NSW DPI
A DAIRYFARMERS' NEWSLETTER FROM NSW DPI

dairynews

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EDITORIAL

Tony Dowman
Technical Specialist, Kempsey

Climate change: is it an inconvenient truth, the great swindle, or a politically engineered state of fear. Everybody has an opinion on the subject, including me. The fact is climate change and global warming are misleading descriptions, as the earth's climate has been changing since the planet was created, which includes periods of warming followed by cooling or ice age periods. The real issues are the rate of change, what is causing it and can it be controlled.

As the climate changes, some areas of the earth will get warmer, some cooler, some wetter, and some dryer. The animal and plant population either adapts, or becomes extinct. As the rate of change increases, the level of extinction increases. Previous periods of rapid climate change caused by excessive volcano activity or meteor strikes has been devastating for many species. Just ask the dinosaurs.

Species which have a very short generation interval allowing them to adapt to the changes, or are mobile and can relocate to areas of more favourable climatic conditions, will be the survivors. Species such as trees may have a real problem as the rate of climate change increases and alters the world's weather patterns.

The main cause appears to be increased carbon dioxide levels in the atmosphere, and the levels will continue to increase while ever fossil fuels are our main source of energy. The $64 question is: when will it all happen, and can it be reversed? There are plenty of opinions on the timeframe from 40 years to never.

The effects on agriculture will be significant and offer both challenges and great opportunities for farmers to feed the world's population. The effects will largely depend on what areas are affected and how important they are agriculturally. There are plenty of models around trying to predict what the weather changes will be in different parts of the world.

Fortunately, we already have a wide range of pasture and horticultural species from alpine to tropical tolerant; and livestock can survive a wide climatic variation as long as there is food to eat. The shift in rainfall patterns will ultimately determine where agriculture will be located both in Australia and around the world.

NSW DEPARTMENT OF PRIMARY INDUSTRIES
DAIRY AUSTRALIA
Dairypathways

Strategic responses to climate change

Michael Cashen

Climate Risk Management, Tocal

NSW DPIs Climatology in Agriculture Project is investigating the value of using climatic indices to define the impacts of changes to our climate on agricultural systems and the potential for such analysis to guide strategic response to future climate change.

The DPI Climatology in Agriculture group have been using climatic indices analysis to investigate changes to historic trends across NSW and the impact on agricultural production systems. The results have been presented at nine Regional Community Forums, looking at the Impacts of Climate Change on Agriculture held at Muswellbrook, Narrabri, Tamworth, Buronga, Dubbo, Bega, Nowra, Goulburn and Broken Hill during 2006 -2007.

There are a large range of indices used during the analysis, relevant to both plant and animal production systems such as; Plant water use (cumulative ETO), critical temp limits for C3 (temperate) and C4 (tropical) plants, Cold and Heat shock, cumulative heat sum during growing season (Growing Degree Days GDD/Heat Degree Days HDD), heat stress in livestock (Temperature Humidity Index THI) and rainfall changes.

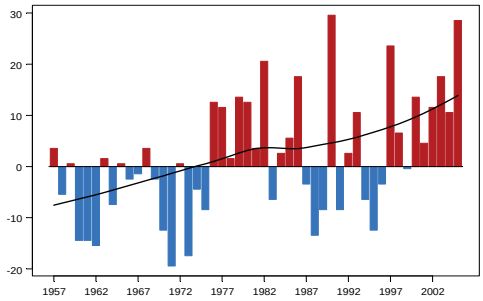
The analysis of historic weather station data for these 9 sites reveals a distinct warming trend across the state and changes to seasonal rainfall distribution. To illustrate the state trends, an historic analysis of observed station data for two temperature driven climate indices relevant to the livestock (THI) and horticulture sectors (HDD) are presented below and the production implications and adaptation options briefly discussed.

Typical of the results presented was the analysis compiled on the number of days during Summer when the animal heat stress index THI at Jerry's Plains (1st December to 28th February), exceeds the threshold of 78.

