

# Citrep

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Newsletter of the Murray Valley Citrus Board

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Jan Denham

## Chairman's Report

Welcome rain over the past few months has brought a ray of light to what has not been the best of seasons for citrus markets.

Early season water allocations are also stronger than in previous seasons, which is giving further certainty.

Following the QFF outbreak in January the Board has been involved in a number of reviews of the operations on the outbreak control procedures. It has become evident that procedures need to be documented specific to each horticultural industry. Industries have asked for the documentation of the procedures to be a priority in the event of any future outbreak (hopefully none) and in place before the coming spring/summer season. An annual review of the procedures has also been highlighted as a must, so that any changes that may need to occur will happen before an outbreak.

DPI Victoria are continuing their work on the cost benefit analysis of QFF control in Victoria. DPI has made it very clear that in the future industry will be expected to contribute a lot more \$\$'s if they wish to retain the PFA. Currently industry contributed 10% of the costs towards the exclusion and control of fruit fly in Victoria.

As reported in the CEO's report, a productive meeting between the 3 regional Boards (SA, Riverina and MVCB) was held in July at which issues of mutual concern were addressed. The Boards are committed to improving and strengthening their operations in a co-operative manner. The Boards have always had a close working relationship and have now decided to move this to the next step with a formal

arrangement. This will result in more commonality between the Boards operations, for example crop forecasting.

Unfortunately we have received Sam Chesson's resignation from the Board. Sam and Craig have moved to central NSW. The Board thanks Sam for input and contribution during her time on the Board.

The Board and Sunraysia Citrus Growers expressed concern over the time it was taking to put in place the processes for the selection of replacement Board members. The Selection Panel has met and interviewed applicants, from which they have made recommendations to the Minister. We are hopeful that the Minister will finalise this process in the near future and the new Board members will be in attendance at our next meeting in October. As well as this we are waiting for formal notification of the Victorian Government representative to replace Stuart Holland.

Now that spring is here it is time that we start thinking of management practices to ensure the best for next seasons crops.

Hopefully the Murray Darling Basin Authority (MDBA) will release the discussion paper on Sustainable Diversion Limits very soon so that we can have some certainty about our plan for the future.

**Jan Denham**  
Chairman, MVCB



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Hugh Flett

## Chief Executive's Report

In July the Murray Valley Citrus Board, Riverina Citrus and the South Australian Citrus Industry Development Board came together in Mildura to hold a joint Board meeting on issues common to all. I would like to take this opportunity to share with you some of the issues on the agenda, and the outcomes.

There was considerable discussion around the visit by the Japanese MAFF inspector and the direct cost to industry to fund this visit. For the MVCB the cost associated with the visit exceeded \$10,000, which covered a share of airfares, accommodation, incidentals, interpreter services and salary expense for the inspector, for the duration of his time in Sunraysia and surrounds. In the past, other regions have invoiced the packing sheds which the inspector visited, as a means to defray the direct cost to all growers, whether they send fruit to Japan through their packer or not. For future visits, the MVCB, in conjunction with the other regions, will explore putting together a joint project to HAL to cover the cost.

As is common in recent times, there was much discussion on the Murray Darling Basin Association's (MDBA) proposed Sustainable Diversion Limits (SDL) paper due for release in August. As is now known, the release of the draft has been delayed until after the election, for reasons best known to the MDBA and the Australian Federal Government.

The overwhelming consensus amongst those present was that, as irrigators of permanent horticulture, the ramifications of any decrease in entitlements were seen as long term impediments to growing citrus. The Labour government recently announced they are now proposing that any further reductions in irrigators entitlements required, over and above those entitlements already purchased by the government, will be bought from willing sellers in the water market.

Many concerns still exist with the long term ramifications of reductions in permanent irrigated areas and the consequent structural adjustment that will be necessary within those communities. The three representative bodies have agreed to reconvene a meeting of CEO's and Chairpersons when the draft is released and the impacts interpreted for each particular area.

Movement towards a consistent National approach to crop forecasting was seen as desirable. To this end, the MVCB has agreed to share its software capability and methodology with the other regions provided that they are prepared to assist with covering the cost of development incurred by the MVCB. Subsequent to the Tri State meeting there was a further meeting on better uptake of the Infocitrus program by packers. Infocitrus is a tool to record outputs from packing sheds and the markets that fruit is sent to. All three organisations have agreed to foster the uptake by packers and facilitate training and information sessions with packers.

### National Fruit Fly Strategy

The strategy is currently at the phase of having a cost benefit analysis completed. This is necessary to provide substance to the report. One of the issues at present is that there are divergent problems in different states. There is a concerted push by government at state levels to have industry cover more of the cost associated with the management of fruit fly and all state departments are seeing budget reductions, which will have an impact. The Boards considered that investigating outsourcing would be beneficial to see if cost savings could be achieved, rather than the relevant state authorities completing the work required. It was agreed that the Tri State Fruit Fly Committee continue to progress the National Fruit Fly Strategy.

National Biosecurity effectiveness and loss of critical resources and expertise within Federal agencies related to exotic incursion threats and export quarantine is raising concern amongst the Boards. In addition the cost of compliance is seen as an impediment to business and is only forecast to increase. As a consequence, a submission was prepared for the Senate Rural and Regional Committee enquiry into Biosecurity. It was also proposed to provide CAL as the peak industry body,

with the facts and ask them to endorse a submission to AQIS.

### Post Harvest R&D

There was support for the continuation of the SARDI National Citrus Post Harvest Team and other strategies to improve export market access and outturn. There was some discussion around cost sharing with a 'user pays' style of support. The SARDI team will continue to work on this aspect to assist in offsetting the direct cost to growers through levies. It was advised at the meeting that there was hope the new post harvest oil would be available for use by the end of the month. Further work is being carried out on Vapormate as it is envisaged that this would be of considerable assistance in getting product into Korea.

General discussion was held on future National orange promotions and media strategies to boost sales and improve the industry profile. Concern was raised in relation to adverse media surrounding aseptic juice and the lack of clarity in reporting. It was agreed that the industry, through its national body, has to get on the front foot to overcome potential issues before they are allowed to prosper with further 'oxygen'. It has again brought into focus the importance of truth in labelling and ensuring that governments are not allowed to simply say it is too hard to implement or monitor. The merit and the future of the Tri State Fruit Fly Committee was discussed, with the three regions all agreeing to fund a further three year program on a VC basis and an application to HAL will be completed.

In closing, the three Boards have resolved to maintain close dialogue and continue to hold annual meetings on issues of mutual importance. The next meeting is to be held in the Riverina in 2011.

Hugh Flett  
CEO, MVCB



Stuart Holland

## Reflections of a Mandarin

Mr Stuart Holland has stood down from the MVCB as the Victorian Government representative following his appointment as Principal Officer, Industry Biosecurity Policy, DPI last year.

