



dairynews

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CONTENTS

Food and farmers undervalued in the UK	2
CowTime's cool tips	3
New research - Alternatives to oestradiol	4
Is irrigation worthwhile?	5
What's it like to work on your farm?	7
New days for new ways	8
Natural resources - On ground work	9
Dairy research foundation symposium	11

EDITORIAL



Tony Dowman

Technical Specialist, Kempsey

There is never a dull moment in the NSW dairy industry as there is always something happening or about to happen.

The pending sale of Dairy Farmers Coop is going to inject an enormous amount of cash into the dairy industry. But what will the individual farmers do with this windfall?

There are endless options including expansion, debt reduction, share-farming, off farm investment and retirement that can be considered. This will be a good test case for family communications and negotiations as there will no doubt be differences of opinion within the business as to what to spend the money on.

Before you make any decisions, talk to financial advisers or your accountant as there will no doubt be tax implications from spending or investing the money.

The 11 cents per litre milk levy that was imposed on the retail price of milk to fund the dairy structural adjustment program is coming to an end. The farmers who elected to take the full money in instalments will miss the quarterly cheques.

It will be interesting to see how transparent the 11 cent per litre drop in the retail price of milk will be considering the day to day variation in retail milk prices and the different milk prices between shops. I wonder if the consumer watchdogs will be watching?

NSW DPI is seeing a changing of the guard in its staff as the baby boomers Hawkesbury and Wagga Ag. Colleges trained staff retire.

In the dairy section, Ross Coomber from the Coffs Harbour district was the first to go, followed by Dick Buesnel from Bega last December, and now Col Griffiths from Kyogle last month. That accounts for over 120 years of experience in dairy extension lost to the industry.

The next generation dairy extension officers have better academic qualifications than our old diplomas in agriculture, and in time have as much experience as the old retirees. Getting approval to replace retiring officers is another story.

On a sadder note, Col Levick who was a DPI Dairy Officer from the 1950's through to the 1980's passed away in August. Col worked in Nowra, Wagga, Kyogle, Tamworth, Maitland and Richmond during his 40 year stint with the Department, and then spent 10 years as a classifier with the Holstein Cattle Association. Col's wife, Dot, still lives in North Richmond.

Food and farmers undervalued in the UK

Tim Burfitt

Manager Intensive Livestock Industry Development, Orange

In June and July of 2008 a group from the NSW Dairy Industry Conference consisting of 12 NSW dairy industry representatives and their partners attended a 3-day International Dairy Federation Climate Change Summit in Edinburgh and subsequently toured the UK dairy industry. The meetings and casual conversations with dairy farmers and industry representatives during the tour provided great insights as well as a developed appreciation of the commonality between our industries especially with the three input F's - feed, fertiliser and fuel. The conversations also reflected poorly on a country that has appeared to have gone to an extreme in driving down the price of food to benefit the consumer at the cost of a generation of dairy farmers.

During the tour, the British Prime Minister, Gordon Brown, produced a newspaper headline in July calling on Britons to stop throwing out food – he identified that a third of all food bought, 2.15 billion Australian dollars worth, is wasted annually. What a turn around in events for a nation starving at the end of World War Two that received donated food from Australia with “Bundles for Britain” program.

In this climate of undervalued food, British dairy farmers have attempted to farm and the last 20 years have not been kind to them. Our tour group visited dairy farms with dilapidated infrastructure and eroded farmer confidence, farmers who have endured a long battle with very low prices and survival to date dependant

on offset payments from the European Union. The distorted market signals provided by the common agricultural policy of the European Union, has prolonged the situation by providing a trickle of income support for years whilst not bringing to a head the reality of an unviable situation. The industry is further compromised by government agencies who have moved from servicing agriculture to a greater focus on community health and environmental outcomes.

What did our group learn from what we saw? Definitely that a market distorted by agricultural policies of the European Union created more harm than benefit, that a milk

price must have within it a proportion for reinvestment and without encouragement to a new generation of farmers, any industry will wither. The UK is largely dependant on Eastern Europeans particularly Poles for their dairy workforce. This is not a sustainable option as this workforce after meeting savings targets head home.



