks, had leaf tests and Stuart said no major deficiencies were identified. Potassium was higher in Frantoio and Ascolano. Magnesium verging on low and needs monitoring. Boron low and as this was needed for pollination and fruit set Stuart recommended a foliar spray prior to flowering of the first variety.

Stuart said that soil tests tell you about the reservoir while leaf tests tells you about the tree. Doing leaf tests in January allows major intervention if required, leaf tests should then be repeated in July. He recommended to Olives on the Hill that only a single block be tested as the three leaf tests had quite similar results. In response to a question, Linda said that leaf tests cost around \$80, while the soil test costs around \$120.

It was noted that we used to be advised not to spread mulch of prunings because of disease but Stuart said this was not an issue with a disease control program. He said organic matter is good to put back nitrogen and other soil nutrition plus increased the ability to retain water and supports worms. So all part of the cycle.

In response to a question on glyphosate spraying Stuart said that the organic matter will deplete over time with spraying. Maximum of two applications and preferably only in late spring. He said light weed not a bad thing in the scheme of things for a variety of reasons - soil structure, water absorption, etc.

Chris said that the Grove Supply Company had a new mulcher on order with side weed eaters. They would trial this with a view to minimise/eliminate the need for weed spraying. See this machine here - <https://www.youtube.com/watch?v=O5s1ZtkTTdc>

Stuart said some trees looking stressed because of lack of rain, however typically across the grove there were great bunches of fruit, with trees showing healthy new extension and no disease. Stuart pointed out the strings of olives like beads. There may be lighter flowering next year but probably better fruit set may compensate.

It was noted there was some die back on some Leccino. Chris said Olives on the Hill want to graft the Leccino trees because of vulnerability to Anthracnose. Perhaps to Picual.

Stuart explained that flatter more umbrella-shaped trees were required for hand harvest while at Olives on the Hill the trees were taller, more upright vase-shaped for machine harvest.

He recommended to continue with the rotational program of taking out large limbs to restructure/rejuvenate tree while maintaining crop load.

Thank you to Chris and Linda for hosting our visit.



Out in the grove



Diseased leaves - top one with Cercospora and bottom with Peacock Spot



Strings of olives



Beautiful bunches



More beautiful bunches



Stuart showing new growth



Stuart shows next branch to cut off

Hawke's Bay

Aquiferra

Bob Marshall and Shona Thompson welcomed 12 people to the Field Day held on Friday 6th March. In addition to olive growers, also in attendance were representatives from Horticulture.

Aquiferra was one of the previous Focus Groves and is regarded as an exemplary grove. It, along with Kakariki in Nelson, leads grove production nationally.

Bob said that summer spraying has been able to be stretched past 3 weeks if weather is dry, by one week is easy but could be more. There was heavy flowering which has resulted in an excellent crop load with good distribution throughout the trees. It is looking like another consistent fabulous crop from Aquiferra with some trees estimated at 38kg.

Irrigation has been underway for some months and is reflected in the plump fruit. It was noted that Aquiferra had good fruit size for time of year, due to exceptional growth conditions immediately after flowering. However other groves reported a light fruit set and this was put down to a number of factors. For example it was noted that it was dry at flowering but desiccated flowers would tend to indicate some Anthracnose. Stuart commented that healthy trees with a healthy canopy were more resistant to adverse weather conditions and the Protek spray programme also protected against Anthracnose.

Stuart pointed out the regrowth at the limb removal zone and the dominance of some shoots over others which is natural. He said to work with this when you make the pruning cuts of the regrowth. If regrowth curves down due to weight of the branch, regrowth will occur on the top side of the branch. Stuart's advice was to let this occur and prune appropriately next year.

Stuart noted that the leaf test showed nitrogen and boron are both below the medium category, but not significantly. His recommendation was this was okay and to observe this for the present. He said normally nitrogen would be applied after harvest, but winter rain would flush this away in the case of olives, so spring application would be better. Stuart commented that nitrogen is good for fruit set.