Stuart's contribution as a Board member is acknowledged as being invaluable in all areas, most particularly statutory legislation and governance since his appointment to the Board on 29 September, 2000. Stuart attended his last MVCB meeting on 20 July, 2010. He records some of his observations gained during his worthy contribution to the citrus industry.

'A few words about 10 years on the Murray Valley Citrus Board was the request. Heavens, who would want to read the ramblings of a public servant anyway? If you have read this far then you probably need to get out more.

These comments and reflections are essentially mine and are not those of my employer the Department of Primary Industries, Victoria.

The MVCB is characterised by a diversity of views, robust discussion, egos left at the door – most of the time, and an overwhelming sense that the people around the table want to see the industry develop and prosper. The MVCB is one of several Boards I've served on over the last 17 years as either a director or CEO and it is also one of the best I've worked on. This is in part due to its focus and objectives, but largely due to the commitment, skills and experience of the individuals around the table. Add to this, some competent and committed staff and you have a great recipe for getting things done.

Like any Board it won't please every shareholder with its decisions, but it is also one of the most accountable boards I've ever worked with and one where there is plenty of opportunity for industry members to put in their two bob's worth.

Greatest achievements? That's always a bit of a 'looking back' exercise and I'm a firm believer in the best is yet to come. However, in its own way, the MVCB has made a very positive contribution to the regional and national agenda without having any 'formal' affiliation with Citrus Australia Ltd. This is something CAL should

seriously consider if it wants to effectively lead the national agenda.

The MVCB has also developed considerable synergies with its sister organizations, in particular the SA and NSW Boards due to common challenges, and also on occasions with the other industries in the Murray Valley with whom the Board shares some common issues. The development of pest free areas for market access, interstate regulation, irrigation efficiency and water management, quality management and crop forecasting is to name a few of the more obvious ones. Much more needs to be done.

There has also been terrific progress made in formalising legislative arrangements, which enables the NSW and Victorian Murray Valley Citrus industries to operate as one Board (under one Act) across the NSW and Victorian borders. It would be great to see SA follow suit and help remove some other impediments to doing business between states. In saying that I'm not pointing the finger at SA, or any other state for that matter, it's just that priorities and resources can limit these opportunities and the process is complex and can be time consuming!

Another key achievement for the Board was building a sound database of industry information (a benchmark for others to aim at) to help inform decision makers about the potential impacts and benefits of investment. This has had very broad implications for project proposals eg Horticulture Australia; water infrastructure and water use; export trade and economics and opportunities for industry to improve its ability to respond to pest and disease issues. All of these issues underpin the region's economic viability, export potential and no doubt professional credibility – especially when export markets and their representatives pay one of their frequent visits. A cohesive professional industry sends the right messages!

The MVCB works because people give their time – largely freely (it certainly ain't the money that attracts people to serve

on the Board!). If you are a clear thinker, circumspect, keen to make a difference and also reap the rewards of giving some of your energy to the wider industry, then throw your hat into the ring next time there is a Board vacancy. I guarantee you will learn heaps and make a difference to the future of the industry. You will also pick up valuable skills to use elsewhere.

While you are a Board member you will probably cop some criticism from some predictable quarters because there are always those in any industry who want things done their way, or would rather not be part of a collective effort. By the way that's OK, our democracy encourages that approach. But to the critics I also say, 'don't throw the baby out with the bath water'. Also, the old adage 'divided we fall' could also be fatal to our export development efforts. In saying this, I recognise that individual effort drives a lot of innovation, which drives opportunity and often comes from creative, radical thinkers and leaders. There is a place for both these seemingly opposite positions, and if we ever get the balance of these two tensions reconciled I'll be amazed, but good industry leadership recognises this and aims to balance the outcomes.

The citrus industry has benefited from some genuinely good leaders (Board and staff) and it has been a privilege to work with several fine leaders over the years. Characteristic of these people is their willingness to share their insights and experiences and engage in robust debate.

Other key requirements for working on the MVCB are a thick skin and a sense of humour. For any government appointee this applies doubly as I frequently found myself at the butt end of 'citrus industry' humour! There were occasions when I thought I could be the first (maybe not the last) bureaucrat to walk the plank off Robert Mansell's PS Impulse. There was probably just not enough water in the weir pool to conceal the deed.



## KIBBUTZ YSRAEL – Keith

'In May, Jan and I had the privilege of staying for nine days on Kibbutz Ysrael ("KY") near Afula, comprising 2,000 acres, with 250 members but about 600 residents in total.

KY is 63 years old (the oldest kibbutz in Israel being 100) and is one of the most successful, many members having been there for more than 50 years and having seen the kibbutz develop into a remarkably integrated 'extended family'. Housed in individual family residences, they have the choice of dining at home or in the dining room with all food provided by the kitchen. All residents are paid the same monthly wage, some working outside the kibbutz, but their earnings are paid to the kibbutz. All health and all education costs are paid for, including 3 years of tertiary. All laundry is done and returned within the week. Outsiders are employed where the necessary skills or experience are not available within the community, or when they need extra hands (eg kitchen staff, agricultural or factory workers, or management).

There are 35 committees, including the Management Committee. All decisions of moment are decided at members' meetings held every 4 - 6 weeks.

The kibbutz has a rugby/soccer field, swimming pool, mini-market, second-hand store, cinema/pub, library, museum and historical archive, weekly newspaper, pre-kindergarten, kindergarten, medical centre attended 2 days a week by a doctor and a physio, and a car pool. Many members have their own cars, but those who don't can order by computer one of the 30 - 40 pool cars.

Being one of the early kibbutzim, KY used to have some practices, since abandoned, eg children from the age of a couple of months, slept in a communal house with children of the same age, not even with their brothers or sisters. However, where the embracing of capitalism throughout Israel to an increasing extent over the years has diminished the number and attractiveness of kibbutzim generally, KY has maintained its attractiveness, cohesion, profitability and sustainability by adapting to changing times or conditions.

KY abandoned agricultural pursuits not proving profitable, eg. citrus and fish farming. When penalized for exceeding its milk quota, it installed a pasteurising plant and now uses 500 litres a day for milk, yoghurt and cheese for the KY community. When agriculture returns generally did not meet sufficiently high levels, KY developed 2 factories on site, one of which, Dolphin, making swimming pool cleaning componentry, is highly successful and profitable, with world-wide sales.

Interestingly, citrus was abandoned because Israeli producers such as KY could not compete on price with countries like Spain with cheaper labour.

Obviously, we Australian producers face comparable problems with our exports having to compete with producers with cheaper labour such as South Africa, Chile and Peru.

The impression we gained, right from our first meal in the dining room, is that KY is a very cohesive, caring, industrious



1. Keith Richards. 2. Jordan Valley and Sea of Galilee 3. Jan relaxing in basalt outdoor setting. Made by resident artist Berny Fink. 4. Kibbutz Ysrael farmland and holding dam.

This spread left-right:

## and Jan Richards visit Israel

community. It is largely self-sufficient with a very wide range of amenities, making for a high degree of harmony and contentment among members and their families, with excellent management at all levels. Everything seems to happen with efficiency and precision.