Site: Jerry's Plains Post Office

Data: BoM Silo project, temps for 1957-2006

Relative to the 1961-1990 average (40.4 days)



Once the threshold of 78 (dairy cattle) was crossed production began to suffer due to; increased animal sweating and panting, reduced carbonate balance of the blood, increased acidification of tissues and rumen, reduced digestion rate, intake and production, hormones and enzymes affected, reduced fertility/ growth and production, increased metabolic disorders, less resistance to infection and at the extreme, increased mortalities

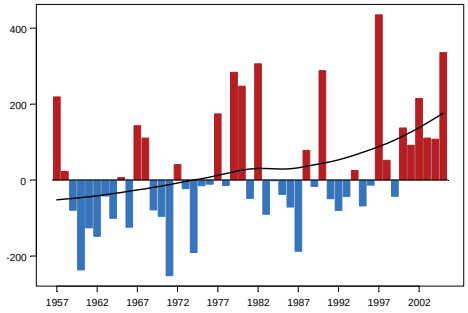
There are a number of strategies which farmers could use to minimise the impact of increased temperatures on their enterprise and included using breeds of livestock with more effective thermoregulatory control, selection of animals with lighter coat colours, provision of additional stock watering points and provision of shade and cooling systems .

The other climatic index focused upon was total Heat Degree Days from September to April (growing season), which has significant implications to the state's grape industry. Typical of the historic analysis presented is that for Jerry's Plains (below).

Site: Jerry's Plains Post Office

Data: Data set from patch Point Silo data set, temps for 1957-2006

Relative to the 1961-1990 average (2404 degree days):



Implications for such increased heat accumulation during the grape growing season include; earlier bud initiation , earlier fruit maturity (increase in sugars decrease in acids), decrease fruit size and yield, fruit quality issues (eg. vine decline), potential reduced fruit set and longer growing season/ increase in water use

There are a number of strategies which farmers could use to minimise the impact of this increase on their enterprise which included; changes of varietal selection in new plantings (Spanish and Italian) changes to row orientation to improve shading in new plantings, use of additional foliage wires to assist with canopy management in existing plantings, improved/increased nutritional program to ensure foliage coverage and improved irrigation efficiency and scheduling

For those wishing to find out more about the latest on the climate change projections on NSW and or climate variability, NSW DPI has a one day accredited course titled 'The farmers' guide to managing climate risk. For those interested in registering or finding out more please contact Michael Cashen on 02 49398953 or email michael.cashen@dpi.nsw.gov.au

Target dry matter for silage

Regan Johnson

Dairy Livestock Officer, Deniliquin

The Dry Matter (DM) content of the parent forage at ensiling can affect the quantity of effluent lost from the silage during storage, the growth of bacteria in the silage and the ease of compaction which in turn, affects the exclusion of air from the silo or bale.

Good fermentation depends on the forage being harvested in a target DM range. The target DM content will vary with factors such as crop type, growth stage at harvest, and the type of equipment and storage method used.

The DM content for baled silage is higher than that recommended for silage stored in pits and bunkers. The recommended DM content for baled silage ranges from 35 – 50 % depending on the parent crop, for pit or bunker silage the recommended DM content is between 30-40 %.

If forages become too dry, very fine chopping and using balers that can compact the material well may allow an adequate preservation of the silage.

The best time to start harvesting silage is when the dry matter content is slightly lower than the recommended dry matter content. This will ensure that if there are any delays, such as contractor problems or weather conditions deteriorate, the silage has a better chance of reaching the desired DM content.

How to determine the DM content of Forages

There are two commonly used methods, the hand squeeze method and the microwave method. The hand squeeze method is quick and easy. Firstly take a representative sample of the parent forage, cut the sample into one to two cm lengths, tightly squeeze a handful into a ball for about 30 seconds, and quickly open hand.

Refer to the table below to determine an approximate DM content.

DM Content	Condition of the sample
Below 25%	Free moisture runs through fingers as material is being squeezed, when pressure is released, the ball of chopped forage holds its shape.
25-30%	Ball still holds its shape. No free moisture expressed. Hand moist.
30-40%	Ball falls apart slowly. No free moisture. Little or no moisture on hand.
Above 40%	Ball springs apart quickly

Source: Top Fodder Manual

This method may take some practice to get you calibrated to different DM contents. It maybe useful to use the microwave oven method first to ensure that you are able to identify different DM contents.

Microwave oven method

Firstly take a representative sample of the forage, cut into three to four cm lengths, using some digital scales tare a container suitable for the microwave, place a heaped forage sample onto the tared container (about 150 grams). Record this weight. Then place the sample in the microwave with a glass of water (you must place a glass of water in the microwave with the sample or you may cause the sample to burn). Dry the sample on full power for intervals of 3-5 mins until the sample begins to feel dry, then reduce the time to 30 seconds as the sample becomes drier. As the sample becomes drier weigh the sample and record these weights, when the weight of the sample no longer changes, then this is the final dry weight.