UK dairy farmers are currently faced with a need for massive investment in effluent storages to meet legislative requirements, limits on stocking rates per farm in nitrate vulnerable zones, an aged dairy farm population with no apparent succession plan and dairy cows with values at an all time high. Milk production can only decline as dairying enterprises will cease and within 10 years the UK may become a net importer of milk.

Supermarket chains in the UK have identified the looming milk shortage and have moved quickly by directly contracting farmers to supply milk under their brand. The contracted farmers are paid above the market rate with a price that acknowledges input costs, farm labour and a return on investment. It appears that the farmers contracted are the ones demonstrating best practice and are sustainable in their businesses into the long term.

Watch this space!

CowTime's cool tips

Darold Klindworth

CowTime



Plate coolers can be an extremely cost effective way to cool milk, but they are poorly utilised on many dairy farms.

CowTime's Darold Klindworth has some tips to make sure you get the most out of your plate cooler. It will save you energy and money.

It is easy to find out if your plate cooler is working efficiently. Simply compare the temperature of incoming cooling water with the temperature of milk leaving the plate cooler. Milk leaving the plate cooler should be no more than 2 degree C. warmer than the incoming water.

If it is warmer, your system is not working effectively and it is time for some basic maintenance and to check your system set up. Your regular maintenance checks should include making sure the plates are clean. Blockages can restrict flow over the heat exchange surfaces. Mud and mineral deposits on the plates also reduce heat transfer.

Now for the set-up.

Are you using the coldest water available on the farm for the plate cooler? And make sure milk runs from the plate cooler into a correctly sized direct expansion milk vat. This will use the least amount of energy to cool your milk. The cooling fluid should flow in the opposite direction to the milk. If not, the heat transfer is reduced.

Size does matter when it comes to plate coolers. The size and number of plates needed depends on the peak flow rate of milk expected from the milk pump. If milk production has increased significantly, make sure your plate cooler is still adequate.

For more information refer to CowTime Quick Notes 4.6 and 4.7 which can be downloaded for free from the CowTime website (www.cowtime.com.au) or contact: Darold Klindworth, ph 03-5624-2269 darold.klindworth@dpi.vic.gov.au or www.cowtime.com.au.



New research – Alternatives to oestradiol

Vicki Smart

Livestock Officer – Dairy Program, Berry

For many years, farmers have used CIDR/oestradiol (eg CIDRIROL, ODB, etc) to improve reproductive performance in their herds.

Recently however, regulatory changes in the European Union have resulted in a ban on the importation of dairy products from animals which have been treated with oestrogens, including oestradiol.

This ban has led to the Australia Dairy Industry introducing a voluntary restriction on the use of oestradiol benzoate in lactating dairy cows (now a condition of milk supply).

What are the options without oestradiol?

Field studies being carried out by Pfizer Animal Health, Dairy Australia and Maffra Veterinary Clinic are researching alternative treatments of non-cycling cows without using oestradiol.

The studies have compared the established CIDR/oestradiol treatment with a treatment in which the oestradiol was replaced with

Gonadotrophin Releasing Hormone (GnRH; Receptal, Gonabreed, Fertagyl). Early trial results show good comparison between the two treatments.

In GnRH based program, no physical signs of heat are observed so fixed time inseminations are used. This can be an advantage where heat detection rates are low in herd situations or certain times of the year.

Each of the programs in Table 1 can be used in a whole herd breeding program to optimise mating rates on eligible cows. Some herds are using the PG program to manage submission rates and the voluntary waiting time, following up with either GnRH or CIDR based programs for the cows not going in calf.

When considering the alternatives to Oestradiol consider:

- seeking veterinary advice on current programs
- the cost benefit of these programs
- the importance in getting cows in calf quickly to keep control of days in milk
- achieving a fresh productive herd through higher in calf rates

Table1: Alternatives to Oestradiol for synchronising and treating non-cycling cows

Program	Works on	Benefit	Limits
PG - 14 days apart	Synchrony of cycling cows	Improves mating rates Better pregnancy rates Identifies non-cycling cows Lowest cost program	Does not work on non-cycling cows
Ov-synch	Synchrony and treatment of non-cycling cows	Fix time mating Less need for heat detection	
CIDR-synch (including re-synchronising returns to service)	Non-cycling cow treatment and synchronisation of heats	Most like normal cow cycle Highest level of control over cows cycle Fix time mating Less need for heat detection Improved conception by 10-20% over Ov-synch	Most expensive option Labour intensive



Is irrigation worthwhile

Tony Dowman

Technical Specialist Dairy, Kempsey

The debate continues over the effects climate change and climate variability will have on the weather patterns in the dairying areas of NSW and its effect on pasture production.