As we walked around the kibbutz, we noticed that it was cursed with most of the weeds on our farm at home, being Caltrop (California puncture weed), Deadly Nightshade, Feathertop and Fat Hen. The only one they seem to have been spared was Gentle Annie!

KY was established in its early years largely by Jewish youth from South Africa, Australia and New Zealand and sometimes thereafter by a number of Eastern Europeans and Russians.

New Zealanders and Australians went in their early twenties to a farm at Mooroopna, near Shepparton, to learn about farming, and South Africans went to a comparable farming property out of Johannesburg, and then went, after a relatively short period of 'training', as enthusiastic young members of the Zionist movement, to be a vital part of the establishment of the State of Israel.

Our visit to the Sea of Galilee heightened our awareness of how comparable Israel's water problems are to ours. One of our friends noted that the level of the Sea of Galilee (the major freshwater catchment in all of Israel) had fallen about six metres since her last visit to St. Peter's Church, on the shore, about ten years ago.

We crossed the Jordan River north of where it flowed into the Sea of Galilee, and also south of the Sea of Galilee as it made its way, as little more than a trickle, south to the Dead Sea.

There is a real apprehension, as expressed in the media while we were in Jordan and Israel, that the Jordan River may well cease flowing into the Dead Sea within a year.

It would appear clear that, as in all river systems in southern Australia, there has been an over-allocation of water resources.

However, it would also appear that Israel is a world leader in maximizing its efficient use of water resources, and especially in use of recycled water. More than half of Israel's irrigation water is from recycled water (at a cost of about half of what is charged for non-recycled water) and Israel dramatically leads the world in use

of its recycled water in agriculture (75%) compared with the next best, Spain (12%), and Australia (9%).

The Israeli water authority has constructed dedicated recycled water infrastructure throughout the country, including more than 200 holding dams, with the widespread use of recycled water for agriculture freeing up and maximizing the volume of potable water for necessary domestic use.

If only the Australian water authorities could have more serious regard to the potential for greater capture and use of recycled water, and also the use of storm water for agriculture or urban amenity horticulture, rendering it unnecessary to rob already stressed areas like the Goulburn-Murray by such means as the North-South Pipeline.

**Keith Richards**  
MVCB Board Member

## The Journey of the Orange Continues to Expand



Left-Right:  
1. Cohen Andrew at East Bentleigh Primary School 2. The group at Coles, Fountain Gate  
3. Jay Foster and Harley Clark with customer at Coles, Fountain Gate.

The plaudits continue for the unique citrus industry partnership that has developed between the Murray Valley Citrus Board and the Nangiloc/Colignan Primary School.

This initiative of the Nangiloc/Colignan Primary School has already attracted recognition and sponsorship from the Pratt Foundation and Visy, the Murray Valley Citrus Board, the Mildura Fruit Company and Mildura Rural City Council. Recently a generous and significant donation from the Pratt Foundation and Visy ensured that a very successful and highly educational program will continue to develop and evolve in 2010. To be recognized and to receive support from such a highly regarded foundation can only be described as impressive and is a huge pat-on-the-back for what is being achieved.

The Nangiloc/Colignan Primary School engaged in their third *Journey of the Orange* experience on Monday, 23 to Friday, 27 August, 2010. This excursion was an integral part of an intensive and unique learning environment provided at the school. Here all children at the school are taught using a thinking curriculum, which we call 'Enterprise Learning'. Children from Prep to Grade 6 are taught how to be critical thinkers, able to pose questions, seek answers and to present their findings to others. Children entering Grades 5 and 6 have developed their skills to such a level that they are capable of operating their own business called *Fundzinc*. *Fundzinc* has a very close relationship with the Murray Valley Citrus Board and the local citrus industry. (95% of the children at the school have families reliant on a viable citrus industry.)

In backgrounding the strengths of the program, the Principal, Mr Eric Wright made the following comments. 'To enable the children to grasp the complexity of the citrus industry, every second year they are involved in the *Journey of the Orange*. This excursion is conducted over a three-week period and examines the entire industry in great detail.'

'This year the journey began with the children being briefed by a representative from the MVCB about the size and locations of the Murray Valley Citrus regions. The children then met with a local farmer (Phillip Baker) who discussed the correct way to pick fruit, farm safety and OH&S issues. The children were then required to actually pick a bin of oranges. At this stage, they also chose an orange buddy, which they monitored over a period of time and recorded any changes, concentrating on science concepts.

The children then followed their 'bin' to local packing sheds, including SOS Citrus, Sandalwood Ridge and the Mildura Fruit Company. During these visits, they observed the grading and packing process and photographed the various boxes and cartons the oranges are packed into. They later used this information to create a *Spotto* sheet for use while visiting Footscray Market, Costa Logistics (Coles distribution centre), Addamo Packers, Port of Melbourne and Coles Supermarket. The children also visited Curlwaa Fresh and Pickering's Transport

Depot, to gain an understanding of the fresh juice industry and to learn about freight and the logistics involved in moving fruit around Australia.

During their visit to the Footscray Market the group used a special train that conveyed them to merchants who market fruit from the companies mentioned. The Melbourne Marketing Committee provided the train, sponsored the breakfast and also arranged a merchant to talk to the children about their role in the industry.

While visiting Costa Logistics the children were shown how fruit is dispatched to supermarkets on a daily basis. A visit to Addamo Packers also added another dimension to the puzzle. Bulk fruit from SOS citrus (a local packer) was prepacked for distribution to Coles Supermarkets. It was then off to a large Coles Supermarket to discover, or find if there were any items observed previously on sale in the fruit and vegetable section. The children also gave fresh oranges to consumers and retold their *Journey of an Orange* story. Through their journey the children have taken the orange from the tree and delivered it to the customer. In all, a well considered, practical and effective exercise in understanding the entire progress of the orange from the farm to the consumer.

A specially catered ferry and commentary from Mr Don Forsdyke (Port of Melbourne Authority) gave the children the opportunity



Neil Eagle

# Notes from Neil Eagle

to view up close and personal the workings of the Port of Melbourne. They observed how export fruit, packed into containers, was loaded onto ships to be transported around the world. They saw the workings of the Port from the elevated boardroom at Patrick Terminals.

During 2009, the school initiated *The Orange Drive* the healthy alternative to a cake or lolly drive. During their visit to Melbourne in 2010 the children conducted presentations at four schools, which have become involved. The Nangiloc/Colignan children discussed their journey, the business they had established and gave away samples of juice and fruit at Wedderburn College, Scotch College, Briar Hill P.S. and East Bentleigh P.S.