Stuart said that Boron foliar application prior to flowering is best. He said that growers should look at leaf test and tree health in tandem.

Stuart gave credit to Shona who he said has revolutionized the way in which we now prune. The "Shona approach", as it is now known, has been well proven in accelerating the restructuring of trees while maintaining production. The approach has now been adopted by those following the Focus Grove Project recommendations with consistent and outstanding results.

The afternoon concluded with an EVOO tasting session, led by Branch Chair Geoff Crawford, and an opportunity for discussions to continue informally. Thanks to Bob and Shona for hosting the visit.



Attentive audience at Ngatarawa



Stuart discussing regrowth from major cuts



Typically laden tree at Aquiferra



Hawke's Bay Branch Chair Geoff Crawford leads tasting of local award winning EVOO

Nelson

The Focus Grove visits and Field Days were held on Thursday 12th March as follows.

Kakariki Olives, Redwood Valley

Approximately 24 people, including the local MPI Senior Advisor for Regional Economic Development and Partnerships, were welcomed to Kakariki Olive Grove by owners Ray and Brenda Gregory. A splendid morning tea had been provided and enabled a good catch up.

Kakariki was one of the original Focus Groves and has shown outstanding improvement to grove health and increased production. In fact Kakariki produces almost double the average harvest tonnage for the Nelson region and it currently leads average grove production nationally. This is an exemplary grove.

Stuart had been bounced to a later flight, so Gayle started the Field Day off in his absence. As there were several new members present, there was general discussion about the project history and performance of the Focus Groves. There were also discussion around the New Zealand brand vs imported oils including the lack of Country of Origin Labelling requirements for olive oil. Anecdotal feedback was that consumers thought because a product was bottled in New Zealand that it contained NZ EVOO. There was a need to focus on the OliveMark as point of difference to show that the product had been certified as EVOO and was a New Zealand produced product. There was also some discussion on the Food Safety legislation and the process for NP registration.

Once Stuart arrived Ray then got underway with what had been happening at Kakariki since the last Field Day. He said that fertilizer had been applied following on from the soil test – the potassium and magnesium deficiency had been addressed by following applying 'olive grove mix' at 300kg per ha. Stuart reiterated the need for soil tests and only applying what is required. He said this was Good Agricultural Practice and growers should see themselves as custodians of their land.

In relation to sprays Ray said Protek had been applied three times at flowering as per the project recommendations. Manzate had been included in the 1st and 3rd sprays. Plus Boron was applied as foliar spray. Regular Manzate sprays have continued after an eight week break over harvest but there had just been a 6 week gap because of no rain. In fact, Ray said, there had been no real rain since before Christmas.

Ray said that they had finished the major restructure of the grove and maintenance was now continuing. Stuart commented that the aim was to get trees under 6m in height.

Kakariki had a big flowering and despite big winds there had been a good fruit set. Other growers commented that they had also had a big flowering but this had not translated into fruit set. Stuart commented that healthy trees aid in fruit set. That is, canopy health and managed disease. Plus the need for Anthracnose control. Unhealthy canopy sees high leaf loss meaning lack of support for fruit set.

Stuart commented on the excellent crop load across the grove. This was evident in bunches of fruit and strings of fruit, almost like a string of large beads. There was a question on

heavy crop affecting yield but Stuart said that pointed to the need to leave fruit to ripen longer. Stuart said that lack of rain may impact intensity of an oil but this was not really proven.

It was noted that last year at Kakariki there was a heavy crop with very good yield. Pointing again that tree health supports production. Stuart commented on the big clusters high in trees which you would have thought would be outside spray reach and Ray said he noted upward spray drift as he looked back down the grove during spraying.

Stuart commented that the leaf tests showed similar results across all groves so far. He said that nitrogen was a little low at Kakariki and will be monitored. Manganese and Zinc are apparent because of Manzate spraying, being the main components. Stuart said that iron was low and a foliar spray could help this. Potassium was a little low and will be addressed by the olive mix fertilizer. In response to a question on how to take leaf tests Stuart said this was covered off in the November Focus Grove Field Day Report but emphasised that it was important to select leaves from current season's growth.