Areas that are predicted to get dryer will rely heavily on irrigation, but only if there is water available. The current situation in the Murray

and central west regions where summer pasture production is reliant on irrigation, is a good example of what to expect when you are geared up for irrigation, but do not have any water.

So, is relying on irrigation on the coast and in the Hunter still a viable option? It is all about cost / benefit and the risk of relying on water that may not be available at the critical dry times. You need to do the sums.

The following points are the basis of the calculations.

1. One megalitre (ML) of irrigated water should be able to produce at least 1tonne dry matter (DM) of pasture (the range is between 1 and 2). Some crops such as maize can produce up to 5 tonnes from 1 ML of water. There are lots of variables including water availability, pasture species, seasonal conditions and irrigation management skills that influence the pasture response to the water applied. James Neil from NSW DPI has done a lot of research on the water use efficiency of different pastures and crops.
2. The variable cost of growing pastures is about \$100 per tonne dry matter (range \$80 to \$120) in a “normal” season regardless of whether it is irrigated or dry-land. With irrigation you generally get more tonnes per ha; on average in coastal areas about 50% more.

FEEDING

3. Pasture yields expressed as tonnes DM per ha utilised is extremely variable under dry-land ranging from zero if it does not rain at all, to 14 tonnes DM if it rained when ever the soil needed moisture. A typical average is 8 tonnes DM per ha per year.
Irrigated pastures have the same range, zero if it doesn't rain and there is no irrigation water available, to 14 tonnes. A typical average is 12 tonnes DM per ha per year where no cease to pump or restrictions come in force.
Bottom line is irrigation is worth about an extra 4 tonnes DM per ha per year, or 50% increase in pasture production on the coast and Hunter region.
4. Dairy cows eat at least 6 tonnes DM per year per cow, of which more than 4 tonnes should be made up of fodder such as pasture, silage or hay. The balance is usually made up by strategically using concentrates. On dry-land at 8 tonnes DM per ha the stocking rate should be 2 cows per ha, while on irrigated pastures the stocking rate can increase to 3 cows if the cow's fodder requirements are being provided by the pastures. Stocking rates can be as high as you like if you have the capacity to supply the minimum of 4 tonnes of fodder per cow from a combination of pastures, conserved or purchased feeds. These numbers are only averages and will vary depending on feed quality and milk production.
5. Irrigating pastures is not only about growing feed. Irrigation may extend the growing season and allow perennials to persist which will save the 6 to 8 weeks lead in time of re-sowing annuals.
6. If you went from a 100% dry-land dairy farm to 100% irrigated, you could either increase your herd size by 33%, or conserve 33% of the fodder grown, or, reduce the amount of purchased feed. Again these numbers are greatly influenced by seasonal conditions, but all you can work on are averages. For every ha of irrigation that you install, you may get an extra 4 tonnes DM which could be converted into at least 4000 litres of milk, or \$2200 at 55c/L.
7. If existing irrigation was removed from your farm, or water was no longer available, you would need purchase fodder to compensate for the drop in pasture production. Current hay prices range from \$200 per tonne for cereal hay to \$400 per tonne for lucerne hay. To replace the 4 tonnes per ha loss of pastures owing to loss of irrigation, it would cost you about \$1200 per ha (4 tonnes x \$300 per tonne average price) in purchased feed to maintain herd size and current production.

If you only look at the variable costs of irrigated pasture production, and you maintain herd size and milk production, and water is available when required, under irrigation you spend \$400 per ha (4 tonnes @ \$100 per tonne) in pasture costs to make \$2200 per ha (4000 litres @ 55 cents per litre). Under dry-land you would need to purchase \$1200 worth of fodder at today's prices to produce the same milk.