As Principal Eric Wright concluded:

*'It is a fabulous way of taking the country to the city, educating all involved in a most practical and relevant manner.'*

*'The entire journey relied on the good will and support of all companies, businesses and personnel mentioned previously. The children and parents were given the opportunity to visit and experience a huge range of career paths, and gain a greater understanding of the complexities involved in marketing their local primary industry and to share their knowledge with others.'*

*'Many thanks must go to our major sponsors, the Pratt Foundation and Visy for their significant support. Thanks also to our partner, the Murray Valley Citrus Board and to everyone else who has supported and contributed to our cause.'*

**Eddie Warhurst**  
Compiler

There has been much discussion recently about the likely adverse, economic and social impacts of the Sustainable Diversion Limits (SDL's) recommendations in the Basin Plan draft paper, to be released in the near future.

A few points to be aware of:

1. It is a Draft Plan, with a period of at least 16 weeks for community response submissions, not as some are saying a fait accompli.
2. Regional communities must first of all demand that further development of the Basin Plan be rejected until the 2007 Water Act is either amended or interpreted, to give equal weighting to economic, social and environmental needs. Not, as is the present case, where the environmental needs are deemed to take precedence, with economic and social impacts to be merely 'add-on' issues.
3. Regardless of the Federal Election outcome, the upper states (both facing an election prior to any finalization of the Basin Plan) shall have the ability to walk away from the Plan if they deem it to be totally unfair to their State, and if necessary must be pressured to do so!
4. The pre-release of the Wentworth Group of Scientists inane document recommending the removal of 65% of Murrumbidgee and 39% of Murray River water from productive use, to flush down the rivers, must be seen for what it is. It has nothing to do with environmental needs, but is purely a grab at the water of the two Rivers in the Basin capable of providing the water to fill the Lower Lakes in a drought sequence. It totally ignores the devastating impact on the industries and communities reliant on that water for their future, and the national issue of food security and production.

developed irrigated agriculture, at massive personal and regional costs, to cater for the single greatest loss in the Murray Darling Basin.

The health of the Lower Lakes can be managed with the building of a weir at Wellington, and in a drought sequence opening the barrages to allow for the natural return of the Lakes to their previous estuarine state, to prevent the acid degradation situation.

A weir would guarantee South Australia essential needs in a drought for Adelaide, industry/towns and irrigated agriculture - about 1 million ML of annual savings. This water, being retained in the upper storages, could also underpin the needs of NSW and Victoria in such a drought sequence, to prevent the collapse of industries and regions; and ensure national food security supply.

6. The failure of either the Coalition or Labor, to talk about the building of new, or the enlargement of existing water storage capacity, shows their lack of vision for Australia's future. This is particularly so in light of Australia's projected population increase and the resultant increase in food production needs.

This inevitably must change.

**Neil Eagle**  
Chairman, Mid Murray Citrus Growers Inc.

5. The issue of the Lower Lakes evaporation losses, of about 1 million megalitres annually, is not being addressed. Presently, the upper states are being asked to reconfigure and modify their existing



# John

## A Determined Barham Citrus G

Currently John and Barbara Lace farm a large citrus holding in Barham, NSW. Like other citrus pioneers who have been profiled in previous Citrep magazines, John was facilitated to tell his story in his own way.

In 1945, when John was 6 years old, he and his mother moved from Melbourne to Mildura where she was employed as a carer for Mr Alec Leng at Irymple. He commenced primary school at Irymple South.

'I can remember the development of the Leng Navel as this occurred where we were living. After the passing of Mr Leng, my mother became the housekeeper for Mr Alf Petschel who owned a fruit block in Karadoc Avenue, Irymple that included an area of citrus. After a while they married and my stepbrother Graeme was born.'

In 1949, the family moved from Mildura to Barham when they purchased 37 acres of citrus. 'The original 30 acres was planted

in the 1930's by Mr Aston Eagle to 80% Valencias, 15% Washington Navels and 5% Thompson grapefruit. We planted an additional 7 acres to Leng Navels obtained from Wiffens Nursery, Mildura. About 30% of the original plantation is still bearing fruit.'

John explains that their orchard was irrigated with furrows.

'We converted to 17'6" x 4" galvanised spray lines, shifting these twice a day. It took four days to irrigate. We chose to pack and cart our fruit to the Melbourne Market where we established a reputation for our quality and quantity with three or four agents. Fruit was also sold to hawkers. This fruit

was often tipped loose into trucks and on-sold to fruiterers and households.'

'The Melbourne Market, in the early 50's when growers freighted fruit direct to the agent, created a desirable personal contact, where quality and control of supply could be discussed.' It appears that, in the 1950's the Barham area was known for holding fruit for late marketing. This was an added attraction to farm in the Mid-Murray area and often our fruit attracted premium prices.

'The farm we left in Mildura was mainly dried fruit with only two acres of citrus. At that time, we had more confidence in the future of citrus growing. Having lived and worked in the industry since 1950, I planted citrus in Barham in 1965, because I had seen other citrus growers in our area expanding their farming enterprises. Our district also promoted the Thompson grapefruit and we developed a special label promoting this pink-fleshed variety of citrus.'





This spread left-right:  
 1. Young citrus tree in lucerne crop. 2. John and Barb in their younger days  
 3. Aerial photo of the property. 4. John at home on the farm

# Lace

## Grower and Community Member

'The Thompson grapefruit was possibly a lead into the red-fleshed grapefruit we have today. It was sweeter and we allowed it to remain on the tree to increase the sugar-acid-ratio. Sadly, the grapefruit market has been partially destroyed by the marketing of low sugar-acid-ratio fruit. To address this, a concept was developed to change the brand name to Gold Fruit, a condition being that the sugar-ratio must be above 6. This stipulation has increased demand.'

The Barham district is unique in many ways. It operates a growers' co-operative packing shed and a juicing plant that operates in conjunction with Berrivale. John shares his views on that system. 'A growers' co-operative efficiently run, under good management, has better control of supply to the markets and the return of packing profits to the grower. We have allowed our industry, through contract packing and purchasing by larger companies, to often dump fruit onto domestic markets.'

John states that his brother was not interested in citrus, but preferred cattle. Therefore, his parents sold the Barham property and moved to Orange, NSW.

In 1966, John married Barbara and they had two girls, Jennifer and Georgina. 'Barbara was brought up in Nyah West where her parents, Jack and Gwenda Shannon, operated a dried fruit and transport business. They moved to Melbourne in 1962 and Barbara and I met when she returned to a youth camp in Kerang.'

Around that time, John established a 25-acre property on which he initially planted 1000 Leng Navel trees. To supplement the family income they grew vegetables and lucerne and leased other sand hills close by their property.

'We established a lucerne chaff mill, selling to produce stores in Melbourne and Sydney. A 75 acre sand hill became available next door and this was an opportunity we could not miss. Back in those days, if your holding

was not viable, you could borrow money over a period of thirty years at 4%. This additional property was part citrus and lucerne. Over time, we planted orange trees in the lucerne area, slashing it and throwing it under the trees as mulch and to save water.'

A further opportunity to buy more citrus orchards and a sand hill area arose. 'One of these farms was our original family farm. We purchased this with our daughter Gina and her husband, Hamish Petrascu. They had been running a business in Queensland and returned to Barham with their children. Our total area now is 230 acres.'