Stuart said the grove overall is in very good health with very good crop throughout.

He emphasized mulching pruning back around trees and said that a new mulching/mowing machine was to be trialed in Northland which could take the place of herbicide spraying. Stuart said that dead roots rot and leave channels for good soil structure and water retention.

Stuart discussing restructured tree that can be left for a year to determine which branches were strongest and best structured. He suggested taking the top part of some trees off after harvest.

Stuart showed making cuts so the tree heals itself, that is look for the 'collar' rather than cutting off too close. If using wound dressing this must be applied immediately and not left until end of the day.

This season Ray said they will trial leaving the machine harvester net around the tree and using branch shakers to get off balance of fruit, which was estimated to be more than 2kg per tree.

Stuart concluded the session at Kakariki by talking about being adventurous and achieving amazing results. For example our initial project target had been an average of 15kg per tree and Aquiferra in Hawke's Bay was now looking at trees with 38kg. He was seeing a similar situation at Kakariki.

Thanks to Ray and Brenda for their hospitality.

The group then went off for an enjoyable lunch at the Moutere pub.



Attentive audience at Kakariki



Kakariki typical laden tree



Fruit plentiful at Kakariki



Stuart discussing tree structure



Stuart showing new growth



Stuart showing new buds coming on

Neudorf Olives, Upper Moutere

Susan Pine welcomed fellow growers to their grove. The Pines are taking an alternate approach by following the Focus Grove pruning recommendations but limiting the Manzate spray programme to monthly applications.

Susan said that access to water was an issue for implementing the spray programme but they were now using water from their pond. Stuart commented that after the heavy prune Susan had done the trees have responded well and there is a pretty good crop.

Stuart said the leaf test results were looking really good and little intervention required. He said that iron is a little low and can be left but Neudorf was the only grove so far that is fine with Boron. He recommended to other groves that they split Boron and apply with Protek as a foliar spray.

Susan said that with now 1350 trees with the new grove it was taking the best part of 9-10 hours to spray. She said the trees had been looking unhealthy and have had two spray cycles since the last visit. The trees were already showing very little sign of disease due to spraying and dry weather.

Pruning the grove has taken a month with Susan doing major chainsaw work and then two woofers spent another month doing skirts and lifting up lower branch height. Susan commented that with hand harvesting there was a need to keep trees compact and well clear of ground for ease of using mats and getting access into trees with the branch shakers. They use two Stihl branch shakers plus an agrotech vibrating harvester which is especially good for Leccino and finishing off a tree if time permits. There is a team of five doing the harvesting with Susan operating the press.

Susan said that last year they lost fruit because of either drought or Anthracnose. However higher yield has compensated. Neudorf usually produce intense oils and harvested mid to late June. Susan also said they had cut back and transplanted approximately 40 trees and all recovered.

The afternoon concluded with refreshments and many thanks to Susan Pine for her hospitality.



Susan Pine explaining what has been happening at Neudorf since the last visit



Neudorf grove is looking fabulous



Typically laden branch



Stuart delighted with new growth at Neudorf

Canterbury

Terrace Edge, Waipara Valley

Bruce and Jill Chapman welcomed 15 growers to Terrace Edge on Friday 13th March.

Terrace Edge is one of the original Focus Groves and, while facing challenges in following the recommendations, has still managed to produce double the average harvest for the Canterbury region.

Terrace Edge was named the 2018 Organic Vineyard of the year. As part of the SFF&F project they have two sections to their olive grove; one following the previous project recommendations and in particular the Manzate spraying regime, while the other will follow organic principles.

Following on from the soil analysis, a fertilizer mix was made up and applied to address deficiencies identified in soil tests.

In regards to spraying Bruce had been keeping up with Manzate but missed the timing for Protek.

