



General Managers Report by Steve Lee

Dear Growers,

REVISED 2015 PRICE \$4.70 / KG

MPC is pleased to announce that we continue to meet our sales targets and based on current financial projections are able to distribute some of the company profits back to our growers with an increase in the notional price for conventional NIS to \$4.70/kg at 33% Sound Kernel Recovery. The increase of \$0.30/kg will apply to all future and already delivered conventional NIS consignments. Grower consignment reports will be re-issued reflecting the price change.

December 2014 seems a long time ago when there was an offer of \$3.90/kg in the market place. Some growers are now living with the decision to lock in at a fixed price and no doubt these processors are rejoicing at the heavily discounted buy price given current market conditions. MPC released our price in February, at \$4.40/kg it was high, but conservative based on market conditions and exchange rate, but most importantly it worked within the band of customer price tolerance.

The best part is that we expect there is more good news to come.

The start to 2015 saw a return to a more conventional harvest timing after a very early start in 2014. To date the weather has been favorable and the nut drop gradual in most areas. Our growers are reporting good crop volumes in the trees, although there is still a long way to go before they are all in the silos. Quality is beginning to improve as growers move into their second and third harvest rounds.

The last week in April saw MPC set a new record for crop intake. Receipts processed almost 1000t of NIS (wet weight) in the week. Congratulations to Ron and his team for this achievement.

The Australian crop is estimated to be around 47,000 t which will be a record if achieved. This increase in crop size will still be short of current market demand which continues to rise, especially as Asian markets continue to grow. The rising demand for tree nuts across the globe has provided a degree of stability to pricing that has not been maintained historically in this market, but this shouldn't be seen as an opportunity to extort the market. MPC through MMI has seen this as an opportunity to partner with customers with similar quality values and long term strategic focus.

Last year I made the statement that every grower and every consignment is a brick in the MPC wall, if bricks are

removed the wall weakens, it mightn't fall but it does lose strength. If growers split loads MPC loses volume and all growers lose the benefit of our combined strength, reducing our profitability and the amount of money we can return for your NIS. If every one of our 230 growers sent just 5t to another processor our volume would reduce by 1150t. To an individual grower 5t may not sound like much, but the combined effect across 230 growers is very significant.

The need for solidarity continues, MPC has helped drive market stability and improve return to farm through MMI, our investment in CNA, our Receipts system and drying infrastructure all targeting improved product quality, improved operating efficiency, improved consumer demand which has increased prices and profits for our growers. As owners and suppliers of MPC, growers have everything to gain by delivering all of your NIS to MPC and encouraging new supply from other growers. MPC's success comes from the collective strength of its growers.

The message to growers who don't supply MPC is simple, get on board now and support market stability. If you haven't experienced what we have to offer there's never been a better time.

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Marketing Report

Larry McHugh, MMI

For the past few months, the market for both kernel and in shell macadamias has been very strong. The lack of kernel in the market is very evident with customers finding it hard to secure enough kernel to meet their requirements. This strong demand has caused small increases in US\$ pricing.

The changes in the \$US price coupled with the change in the A\$ exchange rate has led to kernel prices in Australia rising to the mid \$20/kg range. These prices will soon filter through to retailers and are expected to slow demand in Australia. Any extra kernel generated from this slowing will be absorbed into the Asian Market which is still very strong.

MMI has been working hard over the last few years to develop new and better opportunities for macadamias with the aim of creating stability and unlocking the real value of macadamias.

We have established direct supply to retailers around the world and have helped support product development with both retailers and manufacturers. We are selling significant volumes of African kernel to customers who are using this kernel to develop long term markets which will assist in providing stability into the future. By working with African based processors we are building longer term stable markets, which benefits all growers, no matter where they are located in the world.

We are in this for the long term - with the expected significant growth in the world macadamia industries production over the coming years, it has never been more important to develop markets in order to smoothly absorb crop growth, while maintaining good prices to growers.

As growers, you have invested heavily in this industry and you need a stable and profitable future in order to get adequate return on your investment. It should be your priority to work with those who are trying to secure that future for you. MMI have a plan, the size and influence to make a

difference, the more kernel we can sell the better the result will be for growers. The MMI, MPC, CNA group is 100% owned by growers and is concentrated on creating a good future for you.