On the 28th January, 2006 while up a ladder unblocking an overhead spray, John fell 2.5 metres down when the ladder slipped on the tree and slewed violently around, flinging him headfirst into the sandy earth below. He suffered a C3-4 incomplete spinal injury and had no movement from the neck

*Cont'd next page...*

## John Lace *Cont'd...*

down. After treatment in the Austin Hospital, he was transferred to the Royal Talbot Rehabilitation Centre, Kew for rehabilitation.

John returned home to a modified farmhouse in North Barham after six months, able to walk and with 80% arm and hand function. Not long after arriving home, he stated that 'In NSW we had 52% of irrigation water taken from us'. They had hit a drought, but Barb and John agreed it had been a long six months away and they were glad to get home. 'Coming home has seen more improvement for me - more mobility, more activity, more victories over obstacles. It is difficult, yes, but it is home, it is right.'

When asked why he returned to the industry after his accident he replied that fortunately, he had been given a gift of determination, which the doctors believed assisted his recuperation. 'Determination can help any of us if we are stricken by adversity.'

In attempting to come to terms with the drought, John made the following observations. 'Not having enough High Security water, we then set about changing to drip irrigation. This saved 250 megs per year. We availed ourselves of an incentive offered by the Rice Growers Association of Australia Inc who bought Low Security NSW water for \$2,000 per meg. Our application was accepted. We also attempted to get incentives available at that time from our local Catchment Management Authority, (CMA). These CMA grants were available to fence-off native vegetation and were not for water savings in horticulture.'

'I believe that when there are water issues, water for citrus should be of High Security. However, this has been made difficult with existing State regulations.'

In a measure of his community spirit, John indicates that he has been involved in quite a number of organizations including as a Director of Border Packers, a member of the Barham and Murrabit Citrus Growers, on the Board of the Aged People's Home in Kerang, a member of the local Baptist Church and the Mid-Murray Citrus Growers. 'My off-farm interest is country music. I also play a pedal steel guitar, but am somewhat restricted in this pursuit since I had the accident.'

Mr Robert Mansell, former Chairman, MVCB, acknowledges John's commitment to the citrus industry. 'John was always keenly interested and has been a regular participant in conferences, related citrus

forums and activities over the years. Barbara and John are a wonderful couple and do everything together. They are very community minded people.'

Mr Neil Eagle has also been involved with the Lace family for a long time and recognises John as a long-time, successful citrus grower. 'He started growing citrus from when he left school, establishing his own orchard and expanding his citrus area over time. John is a hard worker and good operator; a determined character who will always battle on and has been regarded as a competent, big grower for many years.'



Right front: John on Gate to Plate Tour 2010

'As a Director of Border Packers he was totally supportive of the grower-owned packing organization and his strength was important in some difficult times. John is a good community member and is involved in church activities. He is also quite musical!'

When asked directly about the industry, John advances a number of interesting thoughts:

- 'The most significant changes I've seen in my life-time are in the bulk handling of our fruit, sod culture, larger packing houses, drip irrigation and the biological control of red scale.'
- 'The future of the industry, because of fixed overhead costs, will be in larger holdings and faster and more efficient machinery. (Our workers are on a 38-hour week, but I see many farmers working 50 hours per week.)'
- 'A lot of red-fleshed grapefruit is grown and there needs to be a juicing program established.'
- John considers that Citrus Australia Ltd (CAL) should have greater responsibility in single desk marketing and promotion. 'We have already seen fragmentation of

this in export to the USA. This is the first step in discounting our product. Other primary industries that operate a single desk entity have greater opportunities to represent their industry.'

- 'I believe our existing State Board funds should be directed to CAL for promotion and co-ordination in marketing. I often feel that some of our State Boards are holding too much money as consolidated revenue.'
- 'I believe it is very difficult for younger growers to get started in the industry without using an existing family farm for security, or having off-farm income to assist in establishing a new property.'
- John also considers that the Melbourne Citrus Market is threatened by our industry packers supplying direct to chain stores. However, the big challenge to be faced is that of limited water. 'I believe Government should be offering more in exchange for on-farm water efficiency programs.'

Overall, it was a pleasure to work with Barb and John Lace on this profile. Their family story will remain an inspiring one, as John's determination is to be commended, as is his consistent contribution to the citrus industry throughout his life.

**Eddie Warhurst**  
Compiler

## Activities of the MVCB - September Quarter

### CEO/Board

- Attended 'Our Farming for the Future' presented by DPI Victoria
- ADFA Forum with guest speaker, Chair of the NFF
- Meeting with Danny O'Brien of the NIC on Sustainable Diversion Limits (SDLs)
- Further consultation with DPI consultant on the Benefit Cost Analysis for the Greater Sunraysia PFA
- Board meeting with Riverina Citrus and SACIDB
- Preparation of the Annual Report
- Auditors completed audit of the Boards affairs for 2009-10
- Met with Andrew Broad, President of the VFF
- Consultation with author on the 'Impacts of Water Reductions' report
- Carbon footprint presentations
- Participation in forum to determine the best methods of achieving a national crop forecast
- Preparation of a new program application for the Tri State Fruit Fly Awareness program
- Various media commitments in relation to the PFA, QFF and market conditions
- Accompanied the Nangiloc/Colignan Primary School on their tour of Mildura Fruit Company
- Meeting with Michael O'Brien, SA MP for Regional development, Minister for Agriculture, Food and Fisheries
- Attendance at meeting with Biosecurity Australia to assess the handling of the QFF outbreak in January, 2010
- DPI Victoria meeting on Locust Plague and update
- Attended AGM and exporters Forum for AHEA
- Tour of the Murray civic reception

### IDO Activities

- Organised four, full day pruning courses
- Funded and facilitated Dr. Andy Krajewski (citrus pruning expert) to travel to Mildura for pruning workshops
- Organised two Crop Regulation field walks on flower regulation using GA3
- Organised bus tour to four citrus orchards with different pruning regimes for crop regulation
- Produced monthly articles for Sunraysia Daily farming page
- Meet with citrus IDO's in relation to national planting statistics and crop forecasting
- Presentation to Nangiloc/Colignan Primary School on Australian citrus production and Murray Valley Citrus Board
- Hosted a new varieties 'show and tell' in conjunction with CSIRO and NSW Industry and Investment
- Attended Vic, DPI weather workshop on climate change and features of the Bureau of Meteorology website
- Attendance at Fresh Event Conference
- Held meeting with growers to facilitate the 'On Farm Field Trials Project'
- Facilitated citrus orchard surveys to smooth the progress of market access
- Participated in the Horticultural Industry Network meeting and training activities
- Updated MVCB website to include a grower resources page to enable them access to citrus factsheets, production information etc
- Presentation to Sunraysia Garden Club on Citrus Gall Wasp
- Attended Vic DPI Locust information presentation
- Facilitated Citrus Gall Wasp Phenology project

**Hugh Flett**  
CEO, MVCB

### Reflections of a Mandarin

*Cont'd from page 3...*

Oh, and by the way, if you are an Essendon fan you will be well supported on the Board - something we could use at the moment.