Bruce has done major pruning since harvest and mulched back in. Also puts ash from their fire around trees.

Yvonne Mitchell raised difference in pruning for harvest method but it was noted that this is not as marked in North Canterbury trees as other regions.

Common issue across Canterbury (and other regions) has been massive flowering not translated to fruit set. Multiple causes including wind, tree health. Probably unlikely to be Anthracnose especially if spraying. There can also be fruit drop which is the trees response to drought. Stuart commented that biennial bearing is caused by poor flowering.

The crop load is looking pretty good in the main, but some trees with very little. Stuart said looks can be deceptive, trees may appear to have a lighter crop than actual. He said the good trees are looking to have more than 20kg.

Stuart noted that leaf tests results across the Focus Groves have been similar, despite different terroirs and grove management. Terrace Edge was slightly low in Nitrogen, Phosphate and Magnesium. Potassium is high which is good. Boron is needed and foliar spray is the best way to respond and to split application at the beginning and during flowering. This could be added to Protek sprays. Applying Boron as base ground dressing takes several years to be effective than the foliar spray, so foliar application at start of flowering is recommended. Manganese and Zinc high again because of Manzate spraying.

Stuart said to consider trees and when intervention is required. More important at current time is water. Deficiencies can be addressed with the annual program after harvest. Olive Mix dressing typically needs modifying based on specific needs.

Stuart said we are typically looking for medium results across the leaf test measures. Exception is Manganese and Zinc as mentioned above.

Noted most regions are experiencing drought which impedes mineral uptake. On the positive side the lack of rain means you can stretch out the spray regime. Disease spread is caused by rain and splash back so no need to spray when there is no rain. Most Focus Groves have skipped several sprays but Stuart cautioned from now onwards the need to monitor dew/condensation (including fog) as that is enough moisture to exacerbate the disease.

Terrace Edge has been irrigating since before Christmas.

The scale problem will be addressed in January. Yvonne used Applaud in late December but she said this was not effective. Horticulture recommended Monarch which was applied in January and was effective, however was expensive.

Bruce said the trees at Terrace Edge are looking the healthiest they have in many years with much reduced disease. Stuart said the improved tree health will result in much less leaf in harvest.

Bruce is looking at trialing an organic approach but Kocide copper is not accepted by Bio Gro so he is looking at alternatives. Champ WG is an alternative but need to look at application rate to equal Kocide. No problem with the recommended Sulphur product. Note in our trial the copper dose used is much lower than on label recommendations but is based on what works in organic apple orchards.

Bruce was having a look at using the vineyard mower/weed cutter to manage weeds around the trees.

If you have a problem with foaming with copper, try adding some olive oil to the tank. Ross Vintiner from Wairarapa has said copper tends to foam in high agitation sprayers and also needs a surfactant to stick to leaves so the copper is absorbed into the leaf (rather than sliding off). He has said both issues can be treated with commercial products but he has found success in using a cup of tank-spoilt olive oil per 700 L tank!

Malcolm McKenzie at his former now leased grove has been limited to 4 organic sprays and limited irrigation. As a result he is very disappointed in the crop. Sally McKenzie said that disease soon reappeared in the grove when wet.

Stuart talked about the Rural Delivery program filming at Leafyridge and this is not to be missed to see a grove in another region. The program has been prompted by the success of the first Focus Grove Project.

Out in grove the attendees were broken into groups and allocated a tree each to discuss what branches needed to be pruned and why. Bruce carried out the cuts, cutting the large pieces of branch into firewood lengths and the balance will be mulched.

With Group One Malcolm explained that branches were hanging outside of harvest umbrella so need cutting back.

Group Two also wanted to cut off branches outside harvest catchment and to open up the tree for light and spray penetration.

With Group Three Malcolm explained which branches to cut off to allow new growth that has been suppressed and to open up the tree.

Stuart explained letting new growth self-select with time.

Bruce showing Leccino with too much new growth. Stuart shows taking a large limb off that will allow the new growth to perform.