Each of you does have an influence on the outcome for the whole industry. We can sustain good returns and profitability, if all industry participants concentrate on that goal.

Aussie champions protect macadamia industry future

The Macadamia Processing Company Ltd in Alphadale, in conjunction with its partner companies Pacific Gold Macadamias and Macadamia Marketing International is helping to protect the future viability of the Australian macadamia industry by making a significant donation to fund the conservation of macadamias in the wild.

The partnered companies are the first industry members in 2015 to support critical work undertaken by the Macadamia Conservation Trust to protect and restore wild macadamias in their natural environment.

Macadamias are the only native Australian crop considered an international commercial food product and as with many crop industries, the macadamia industry is based on a very small number of trees, selected for their favourable characteristics, such as bountiful crops and thin shells.

What makes them different and a little special, is that whilst most horticultural food products have undergone tens, if not hundreds of generations of breeding to produce the crops that we consume today, macadamias are still relatively new and little more than three generations separated from wild trees.

Australian Macadamia Society CEO Jolyon Burnett thanked MPC/Pacific Gold/MMI for their generous support, which will help to support activities

like conservation, rehabilitation and research all of which are vital for the ongoing successful future of the macadamia industry.

“Being the one country where macadamias are found naturally means we are better placed to tap into their genetic diversity, which gives our macadamia nuts the best chance of adapting to changes in weather patterns, emerging pests, possible diseases and other improvements.”

“When we look at crops such as apples, in the wild they produce around 2 Tonnes per hectare, but commercial varieties now produce up to 100 Tonnes per hectare,” said Mr. Burnett.

“This is the sort of improvement that wild macadamias and the conservation hold the key to.”

“Whilst over 80% of wild macadamia trees have been lost since European settlement, a lot is now being done to secure their future.

“Contributions such as these go a long way towards managing threats such as habitat loss, weeds and fire and further research. It allows us to continue our valuable work with government, industry and the community to identify, protect and expand remaining valuable macadamia populations.”

Macadamia Processing Company General Manager Steven Lee said that it is vital that the macadamia industry has future access to untapped genetic diversity by finding ways to conserve wild macadamias.



MMI General Manager Larry McHugh, Macadamia Grower Bill Moorhouse and MPC General Manager Steven Lee are proud to support the macadamia conservation trust

"The Macadamia Conservation Trust is undertaking important work for the benefit of the entire industry and we encourage others to support them," Mr Lee said.

The Jones Family - a Successful Farming Family

The Jones family have an interesting macadamia growing story to share because they are always interested in improving their orchards and are early adopters of new skills and technology. The whole family are actively involved in the farming business. David, his son Greg and son in law Enrique are heavily involved in the day to day operation of the farm. The Jones family's commitment to continually improving their operation and increasing the production from the farm is a true testament to how strongly they believe in the macadamia industry.

David and Ann Jones began farming on a 500 acre property at Leeville (about 16km south of Casino, NSW) in 1964. To make the property suitable for cropping and cattle grazing, the land required extensive clearing and drainage. When completed, they grew sorghum, pasture and grazed cattle. After five years they purchased the adjoining 400 acres that had once been a dairy farm. This property also required clearing and draining. Their 900 acre property grazed cattle until 1987 when wildly fluctuating cattle prices cost graziers dearly and forced David and Ann to look for an alternative to cattle grazing (David was also working at the time as a Veterinarian).

So began the Jones family adventure into macadamia growing in the rich deep red soils of the Alstonville Plateau. The 900 acre Leeville property was sold at a price that would only buy a mere 80 acres of land at Wollongbar. The decision to plant macadamias was made because macadamia growing was seen to have a promising future

and David thought it offered a good lifestyle. The new orchard was named 'Windhover'. Before they could start preparing the farm for macadamia development, there were very large camphor laurel trees that had to be removed along with all the internal fences left from the days the farm had been used for dairying. Ann was chief roller of barbed wire after David had pulled it out of the fence posts of the twelve internal dividing fences the dairy farm had used.