In my new role in Biosecurity Victoria, I'll be back from time to time, but I hope it's only to deliver good news!

The last word? If you want to do something regarded as impossible for the citrus industry get on the Board or get involved in its activities. You'll get more out of the process than you ever put in!

### CORRECTION

In the June edition of Citrep, (Gate to Plate article) Mr David Castle was referred to as the Melbourne Markets Marketing Manager. This was incorrect. The Melbourne Markets Marketing Manager is Mr David Fussell.

## Locust Update and Chemical Rebate Scheme

### Locust hatchings in Victoria could occur ten days earlier than previously forecast, according to the Australian Plague Locust Commission.

Locust hatchings in Victoria could occur ten days earlier than previously forecast, according to the Australian Plague Locust Commission. The revised Australian Plague Locust Commission forecasts are based on information from the Australian Bureau of Meteorology, which indicates that there is a high probability of warmer than average spring temperatures. The new forecast dates indicate high levels of hatchings in north-west Victoria may occur from September 25. Further information is available on the APLC website at <http://www.daff.gov.au/animal-plant-health/locusts/current>.

Victorian landholders are encouraged to prepare now to treat locusts approximately two weeks after they hatch. Farmers should begin ordering the chemicals they may need to treat locusts on their land this spring.

Landholders should consult with the Department of Primary Industries, chemical resellers and agronomists about locust treatment. They should also discuss their needs with local suppliers who can in turn report to the relevant manufacturers.

The revised dates for locust hatching are:

Location-Victoria	Egg Laying	Hatching	Mid-instar	Fledging
Mildura-Ouyen	16 April	25 September	10 October	31 October
Swan Hill-Boort	16 April	6 October	19 October	10 November

The Victorian Government is providing a 100 percent rebate on the purchase of chemicals used for the treatment of locusts by eligible private landholders in areas expected to be worst affected in spring 2010. The purpose of the rebate is to assist eligible landholders treat locust hoppers, before they are able to fly and spread in large numbers across the state.

The Locust Insecticide Rebate provides eligible landholders with a 100 per cent rebate on the purchase price of insecticides listed in the Insecticide Control Options Tool (available on the Department of Primary Industries website) used to treat Australian Plague Locusts on private properties between 1 September 2010 and 31 May 2011.

The maximum available rebate is equal to the cost of insecticide required to treat the total area of a landholder's property once. Landholders may choose where and how often insecticide is applied on their property, subject to label permit instructions. Rebates are available for the cost of insecticide used, once the application has been completed.

### Eligibility Conditions

Rebate applicants (maximum of one per property) must:

- Be landholders in the defined area (rural zones in identified municipalities)
- Purchase and use an insecticide listed in the Insecticide Control Options Tool (on the DPI website) for their specific crop/situation
- Apply the insecticide to treat Australian Plague Locusts in the defined area between 1 September 2010 and 31 May 2011
- Comply with all mandatory chemical use requirements (including chemical use record keeping).
- The rebate is not available for application expenses, the cost of commercial contractor services or equipment purchases. Commercial spray contractors may not claim the rebate on their client's behalf.

- Rural Zones
- Eligible rural zones are the Farming Zone, Rural Living Zone, Rural Conservation Zone or Rural Activity Zone.

Applicants can confirm which zone their property is located in by visiting [www.dse.vic.gov.au/planningschemes](http://www.dse.vic.gov.au/planningschemes) or calling the Information Victoria Call Centre on 1300 366 356 (select planning when prompted). Insecticides Eligible for the Rebate Insecticides that are eligible for the rebate are those that appear in the Insecticide Control Options Tool on the DPI website or in your industry factsheet (also on the website) for the crop or situation required to be treated.

If you can't find a chemical for your crop or situation under the Insecticide Control Options Tool, please call the DPI Locust Hotline on 1300 135 559 and ask to speak to a Chemical Standards Officer.

### How to Apply for the Rebate

To apply for the Locust Insecticide Rebate landholders are required to:

- Obtain advice on appropriate insecticides and how to apply them from an agronomist or chemical supplier.
- Purchase an insecticide eligible for the rebate, ensuring that a tax invoice, with a receipt to confirm payment, is obtained. The tax invoice must state the product name of each insecticide, the purchase date, the quantity purchased and the purchase price, exclusive of GST.
- Apply insecticide in accordance with the Insecticide Control Options Tool on the DPI website and label requirements, ensuring that a chemical use record is completed for each application. An example chemical use record is available at [www.dpi.vic.gov.au/locusts](http://www.dpi.vic.gov.au/locusts)
- Complete the Locust Insecticide Rebate application form with assistance if required, from the Insecticide Cost Calculator available on the DPI website. This form is available from DPI offices, DPI locust hotline 1300 135 559, the DPI call centre 136 186 or [www.dpi.vic.gov.au/locusts](http://www.dpi.vic.gov.au/locusts)

## Sunraysia Citrus Growers' Report

### *Basin Plan Casts Deadly Shadow Over Farming Communities*

- Ensure that the application form is witnessed and signed by an authorised signatory for statutory declarations. An authorised witness list is available at [www.dpi.vic.gov.au/locusts](http://www.dpi.vic.gov.au/locusts)
- Attach copies of receipted tax invoices and chemical use records to the application form and deliver to a designated regional DPI office (see the list at [www.dpi.vic.gov.au/locusts](http://www.dpi.vic.gov.au/locusts)) or mail to:

Locust Insecticide Rebate  
Reply Paid 86683  
Tatura Victoria 3616

Ensure that rebate applications are received by DPI by 30 June 2011.

Source: Victorian DPI website  
([www.dpi.vic.gov.au/locusts](http://www.dpi.vic.gov.au/locusts))

Subsequent to completion of this article above, the following information has been received with regard to NSW.

Land managers in NSW are required to report any locust activity and carry out any necessary control. Insecticides for the control of locusts are available from your local Livestock Health and Pest Authority (LHPA). All insecticides must be used in accordance with the Pesticide Act 1999. All insecticide applications must be applied according to labels instructions and all users of insecticides must be accredited. Outbreaks must be reported to your local LHPA office. For further information visit the LHPA website at [www.lhpa.org.au](http://www.lhpa.org.au) or the Industry and Investment NSW - Primary Industry website at [www.dpi.nsw.gov.au/agriculture/pest-weeds/insects/general/locusts](http://www.dpi.nsw.gov.au/agriculture/pest-weeds/insects/general/locusts) or phone the I&I NSW plague locust hotline 1800 814 647.

### The speculated water cuts under the Murray Darling Basin Plan will kill our industry, kill our towns, kill our communities and uproot our families.

Sunraysia Citrus Growers (SCG) is calling for details of the plan to be released immediately. Our businesses cannot operate on caretaker mode. The shadow the plan is casting is stifling investment and certainty in our industry. Farmers need to know the details of the plan to make viable decisions. Our industry is based upon long term decision making - citrus takes seven years to bear fruit.