But how do you factor in the risk of not having water available when required? Is it 1 year in 5, or 3 years in 3 like the Murray irrigators are experiencing? Another risk for the dry-land farmers is not being able to purchase the right type and quality feed when required. Climate change and government policies will have a big influence on these risks, and to date no-one knows what will be the outcome.

Another consideration is the capital cost of the irrigation system and purchase of water. The

irrigation system will depreciate over time, while the water will most likely appreciate as people realise its value. The annual capital cost per ha is dependant on the type of system, area irrigated, life expectancy of the system, amount borrowed, interest rates, and the tax implications for your business.

These calculations need to be done on an individual farm basis, and once calculated, can be added to the annual variable costs to get a true picture of total irrigation costs. Remember, annual capital costs (or overheads) are paid regardless of whether the irrigator is turned on or not.

Bottom line is irrigation is still financially worthwhile if water supply can be guaranteed and purchased high quality feed costs more than \$200 per tonne.

What's it like to work on your farm?

Michael Ison

Dairy Officer – Human Resources, Paterson



One of the key principles of The People in Dairy Project is to develop a farm business that suits people, not the other way round.

Trying to make people “fit in” to existing practices that are difficult, unrewarding or unsatisfying will contribute to people leaving and will make it more difficult for you to attract the right people.

Here are my observations of what you see on a happy and productive dairy farm.

Adaptability – “On our farm, we know that constant learning, new ideas and adapting to what the external environment sends’ our way is critical. To this end our people are encouraged to learn and innovate.”

Responsibility – Individuals are encouraged to behave responsibly and to take risks. While the buck may stop with the farm owner or manager, individuals still have plenty of loose change in their pockets.

Values and Principles– The things that are important to the farm owners and the business are recognised and understood by all and there is an internal motivation to reach higher and excel. The values that are expressed by people on the farm line up with clear principles such as justice, fairness, openness and win-win.

Rewards – Everyone feels rewarded by the work and effort they put into the job. This is not just about money, but about non financial pats on the back and the fact that the reward is linked to the performance.

Clear thinking – What we aspire to on this farm is clearly understood by all. “I know what my role is in reaching the farm goals and I know what to do.”

Dedication- “We are committed to the farm team and cooperate with others to reach the farm goals and are prepared to work through the ups and downs to achieve the goals.”

To back up these observations, studies of workplaces and interviews with employees show that the working environment and relationships with “the boss” and co-workers is rated as a key part of work satisfaction and retention.

In a recent survey of company employees, 80% said they had left a previous job mainly because of their relationship with their boss or manager.

Author, Leigh Branham in his book “The Seven Hidden Reasons Employees Leave” suggests the main reasons that people leave are:

1. Unmet expectations
2. Mismatch skills
3. Lack of coaching and feedback

4. Limited growth opportunities
5. Feeling unrecognized or devalued
6. Overworked
7. Loss of confidence in senior leaders

Because work takes up a large proportion of people's life and time – having motivating work environments can make the difference to our entire well-being – and therefore work-performance, all good reasons to create a farm business that suits people.

The People in Dairy website has many interesting articles, tools and techniques that you can use to improve the working lot of people on your farm. Visit the website at www.thepeopleindairy.com.au

New ways for new days...

Michael Ison, Dairy Officer – Human Resources, Paterson

The internet has revolutionised news and information delivery across the globe with news deadlines disappearing and instant updates available 24hours a day.

Got a question? Type it into Google and there's your answer. E-journals are replacing or working side by side with traditional magazines. Blogs and websites such as MySpace and Facebook are now prolific and provide exciting new ways of communicating ideas and connecting families and communities.

NSW DPI and your dairy extension team are constantly looking for ways to improve the information flow and are taking on new technologies to help this process. For example, "Dairy News" is already available on website and can be read and downloaded as a pdf file at <http://www.dpi.nsw.gov.au/agriculture/livestock/dairy-cattle>

In the future, "Dairy News" will become completely electronic using emails and website as the medium for delivery. This will provide information quickly, with lower cost and less impact on the environment

Our team has also subscribed to a webinar program that will enable electronic discussion groups to be created around specific topics quickly, cheaply and easily over the internet and the use of SMS, podcasts and video as ways of staying in touch with current information.