There was discussion around trees with trunks that are now too big for harvester. The suggestion was to coppice at ground level and let new growth establish a new tree.

It was noted that a new processing plant was being installed at Akaroa - an Oliomio Profy capable of 200kg per hour.

A shared lunch was enjoyed by attendees and thank you to Bruce and Jill for hosting the Field Day.



Out in the grove at Terrace Edge



Bruce and Stuart looking at crop load



Droopy branch which will fall outside of harvest net



Group One explains which branches to remove



Bruce makes the cuts



Group Two explains which branches to remove



Group Two - Bruce has completed the pruning



Group Three - Malcolm explains the branches to remove



Bruce makes the cuts



Prunings



Firewood

Wairarapa

Unfortunately the escalation of the COVID-19 situation necessitated the need to cancel the Wairarapa Focus Grove visits and Field Day. Fortunately Stuart Tustin had visited Leafyridge in January so had seen how that grove had come on since the last Field Day. The following report is based on feedback from the two grove owners, Leafyridge and Bella Olea.

Leafyridge Olive Grove, Masterton

Leafyridge is one of the original Focus Groves and has followed an aggressive pruning regime to get the trees back into the desired shape and size. The benefits of this are now becoming apparent.

Thanks to Craig and Ruth Leaf-Wright for the following report.

Fertiliser

Following on from previous soil tests, 30T of lime was spread across the grove (12ha) on 18 May 2019 to raise the pH. When the next test was done on 23 August 2019, the pH showed as 6.1 which is considered acceptable. On 25 September 2019 spread 2T of 50% Potash Super on grove. In the months following, this had a marked effect on the appearance of the trees: leaves more prolific and generally looking healthier and greener.

Pruning

The front and middle fields were heavily pruned in 2018/2019.

The back field was similarly pruned in 2019/2020 to remove the main central (usually largest and tallest) limb to open up the canopy and allow light to reach the centre of the trees.

In addition I have paid attention to the sides of the trees to allow for the penetration of sprays into the tree canopy.

Spraying

I continued with the 21day cycle of spraying Manzate, only extending the interval twice in the middle of the drought to 30 days (Feb and March).

I applied Protek 3 times at flowering 25 Nov; 6 Dec and 22 Dec. I feel that we should consider applying the first Protek spray a few days before we expect flowers to start opening, rather than after.

Weed Control

As the trees now have large canopies, I find that weeds do not grow as much. Consequently, I do not need to spray as often. Now every 4 months and often only in certain areas.

Flowering

Flowering was very good and this translated into a good fruit set. The Frantoio trees that were heavily pruned in 2018/2019 have particularly good crops but happily, so do the Manzanillo, Leccino and Picual although not quite as spectacular.

We noticed that only the Leccino had some desiccation of fruit early in the season. This then dropped off. This could be the tree adjusting its crop load and shedding excess fruit.

Initial indications are that this year's crop will be at least 50% higher than last year (this is taking into account the very heavy pruning of the back field trees (2,000) which will impact on their crop this year.

Irrigation

Rains stopped early January with minimal precipitation from then until 27 March 2020. We are fortunate in having irrigation although for much of the time are restricted in how much we can take. Irrigation supplies between 20 and 40L per day to the trees (depending on restrictions).

We noted that the trees remained looking healthy and retained most of their fruit during this period. Where the dripper for a tree had malfunctioned, the tree clearly looked stressed with curling leaves but interestingly, did not appear to shed fruit. The fruit was just smaller.

Leaf Tests

Leaf test showed a few deficiencies but none that required action at this stage. Action to be taken in Spring.

Future Plans

We are installing 2 olive mills on the grove: an Alfa Laval processing 500kgs per hour and an Enorossi processing 700kgs an hour. They are side by side in a new press shed that we had built.

Other Comments

The benefits of restructuring the trees cannot be over emphasised but do not happen overnight. The new growths that we see from where the trees have been opened up are spectacular.