Our farmers have survived the worst drought in history, through best practice irrigation, increased borrowing and hard work. The basin plan now threatens to pull the rug from under our industry and take away the very asset that we have borrowed against and built our businesses with - our water. The plan is purported to be a 5000 page document prepared by highly paid consultants and hocked by a bevy of bureaucrats. Surely, this waste of taxpayer money would have been far better spent in purchasing water from willing sellers utilising the water market created by the Government.

The problem of over allocation has not just occurred, yet the cuts under the basin plan will directly ruin the businesses of those currently holding irrigation licences. SCG welcomes Prime Minister Gillard's commitment to buy water licences from willing sellers, however acceptance and adoption of a Plan that is yet to be released may have "Pink Batt" ramifications. Details of the Basin Plan must be released prior to the election to allow proper public scrutiny of how billions of taxpayer dollars will be spent.

Government water purchases must be strategic as poorly executed programs will lead to the collapse of our industry and those of our fellow farmers. Such industry failure will see the price of food sky rocket to levels akin to the recent cyclone induced banana spike. Water is a necessity for growing food - a proposed water licence reduction of 40% will equate to a minimum cut of 40% in food production. Whilst the Government may be happy to rely on imported food to fill

the void, Australian consumers deserve better. Imported food is not grown to our high standards - contaminated milk, poisoned vegetables and child labour are not uncommon. The Government's proposed National Food Plan is a response to these food security concerns. The recent blocking of wheat exports by Russia shows that we cannot rely on others to feed our children. So what is more important, policy skewed heavily towards the environment or feeding the mouths of our growing population with clean green Australian food? SCG recognises that the river system is suffering as a result of the sustained drought. However, politically motivated water licence cuts will kill the industries that feed our nation and decimate the communities that are so important to Australia's great diversity.

SCG is calling on the MDBA to release the details of the Basin Plan immediately and include a long term strategic program of buybacks from willing sellers. Such a program must achieve the long term environmental goals, whilst minimising the social and economic impact on rural communities.

**Mr Vince DeMaria**  
Chairman,  
Sunraysia Citrus Growers Inc.

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Phone 03 5023 8205  
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Email [scq@mvcitrus.org.au](mailto:scq@mvcitrus.org.au)

## Advanced Citrus Nutrition Training for Sunraysia



Technical Citrus Nutrition workshops facilitated by Mary Cannard (MVCB) and conducted by Steven Falivene (Industry & Investment NSW) were held in Barham and Sunraysia in late summer to Autumn in 2010. The workshops aimed to improve the effectiveness and cost efficiency of citrus nutrition management practices.

Steven and Mary noted that 'There were many glossy brochures promoting various types of fertiliser products and programs, claiming improvements in fruit quality, size and productivity. Some of these programs were developed in other districts or countries, in different climates, soil types and cultural practices. These workshops empower the grower with skills and knowledge to decipher the claims and develop a cost effective fertiliser program that is suitable for their orchard situation'.

The workshops delivered intensive technical information, which was easily understood by people with a non technical background. The workshops covered wide aspects of citrus nutrition including:

- Choosing the correct leaves for leaf analysis
- Interpreting leaf analysis
- Understanding how nutrition can affect fruit quality and yield
- Cost comparison of different kinds of fertiliser
- Amount of nutrients required by trees
- Nutrient sprays to improve fruit size and quality
- How roots and leaves absorb nutrients
- Synergistic and antagonistic nutrient interactions
- The efficiency of uptake of nutrients in orchards

- Crop load estimation to help meet crop nutrient needs
- How to monitor orchard nutrition
- Steps to developing a nutrition plan that suits each individual situation

A couple of field sessions were included in the workshop. One of these was the collection of leaves for analysis. Many participants did not realise that if you chose a wrong leaf, it could give a different result. They were shown the correct leaves to analyse and then picked a handful of leaves for practice. They then conducted a leaf analysis of their own orchards, with the results being used during the workshop for training on interpretation and developing a specific nutrition program.

At the end of the workshop, growers spent time developing and analysing their nutrition programs by entering their specific details into a special 'citrus nutrition planner' spreadsheet developed by Steven. The planner provided detailed information on the monthly application rate and cost of each nutrient in the fertiliser program. Growers were encouraged to use the spreadsheet to compare the cost of different fertiliser programs. It is easy for an agronomist to recommend an "advanced" fertiliser program, however, growers need to justify the extra costs and they can do this by using the citrus nutrition planner.

Past participants of the workshop have made the following observations:

**Mathew Cottrell (Sunraysia Citrus Grower)**  
Information was at an understandable level. Not too high, not too low. Computer nutrient planning and cost analysis program was very useful.

**Lisa Eagle (Barham Citrus Grower)**  
Covering the topics with excellent knowledge of citrus nutrition. Sound practical advice in all areas.

**Geoff Brown**  
There is a host of advice and choices out in the market place on nutrition plans, but what I learned from the workshop has helped me work out which ones best suit my situation.

Steven aims to present the workshop in Sunraysia in late February 2011, however only 12 participants will be enrolled at a time. He limits the numbers to better provide a personalised and quality service, and also to encourage interaction amongst participants. If you are interested in attending a workshop, contact Mary Cannard (MVCB – 03 5051 0500) to put your name down as an expression of interest, noting that 'first in best dressed'.

## MVCB Promotions for 2010/2011

The Murray Valley Citrus Board has outlined their known citrus promotions for 2010/2011.

- 'Journey of the Orange' Partnership with the Nangiloc/Colignan Primary School. Melbourne Market etc 23-26 August, 2010.
- The Wentworth Show 28-29 August, 2010.
- The eight day 2010 Tour of the Murray River cycling classic, 29 August to 5 September.
- The Mildura Show, 14, 15, 16 and 17 October, 2010.
- The Wentworth Women's Gathering, 30 and 31 October, 2010.
- The Werribee Harvest Picnic, 28 November, 2010.
- The Hanging Rock Harvest Picnic, 27 February, 2011.
- Organised school visits across the period.
- The Orange Drive in conjunction with the Nangiloc/Colignan Primary School.
- Attendance at the Scotch College Open Day. Date to be confirmed.

Over recent years, a number of growers have participated in these and similar promotional activities, and their observations as to the overall value of local and regional promotions and direct benefits and information to growers are worth considering.

In this context, I have made approaches to some of these growers requesting that they provide responses that reflect the personal outcomes of their participation.

The responses so far are encouraging and a full report of the overall outcome will appear in the December edition of Citrep.

**Eddie Warhurst**  
Compiler

The above schedule outlines the scope and diversity of the overall program. In an increasingly competitive environment for market share of individual primary industry products, the MVCB places considerable importance on local and regional promotions, particularly those opportunities that have direct personal contact with consumers.

In this context, publication of the promotions schedule provides advance notice and incentive for growers to consider becoming involved as a participant and plan accordingly.