To then calculate the DM content:

$$DM\% = \frac{\text{Final Dry weight (g)}}{\text{Initial wet weight (g)}} \times 100$$

It is important that the DM content of the parent silage is at the target, this will allow for good compaction and therefore good fermentation.

For more information on making silage and Top Fodder contact your local Dairy Livestock Officer.

Dairy Research Foundation Symposium on again

The DRF Symposium will be held in Camden, NSW on the 8th and 9th November 2007.

The Symposium' target audience is dairy farmers and Agribusiness with 150 to 180 people attending each year. To encourage farmers to attend we have a program which addresses topical issues with fees to producers very low at $150 (+ accommodation).

The topics this year are:

- Planning to minimise the effect of uncertainty – markets, inputs, weather
- FutureDairy – great progress being made with automatic milking and achieving over 40t DM/ha from forages/year
- Entry to the industry – Leasing/share farming
- Subterranean irrigation – fact or myth?

The speakers are a good mix of farmer case studies and professionals.

A group of young farmers will be sponsored by Agribusiness to attend and young scientists will present their research.

The dinner is always well attended, at which we present the NSW Food Authority Dairy Science Award.

Our guest speaker this year will be well known writer and sports guru Peter FitzSimons.

For further details please contact :

Sherry Catt – Ph: 02 9351 1631
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Bill Fulkerson – Ph: 02 9351 1635
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Funny feeds galore – *but what do we do with them?*

Anthea Young

Dairy Officer, Scone

In the current climate of fibre and other feed shortages, there are a number of by-products being offered for sale that you may not have tried before. Most commonly, the feeds will be by-products of grain (such as malting or ethanol production), potatoes or other vegetables, or citrus fruits.

SUPPLY:

Often the by-products will be offered at great prices when compared on a cents per megajoule of energy basis, in large quantities for a short period of time. The by-products are generally quite wet feeds, and can be quite unstable, so simply dumping them in a pile on concrete and expecting them to last for 6 weeks while you feed them out is not an option.

RESIDUE RISKS:

Residue risks may be increased in by-products because some chemicals are concentrated in the waste fraction. Materials such as grape marc, pomace, fruit and vegetable skins, outer leaves of leafy vegetables, may have higher residue levels than the crop from which they were harvested. Before buying the waste material, samples should be tested for pesticide residues by an accredited laboratory. A signed Vendor Declaration Form may be available from the vendor.

CONSIDERATIONS:

Make sure you compare apples with apples – calculate price on a dry matter basis, and look at the energy or protein value to make a comparison.

Beware that high moisture products will be very expensive to transport. This should be considered if you are a long way from the plant.

Check the TopFodder website or contact your Livestock Officer for detailed information about particular by-products

See Table 1 for some typical nutritional values

STORAGE:

For short term storage, small amounts may look okay when stored in a heap on the ground. Be aware, though, that quality will decrease as soon as the product begins to heat, or a hard or discoloured crust forms on the outside.

SILAGE:

Most by-products can be ensiled very successfully. Making silage ferments a feed without oxygen present and brings the feed to a stable pH to prevent rotting and loss of quality.

The Top Fodder program gives the following tips for successfully ensiling by- products:

Create an anaerobic environment (that is, without oxygen) as soon as possible – this is done by packing down the stack and rolling as firmly as possible.

Promote a lactic acid fermentation – this will produce the most stable silage, and the stack will be less likely to react to any air entering when feeding out or if the plastic covering is damaged. Lactic acid inoculants may be added when making the stack.

Seal with silage wrap: any crust forming on the surface of an unsealed stack is wasted feed – it is of lesser quality and may contain moulds (even if you can't see them) which are unpalatable and may be dangerous.

HIGH ENERGY BY-PRODUCTS:

Most fruit and vegetable wastes will be high in WSC's (sugars) and so will ferment easily and make good quality silage. However, it also means that the silage tends to be unstable after opening; consider making a number of smaller stacks if only feeding a low quantity each day.

BREWERS GRAINS:

High protein and moderately high in energy (can be variable). The very high moisture content means that the product will spoil easily if not ensiled and sealed. Stacks of more than 2.5m high are likely to crumble and let air in when feeding out.