Peircy and Nott in Lismore sold dynamite and gelignite amongst other farming tools to farmers for clearing land in those days. David rather enjoyed blowing things up (e.g. Large trees), as part of the clearing procedure. None of this work was considered to be particularly dangerous at the time and David said luckily he had finished the blasting work before someone in officialdom thought that this work should only be carried out by a licenced person.



David and Ann Jones clearing their farm at Wollongbar

The orchard was planted out with varieties 344, 508, 741, 246 and some A4 & 16's on an 8.5 x 4.25m spacing. David recounted with displeasure how he had been advised to plant eucalypt windbreaks on the boundary and Barner grass between the macadamia tree rows. The windbreaks grew into massive trees that had to be later removed at considerable expense and the Barner grass seeded and spread across the country side at a rapid rate

producing Barner grass clumps where ever it could germinate. Before he could eventually remove the inter row Barner grass it had served as a breeding site for generations of Monolepta beetles (red shouldered leaf beetles) which were costly to control. Monolepta beetles were a major concern for macadamia and avocado growers in the local area at this time.

In 1995 David and Ann became Shareholders of MPC. David said that "The MPC factory was close to the orchard site and the company appeared to have a bright future. After experiencing such a rough time in the cattle industry with wildly fluctuating cattle prices, the guarantee that MPC gave me (and still does) that they would always take macadamia nut in shell from Shareholders and sell it at the best possible price, even when the market for macadamia sales get tough, was great."

were upgraded. This orchard had once been the site of a large Gladioli flower farm which was planted to macadamia trees in 1980/81 by Macadamia Plantations of Australia (MPA). The varieties planted were 246, 344, 741, 508 and H2. Later planting included a block of variety 660. The spacing in the original planting is 10 x 5m and the later 660 planting is 8 x 5m.

The orchards continued to be upgraded in the ensuing years and in 2009 a further 25 acre vacant block, adjacent to Windhover at Wollongbar was purchased. This block was planted on an 8 x 4m spacing with the varieties 816 and 849 and in 2014 this block produced its first commercial crop.



An aerial shot of "Windhover" taken in the mid '90s

The Jones family are a true family farming operation, with all of the extended family being involved in the orchard's operations. They work together to achieve the best results they can from the orchards. Some of this work has included:-

- Orchard floor management with all tree rows being 'veed' by a road grader to cover tree roots and direct stem flow water away from the tree line.
- Construction of a 50t 'Bungay' style drying system.
- Ongoing canopy management to provide more light into the orchard and therefore more production.
- Planting of sweet smother grass for groundcover.

Design and establishment of a major drainage network across the orchard, including removing trees in natural drainage lines, reshaping and establishment of grass to ensure safe water movement through the orchard. This work has also provided access to the crop during wet harvest periods.

More recently they have moved towards producing a compost/mulch material to improve soil and tree health.

In 2010 a major canopy management program commenced at Windhover in a block of 344's that were producing little crop. This block had canopied over and David knew they had to do something. After visiting a number of other farms, they decided that in this block they would remove every second tree in every second row. 500 trees were removed in this block by a contractor who felled the trees, they then dragged them out of the rows and chipped them – with the chip going to co-generation at the local sugar mill. This system meant there wasn't a cost for removing the trees.

At Tweebreena, 1000 trees were also removed in 2010 in blocks that had canopied over and then had poor production. The blocks were of 344 & 660 variety trees on an 8 x 5 spacing, with the same contractor carrying out the work.

Further tree removal continued for the next two years, being carried out in the break between harvests. Initially the trees were felled by a contractor and the chip was burnt at a local co-generation plant but later the Jones family purchased an 18 inch self-powered chipper and a 10t excavator with a tree grab to carry out the work. The change was made so that the trees could be used as woodchip that was placed directly under the remaining trees – providing a good mulch layer.