If trees such as ours have been allowed to become too big and dense, we have to understand that there will be a period of consolidation before we return to the large crop loads of before.... but now in a better structured tree for on-going production.



Amazing flowering at Leafyridge



Laden branches – above and below





Beautiful bunches at Leafyridge - above and below



Bella Olea Olive Grove, Greytown

Chris and Hilary Penman are following an organic approach and are well on their way to certification as an organic grove. Thanks to Chris and Hilary for the following update.

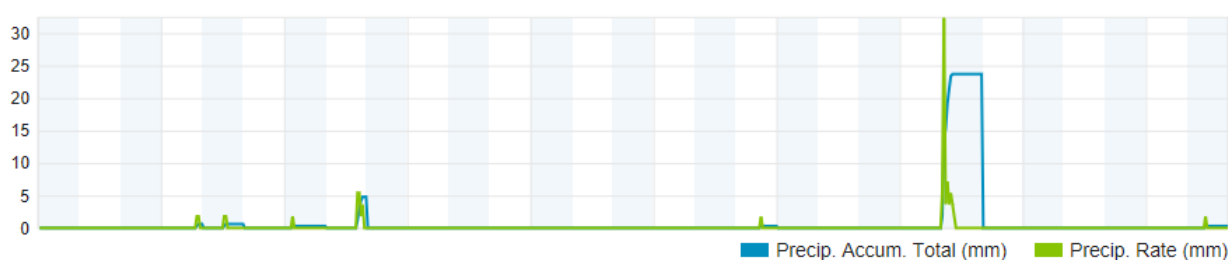
Pruning

Some more big pruning has been under way. New growth is obvious from the pruning done late last year. A reduced crop will result from the major pruning cuts, done to reduce tree height and to improve re-growth.

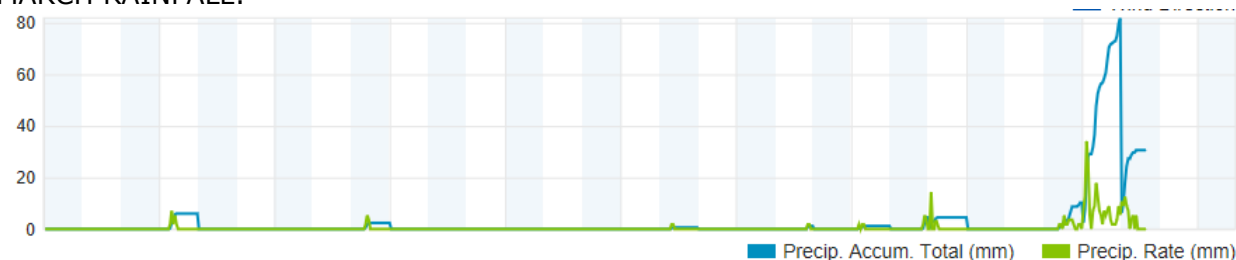
Irrigation

Due to the drought, not much rain over last two months, until this current weekend 28/29 March)!

FEBRUARY RAINFALL:



MARCH RAINFALL:



Fertiliser

No fertiliser applied yet due to the drought, but now that we have had our first real rainfall for several months, we can start to plan applying fertiliser – assuming more rain to come.

Spraying

Spraying of our organic fungicide mix is about to commence.

Flowering/Fruit set

Flowering was seen to be normal but fruit set was medium to low in Leccino & Frantoio, and zero in Picual & Picholene. We have taken over the management of another organic grove in Woodside Road Greytown (approx. 600 trees) which has reasonably good fruit set and should help keep our oil levels up.

Leaf tests

Leaf tests show continued low levels of Boron and Magnesium, so continued foliar applications of these are planned.

Next steps

Apart from continued operations mentioned above – our annual Organic Certification audit will take place around July (currently). Our current status is C1, going to C2 this year. Next year we should be fully certified (J).