For you to become a part of this exciting future we need your email address so we can begin to develop our database.

Send your email details to michael.ison@dpi.nsw.gov.au

ON-GROUND WORKS

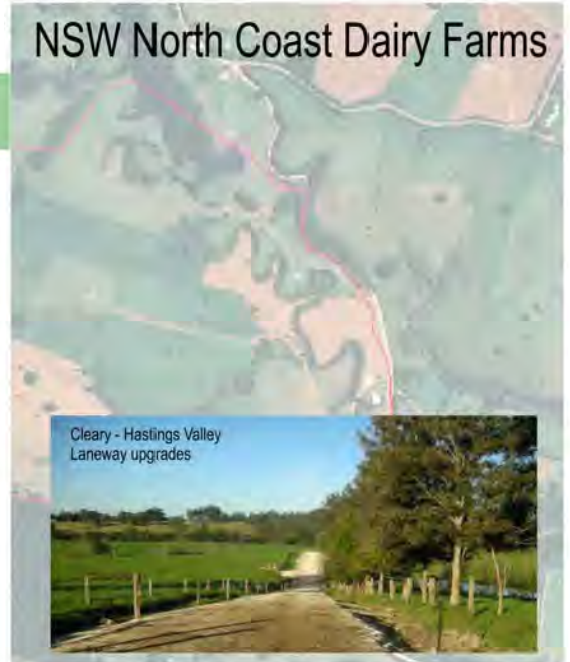
34 dairy farmers, between Hannam Vale and the Queensland border have contributed \$917,699 to a \$1.3M project targeting improved farm management and environmental outcomes as part of the 2007/08 Dairy NRM Works for Healthy Soils, Rivers and Catchments.

The project was initiated by the Northern Rivers Natural Resources Management Committee (NRNRM) and co-ordinated by the NSW Dept. of Primary Industries (NSW DPI) with support from the Northern Rivers Catchment Management Authority and funding from the National Landcare Program.

All farmers had participated in the 'Farmer Targets for Change' (FTC) workshop series run by the NSW Dept. of Primary Industries and it was through this process that their environmental works were prioritised. The FTC Workshops provided a framework for reviewing practices on the farm and planning for the adoption of best management practices with the assistance of Technical Officers from NSW DPI.

This is one of a series of case studies showcasing improved natural resource management on dairy farms on the north coast of New South Wales.

NSW North Coast Dairy Farms



Erosion, sediment and nutrient management - LANEWAYS and LOAFING AREAS



Above: Stock benefit from the retention of shade trees within pasture areas and the improved drainage in laneways will help keep the herd healthier with less mastitis and hoof problems.

Laneway and Loafing area upgrades Sue and Brett McGinn of Belmore

Their project started with the re-evaluation of the layout of cattle loafing and feeding areas and laneways adjacent the dairy.

The nature of the flat alluvial country meant they had to pay particular attention to the foundation materials and drainage of the new laneways. 275mm of rain during construction posed many challenges and accentuated the need for good drainage design.

Loafing areas were reduced in scale and electric fencing installed to manage the stock and ground levels were built up and shaped to facilitate shedding of water and better drainage.

A 'travelling effluent irrigator' was also installed to allow re-use of nutrients on the grazing pasture.



Funded and supported by :



Northern Rivers
Natural Resources
Management Committee
NRNRM

NATURAL RESOURCE MANAGEMENT

Laneway upgrades and protection of riparian zone Sue, Luke and Leo Cleary, Brombin

The laneway system, shown below in the photograph, was identified to be directing all runoff into the drainage line which feeds into Hastings River.

The project required the:

- reduction in width of the laneway to reduce maintenance requirements;
- the re-shaping of the laneway with drainage diversions at intervals to disperse water into adjoining paddocks;
- the use of a gravel which would consolidate well and would not contain sharp material which would not cause lameness.



Lane way prior to works - unnecessarily wide and drainage predominantly along one side and causing scouring



Completed works showing reduced width, fencing along sides to protect edge of gravel, and drainage bunds at regular intervals.