Three seasons following the 25% tree removal work, the production from the complete rows had increased as a result of increased light and more fruiting wood being produced. The rows with trees removed (and only half as many trees) produced a crop that equalled the production from the complete rows. The blocks where 25% tree removal was carried out all produced complete ground cover of smother grass again that has reduced soil movement, soil temperature and allowed harvesting to resume soon after rain. This grass is now on the wane again as the trees have become thick with leaves and expanded sideways across the row reducing the light reaching orchard floor. This has indicated to the Jones family that it is now time for further canopy management in these areas. The current strategy is to conduct heavy limb removal in these blocks to increase light penetration through the trees and onto the orchard floor.

The Jones now consider the complete removal of every second row as the best strategy in areas where they wish to remove trees, typically on the tighter (8x5m) row spacings. David said "it is time consuming and expensive to remove every second tree. The excavator is confined by the tight space it has to work in, making it a slow process and it is hard to get the trees down without damaging some branches on the remaining trees".

"We experienced two violent storms after the tree thinning was completed and significant damage occurred in the newly thinned trees. Under the new row removal strategy, the rows to be removed will undergo heavy hedging for three years to reduce their width and allow the trees which will

remain to grow stronger and take up the row space that has been vacated by the trees to be removed. Some crop is still produced in the crown of these sacrificial trees and the new growth that is generated in the row of the trees that we will keep will become our fruiting wood in the near future", David said. The trimmings from the hedging process are easily mulched with a standard orchard mulcher and there is a smaller tree to deal with at the time of removal. From David's experience "this process reduces removal costs and gives a faster production benefit", he said. They expect the system of hedging before removal will reduce the potential for storm damage in the remaining tree rows.

In sections of the orchards on the wider 10 x 5m spacing, limb removal has been practised extensively on these very large older trees. The regrowth within the trees has been particularly impressive and production has improved considerably. This work is now ongoing and each year limb removal is conducted in at least one block of the 10 x 5m section of the orchard. David described the regrowth of new fruiting wood following the canopy management practices as "Fantastic"! "There has been a variation in tree production recovery speed that appears to be variety related. Varieties 660, 344 and 741 appear to regrow and produce fruiting wood faster than the 508 and 246 trees. The 660 trees, are the fastest of all to regrow", David said.

Through all the canopy management work and other changes to practices, the decline in production experienced by the Jones family has been arrested and they are now seeing production increases as a result of the canopy management and other ongoing work in the orchards. Trees that were hollow with a dead heart are now filled with productive wood and the orchard floor once again has grass cover.

They were dissatisfied with the slow harvest rate of the pin wheel harvesters they had been using. They found that they were leaving up to 30% of the nuts on the ground

after the first pass of the harvester. To overcome this problem they had tried replacing wheel packs frequently to ensure the finger wheels were all straight and in excellent condition in an attempt to maximise nut pick up. However they found that it was not bent wheels that were causing them the ongoing grief. What they found was the sweeper did not move the nuts well enough in the grassed areas and therefore they had to not only sweep, but also blow to move the nuts from the tree line. As they had been working hard to cover the tree roots with soil and mulch, the extra blowing and sweeping was exactly what they did not want to do. David said "we were frequently placed in a position that meant we did not get as much crop harvested as was desired before we were held up again by another rain event. This problem was particularly costly and frustrating".

David felt there had to be a better way. After going to a Monchero harvester field demonstration at Tim Reilly's orchard arranged by MPC, he was impressed that this harvester moved across the orchard quickly and did not leave nuts behind as he had experienced with the pin wheel harvesters. He then went to another demonstration of the Monchero harvester, but this time it was now on tracks. He was impressed how it gleaned the slopes at Lance Emery's orchard on a very wet Saturday. After this field day he decided that one of these harvesters was what they needed. David said "Sections of Tweebreena can be difficult to harvest in wet weather and the tracks should allow harvesting in these conditions with ease". Unfortunately the tracks have not been a success yet because of mechanical problems. Having spent an extra \$20,000 to buy the track model, he is still waiting for a satisfactory outcome to the problem. The tracks have been removed and the machine is currently operating on wheels. David has found the Monchero to be far faster at harvesting than the pinwheel harvesters and does not leave nuts behind, particularly when harvesting from smother grass,

which is planted extensively throughout the orchards.