Left-Right:

1. Hamish Petruscuc 2. Steven Falivene, Hamish Petruscuc, Lisa Eagle and Brad Billi 3. Lisa Eagle

The development of the workshops is a part of a project supported and funded by Horticulture Australia, industry voluntary contributors, CRC Irrigation Futures and the National Program for Sustainable Irrigation. The project "Integrated Advanced Fertigation of Citrus" aims to compare the economic and practical application of 'best management practices' (BPC) and 'open hydroponics' (OH), identify optimum management techniques for each of these systems and extend the information to industry via the development of specialised technical workshops and tools. More information and results of the project will be provided in future issues of the Australian Citrus News. The Horticulture Australia voluntary contributors are;

**Gold** Netafim

**Silver** MVCB, Amcor, MFC, SprayGro, Timbercorp, Mottes, Rootzone Solutions & Water Dynamics

**Bronze** EJT Packers, Aussie Orange, SS Citrus and Shane Singh

**Contributed by**

**Steven Falivene**  
Industry & Investment NSW

**Mary Cannard**  
Industry Development Officer  
Murray Valley Citrus Board

Telephone 03 5051 0504  
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Jeremy Giddings

# Measuring and Monitoring to Manage Water

Growers have had to closely monitor and budget their irrigation in recent seasons in response to reduced and staggered allocations. At the time of writing this may again be the case this season.

Figure 1 presents two recent cumulative irrigation applications from well monitored, fully productive trees in Sunraysia. Cumulative water use from two patches of Late Lane navels resulted in an annual application of 12.4 ML/Ha (low level sprinklers), and 7.3 ML/Ha (drip irrigation). These figures are used as an example only, and individual cumulative water use will

vary depending on tree age, irrigation method, planting density and soil type.

It is important for growers to understand their water use, and cumulative water use throughout the season, for each patch. With this knowledge irrigators can learn from past experiences and be better prepared in the future.

An example of how this knowledge can be used is if the Victorian water allocation announcements from 2009-10 are converted to ML/Ha and added to this cumulative irrigation chart (Figure 2). Various levels of entitlement can be added, with 12 and 10.8 ML/Ha entitlements added here.

Allocations are converted to ML/Ha by multiplying the % allocation by the entitlement. For example, in November 2009, the allocation was 60%. Therefore the allocation in ML/Ha is 60% of 12 ML/Ha and 10.8 ML/Ha, which is 7.2 and 6.5 ML/Ha respectively. The assumption here is that original entitlements exist. If previously excess water has been sold the same calculation can be made to the adjusted entitlement.

Such a comparison shows when allocations did and did not meet tree water requirements. In periods when water requirements are not met by allocations, carryover water or water traded-in, obviously becomes important. In the example shown, these periods in 2009-10 were in July to September for both patches in this example, and January to April for the sprinkler irrigated site. Similar comparisons may be carried out for different levels of entitlement and cumulative water use.

Using information such as this helps develop educated decisions on such things as when and how much water to purchase, as well as scenario planning. The exercise shows how important it is to have available accurate records of monthly water requirements on a patch basis, in order to make informed decisions in the future.

**Jeremy Giddings**  
Irrigation Officer, Industry & Investment NSW, Primary Industries

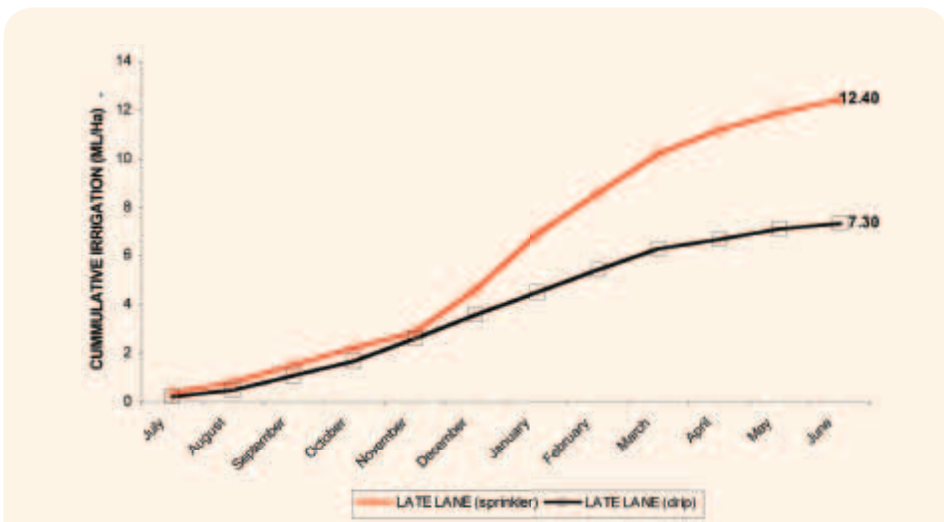


Figure 1. Cumulative water use (ML/Ha) of two monitored citrus sites in Sunraysia.

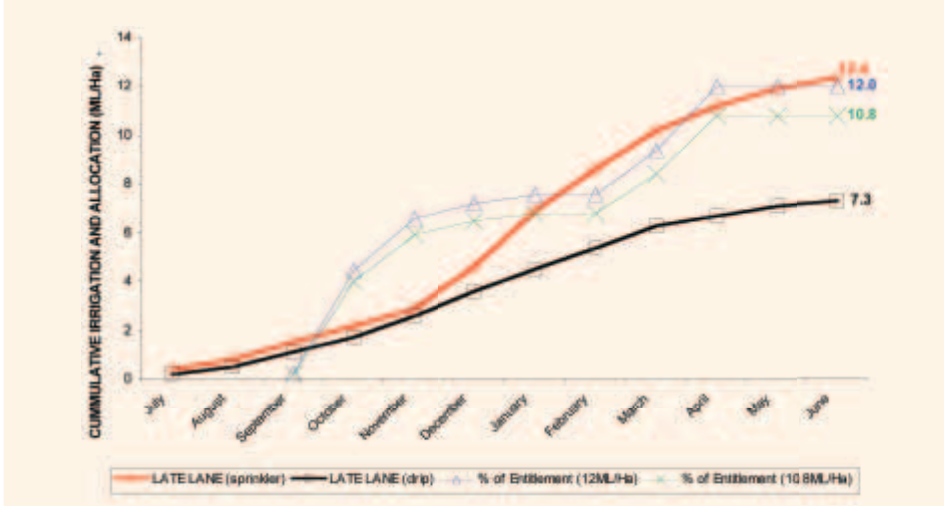


Figure 2. Cumulative water use (ML/Ha) of two monitored citrus sites in Sunraysia and converted allocations for Victorian Murray pumped districts (12 ML/Ha) and private diverter (10.8 ML/Ha) 2009-10.

**EDITORIAL DISCLAIMER**  
The opinions expressed in this Citrep are not necessarily those of Murray Valley Citrus Board, its editor or compiler.