The project also included the revegetation of a degraded section of riverbank following the control of environmental weeds such as Large-leaved Privet *Ligustrum lucidum* and Pink Lantana *Lantana camara* and the replanting of a site with local native species such as Weeping Lilly Pilly *Waterhousea floribunda* which is dominant along this section of the river.



Weed species : Large-leaved Privet *Ligustrum lucidum* in flower (Coastcare)

Laneway upgrades and protection of riparian zone David and Sarah Hewitson, Upper Rollands Plains

The priority on this property was identified as re-configuration of the laneway system to protect water quality and improve stock health.

This required the removal of the main laneway which was located on the high ground on the main creek bank, upgrade of the remaining laneways and installation of additional access gates. Cattle are now spending more time in the paddocks feeding and less time in the laneway.

This work is part of a progressive implementation of the 'farm plan' and is complemented by the installation of additional off-stream watering troughs and weed control activities along the riparian corridor.



Existing laneway along the creekbank - now closed



Source - NSW Dept. Of Lands SIX Viewer19/3/08



Additional gateways reduce the time sent in laneways and maximises time on pasture.



Laneway upgrades on balance of property

For further information and technical advice contact:
NSW Dept. of Primary Industries, KEMPSEY OFFICE
Phone : 02 65 626244

Photos (unless otherwise noted) by Daintry Gerrand, Prepared by NSW Dept of Primary Industries

DAIRY RESEARCH FOUNDATION SYMPOSIUM

**You are invited to attend the 2008 Dairy
Research Foundation Symposium.**

**6-7 November 2008
Camden Civic Centre**

Farmers from all over Australia flock to the symposium each year. It has developed a reputation for providing a relevant and exciting forum for dairy farmers to find out about the latest research and how it could be applied on their own farm and hear from farmers on different ways they've achieved success.

There are a variety of topics including:

- * *How to keep good staff*
- * *Succession planning*
- * *Using overseas workers*
- * *Equity partnerships*
- * *Automation options to reduce labour needs eg. Robotic milking*

Speakers include both farmers and industry experts.

Symposium participants will tour **FutureDairy** research trials being conducted at Camden. These include the Automatic Milking Farm, which is currently milking over 160 cows with 2 robot units!; and the Complement6ary Forage System at Corstorphine (USYD dairy farm), which aims to produce over 30,000 L/ha (2,200 kg MS/ha) from home-grown feed.

To register

Contact Sherry Catt on 02 9351 1631 or email sherryc@camden.usyd.edu.au.

Further information

Contact Dr Pietro Celi (pietroc@camden.usyd.edu.au) or Dr Yani Garcia (sgarcia@usyd.edu.au)

COMING EVENTS 2008

7/8/9 October	The People in Dairy Advisor Workshops Toowoomba 7 th , Brisbane 8 th , Casino 9 th October 2008 Contact – Michael Ison 02- 4939 8814 or 0409 983 667
8 October	Grains2Milk workshop at Kyogle Golf Club 9.30am to 2.30pm
8 October	Grains2Milk workshop at Dorrigo Club 7.00pm to 9.30pm
9 October	Grains2Milk workshop at Macksville Returns Services Club 9.30am to 2.30pm
14 October	Managing Pastures for Profit workshop Casino Services Club 10.00am to 2.30pm
16 October	Managing Pastures for Profit workshop Casino Services Club 10.00am to 2.30pm
22 October	Managing Pastures for Profit farm walk at Tamworth 10.00am start
22 October	Cows Create Careers Final Presentation Day, Moss Vale Contact 03 5659 4219
23 October	Managing Pastures for Profit farm walk at Dubbo 10.00am start
23 October	Cows Create Careers Final Presentation Day, Bega – Contact 03 5659 4219
24 October	Managing Pastures for Profit farm walk at Scone 10.00am start
26-29 October	DIDCO Members Council Forum Taree, Contact Kate MacGilvray 6373 1435 or 0409 810954
29 October	Subtropical Dairy Annual General Meeting
6-7 November	Dairy research Foundation, Contact Sherry Catt on 02 9351 1631 or email sherryc@camden.usyd.edu.au .
13 November	Managing Pastures for Profit farm walk at Manilla 10.00am start
8 December	Mid North Dairy and Pasture Council meeting at Urunga 10.30am start

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (September 2007). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.