The orchards had a considerable amount of sticks and dead wood remaining on the orchard floor following the canopy management work. The Monchero has proven to be very efficient in removing most of this debris in its first season of harvesting. However, it has caused a considerable amount of anguish during the dehusking phase of the operation, particularly by jamming the receival bin elevator. In an attempt to reduce the amount of sticks and rocks that were transported back to the dehusking shed, a sheet of steel mesh has been used over the top of the in-field harvest trailer. The nuts and sticks are tipped from the harvester onto the mesh, with the aim being that the nuts pass through the mesh and the sticks are held on top, with the sticks then being hand-picked off the mesh. David is also concerned by the amount of soil that gets delivered to the receival hopper and causes mounds of soil to build up under the hopper. He said that there was still a number of issues that were a work in progress when using the Monchero harvester in his orchards.

To build soil organic matter and carbon in the orchards, the Jones use as much mulch, wood chip, chicken litter and cow manure as is affordable. David said "The soil texture looked washed out and so we want to rectify this situation, along with improving feeder root density and the orchard floor environment. We have found that while chicken litter can be washed away in heavy rain, the woodchip will remain in place on the orchard floor and has retained the soil, which is really beneficial".

By manufacturing and using their mulch/compost product they hope to be able to increase the quantity of organic material they have on the tree rows in an attempt to:-

- Retain soil moisture
- Stop soil erosion
- Improve soil quality

- Reduce soil pathogens (eg phytophthora)
- Buffer soil/surface root temperature

David said they are now using the “one quick sort only and send the crop off to MPC method’ in the sorting and handling of their crop. They haven’t noticed any changes in

April flowering – is this going to be a problem?

Jeremy Bright, Development officer – Macadamia, NSW DPI



The base ingredients used by the Jones family in their mulching and compost

All of these benefits are seen as advantageous in improving the production in the orchard and improving the sustainability of the orchard. The mulch applications are one part of the orchard nutritional program. The orchards also receive three applications of mineral based fertilisers each season. The nutrition inputs are based on the results of soil analysis tests interpreted by staff at MPC.

To ensure microbial contamination from the use of raw animal manures does not pose a food safety, any manure must be applied at least 4 months prior to the commencement of harvest.

In 2009, the Jones family continued their best practice work, with a 50 tonne ‘Bungay’ style drying system being built at Tweebreena in an attempt to dry and store the crop while preserving quality, and do it economically. Initially the system was not a complete success as some components of the system were missing and nut quality was deteriorating due to moisture retention during storage. David contacted MPC about the problem and MPC was able to assist with overcoming the engineering and control issues that were causing the problem. After this work the storage/drying then became satisfactory and completely automated.

their quality results by using this method. They have however found they are spending less time dehusking. Ann said she “now has time for more pleasurable and productive pursuits away from the noise of the dehusking shed”. The other benefit they have noticed is they are now delivering more crop as they are rejecting far less from the sorting table, and their labour, shed operating and silo drying costs have been significantly reduced.

The Jones family have demonstrated a continual commitment to improving their farming operations and they are starting to see the fruits of their labour. They are continually seeking new information and ideas about how to improve their orchards –not only to get the best production possible but also ensure they are doing it sustainably. When asked about his expectations for the future of his orchards, David looked contemplatively into the distance and said “the future looks to be improving constantly. After 59 years working, I look to the future, and I am sure that there is one for an 84 year old. The fact that there is, always seems to keep me occupied, and that is fantastic”!

In a number of orchards there are fully elongated racemes around or even open flower. This early flower provides the ideal opportunity for pests and diseases to carry over from one season to the next in our orchards.. If the out of season flowering is just a few flowers here and there throughout the orchard, there is probably no reason for concern. If however the flowering is significant, it could bring on issues later in the year.

All of the information the NSW DPI entomology team has developed shows a significant out of season flowering is the key to a number of pest problems. Out of season flowering will support populations of lacebug – allowing the population to build up and attack the main flowering. It is also the nut set from this flowering that will allow Sigastus Weevil to survive in the orchard and build up numbers and damage the main season’s crop when it appears.