Major pruning almost completed



Large branches for firewood



Healthy new growth at Bella Olea



More new growth from cuts made last year



New leaves looking much healthier but still some disease to be addressed



Some fruit on new growth

General Comments

The participation of the Focus Groves is much appreciated and critical to the success of the project. They have shown an unquestioned willingness to follow recommendations and incur the associated costs. As well as welcoming other members to their groves and providing hospitality. Thank you all.

Disappointingly two of the groves that were initially interested in trialing the organic approach have withdrawn from the project, while a third grove has decided to trial a modified Manzate, lower input approach. Significant efforts are underway to try and find other groves who would commit to trialing the organic approach. It is extremely important that groves not continue to do nothing as this has proven to result in poor and inconsistent crops and high costs.

At all of the Field Days there was extremely positive comments from attendees about how the increasing level of knowledge transferred and gained. Attendees feel confident in asking questions and contributing from their own experiences.

As from midnight 25 March 2020 New Zealand moved to National Alert 4 in response to COVID-19. There are stringent measures around this status limiting businesses that can continue to operate (essential services), travel, etc. Olives New Zealand has produced and circulated a Fact Sheet; COVID-19 Checklist for Hand Harvesting and Processing Plants. <https://www.olivesnz.org.nz/wp-content/uploads/2020/03/Fact-Sheet-COVID-19-Checklist-for-Hand-Harvesting-and-Processing-Plants.pdf>

Summary

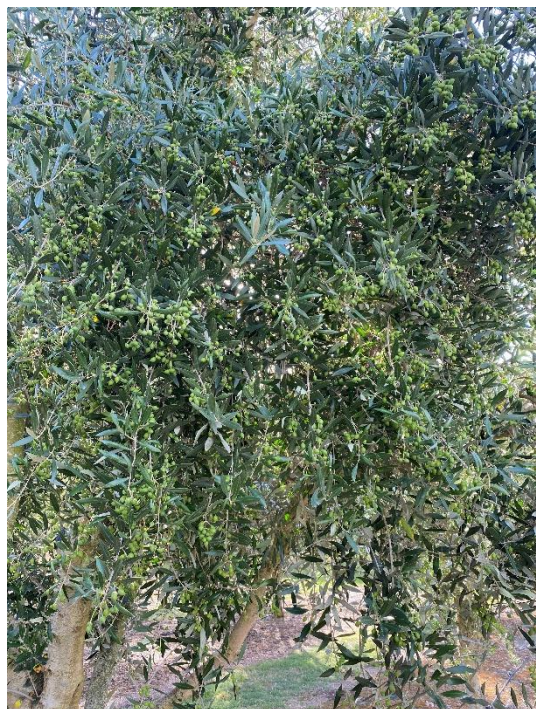
All of the original Focus Groves visited as part of the Field Days that have been following the recommended programme for proactive disease management and canopy management have reached an exemplary stage and are exemplars for the wider olive growing industry in New Zealand. Neudorf is also well on their way to this same condition. For other groves following the recommendations, the results are apparent in their harvest tonnage as well as their observations on overall grove health. It is therefore difficult to understand why other groves, that chose to do nothing, accept poor production and high costs. The ability to address these issues is in their hands and there is the unfilled demand for NZ EVOO in many regions.

The project target of 15kg per tree has been met and typically exceeded by all Focus Groves and other groves who have implemented the methodologies. Most are now reporting an average of at least 25kg per tree across their grove, exceeding the target by 70%. Some hand harvested trees are closer to 40kg.

The vastly improved tree health is apparent across all of the groves visited with very little or no disease and plenty of lush leaf.

The tree structure also across these groves has dramatically improved, enabling light and spray penetration and ease of effective harvest.

The 2020 crop-load is looking impressive at these groves and the harvest tonnage should prove unquestionably the merit of following the project recommendations. Conversely note that other groves, not following the project recommendations, have reported a poor fruit set and some will have a poor harvest (again).



Crop load at Kapiti Olives is looking impressive, as are other groves following the project recommendations