Many people will say “but I haven’t even finished harvesting this crop yet, it’s a bit too early to think about next year”. While it is true, focusing on finishing this year’s harvest is a priority, you also need to consider next year – as doing something small now such as having a quick chat to your pest consultant about your options could save a lot of heart ache in Spring!

There are a number of options available to deal with the out of season flowers. It is recommended you discuss with your pest consultant, NSW DPI or your processor representative the best option for your orchard. Here are a few options available:

One option is to eliminate the flowering. The application of Ethephon (eg Ethrel®) to promote nut drop will also “burn off” the flowers. It is important to understand how Ethephon works and the

impacts upon its successful use. For example you need to check the weather forecast prior to applying Ethephon as the delay between application and nut drop is generally around 2 weeks. MPC has great information relating to Ethephon use - including its timing and rates of application for each variety. You can read the information at

<http://www.mpcgrowers.com.au/growers-advice-centre/ethephon-and-its-use-on-macadamia-nuts/>

If you are unable to remove significant out of season flowering with Ethephon you will need to be especially vigilant in your monitoring as the main flowering comes on. If there are lacebug around in your orchard at the moment they will possibly take out most of your out of season flowers but this will also mean that the lacebug population will be higher than normal in your orchard when the main flowering comes. If this is the case it would be a good idea to communicate with your insect pest scout now to keep an eye on lace bug activity. This may mean your consultant starts monitoring a few months earlier than normal but the extra monitoring costs are small compared to the possible crop losses from a pest like lace bug. You cannot afford to miss the critical control window for lacebug as we have seen 100% crop loss from lacebug in the past when left unchecked.

If nutlets survive from this early flowering you will also have to be vigilant as these are perfect homes for Sigastus Weevil larvae. Your orchard floor clean-up of the small nutlets has been found to be a critical part of the Sigastus Weevil management strategy. Fortunately growers are still harvesting so orchard floor clean-up will continue as part of your harvest operations.

So in brief:

- Talk to your consultant about the best strategy for your orchard.
- Ethephon your crop for good flower clean up and compact harvest. This will aid in insect control for next season.
- Continue to monitor out of season flowering and nutset. Make a note of lacebug activity on the out of season flower.
- Continue harvesting and mowing/mulching as this will clean up any nuts that have dropped with Sigastus eggs on them or larvae in them.
- Start monitoring early the main flowering to ensure you protect next season's crop from lacebug attack.
- Seek advice from your consultant, NSW DPI or your processor representative on the strategies available to you.

Changes at Australia Post – the effect on CQR's and general mail outs

Australia Post are currently planning to change the speed of general mail delivery. Under this plan they intend to decrease the speed of delivery for general mail (which MPC uses) by 2 days, in order to save costs. Along with this change, Australia Post also plans to increase the cost of postage.

If you wish to avoid the proposed slower delivery speed of mail by Australia post (with Consignment Quality Reports being the most common mail MPC sends out), you should consider receiving your documents from MPC via email. Receiving your correspondence by email is fast, can be accessed anywhere you have an internet connection and you can save the documents directly to your computer for future reference. If you wish to receive correspondence by email, please email Jodie at MPC reception reception@mpcmacs.com.au. Please remember to advise us of any change to your email address.



A H2 tree with a heavy out of season flowering. Photo taken in April 2015 (Photo courtesy of Jeremy Bright, NSW DPI)

FOR SALE

Harvester

Side mounted with towing frame, 2 metre, small finger wheel, leaf extractor and Bill Farrell sweeper
\$10,000

Tipping Bin

3PL, holds 360 kgs nut in husk, twin rams, Bill Farrell construction \$1,000

Contact Peter Squire 6628 1563



Tornado Airblast Sprayer

1000lt tank.

New Bertolini pump with approx. 100hrs of use.

Double fan. Reduced to sell. \$3000

Contact Peter Curnow 0439 391 957 or 02 6629 5439



New Machinery Dealer in Town

Tuff Ass machinery, operated by MPC shareholders Shaun and Ann Stead have established an office in town, at 155 Casino Street, South Lismore NSW 2480 (next to Landmark PH 02 6621 8837

They have in stock air blast sprayers, a range of spreading machinery, and Farmi Forest chippers .

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