Crops that have been successfully ensiled include:

- Brewers grains
- Citrus pulp
- Grape marc
- Apple pomace
- Tomato pulp
- Bananas
- Corn trash
- Sugar cane tops

Table 1: Nutritional value of a range of by-products and by-product silages (mean values, with range in brackets indicating variability of values) from TopFodder (samples sourced from FEEDTEST, 2000)

By-product	Dry matter content (DM%)	Crude protein (%DM)	Energy (MJME/ kgDM)
Citrus pulp	15.2 (9.4-23.8)	8.7 (6.0-12.9)	12.5 (9.9-14.1)
Citrus pulp silage	15.6 (15.1-16.5)	9.5 (8.9-9.8)	11.9 (10.5-13.1)
Brewers grains	25.4 (13.9-33.0)	21.7 (16.9-25.2)	10.7 (9.7-11.9)
Brewers grains silage	39.7 (27.9-33.0)	22.0 (20.7-23.3)	10.6 (6.9-11.1)
Grape marc	35.8 (28.1-46.4)	17.9 (11.7-23.3)	8.1 (4.3-11.1)
Apple pomace	24.5 (21.0-27.6)	7.1 (6.0-8.0)	9.6 (8.4-11.0)
Tomato pulp	27.0(16.6-30.2)	20.5 (17.7-22.4)	7.7 (4.8-9.5)
Potato mash	23.1 (10.9-62.3)	11.2 (6.7-25.8)	13.3 (10.8-14.8)
Corn trash	19.8	7	9.3

Source: TopFodder (samples sourced from FEEDTEST, 2000)

See the Top Fodder materials for more information: www.topfodder.com.au (search for by-products); or contact your local Livestock Officer.

Protein Plu$ Rules of Thumb

- To maintain good milk protein levels, keep diet as consistent as possible, making any changes in small steps. Farms that regularly check and formulate milking cow rations, and have less variation in diet quality and composition, tend to have less seasonal variation in milk protein %.
- Urine scalding of pastures, or a noticeable ammonia smell in the dairy, indicates an excess of degradable protein (RDP) in the diet. Balancing this excess RDP with higher energy and lower protein feeds (such as low protein grains) can show an immediate response of 0.1% in milk protein.

High grain diets, what are the issues?

Regan Johnson

Dairy Livestock Officer, Deniliquin

Often during time of little pasture there is no choice but to feed your stock high levels of grain, the implications of feeding a large amount of grain without enough roughage such as hay and silage can cause metabolic health issues within your herd .

Grain poisoning (acidosis) occurs when large amounts of lactic acid are produced by the fermentation of the grain in the rumen, which is then immediately absorbed into the blood stream.

Signs of possible grain poisoning include a drop to 3.4% butterfat or less, as a herd average, sore feet (laminitis) and scouring.

To prevent grain poisoning start feeding small amounts of grain and gradually increase amounts each day. If changing from one type of grain to another mix the two grains together for a week or so to avoid a sudden change.

Tips for feeding grain

- When feeding more than 8kg/cow/day of grain, it should only be coarsely ground or hammered. Avoid fine grinding of any grain.
- Fibre (hay and silage) is very important in maintaining rumen function

- Heifers should not be fed more than 8kg/day due to their lower intakes. Because grain is greater proportion of their diet it will affect them at lower feeding levels.
- Maize and sorghum are the safest grains to feed at high levels. Wheat is the least safe.
- Feed in troughs or along fence lines to avoid camping and trampling losses.
- Keep feeding trough clean, and remove any leftovers.

Buffers should be included in high grain diets to reduce the incidence or severity of acidosis. The recommended rate is 150gm/day/cow of sodium bicarbonate. It is also recommended that a rumen modifier be used at the recommended rates. (For example Rumensin ®).

If you are not accustomed to feeding high levels of grain to your dairy cows then it is important that you are aware of some of the issues that accompany such a feeding strategy.

Thirst for milk

Michael Ison

Livestock Officer - Human Resource Management

Worldwide demand for milk and dairy products is creating a shortage and this is not looking like changing anytime soon.

A recent article by Wayne Arnold in the Sydney Morning Herald highlighted the situation. *" The biggest force driving up milk prices is the same one that has driven up prices for conventional commodities like iron ore and copper: a roaring global economy"*

In emerging economies throughout the world, the poor are moving into the middle class and as milk constitutes a large part of the protein requirements of the affluent person's diet, milk is the mark of new money.

It is estimated that each year the equivalent of Australia's milk production will be needed to meet the growing demand. Australia will be one nation that can cash in on this demand because a large proportion of our production is exported.

Figures from Dairy Australia show that world stocks of dairy produce are at an all time low and our national production has fallen by 9.1% YTD against 2006-07. This coupled with rising demand has led to the situation where farm gate milk prices are increasing across all regions.

For the first time since deregulation in NSW, farmers are seeing realistic prices and the prospect that longer term demand will keep milk prices strong into the future is allowing for more confidence in planning.

To capitalise on this situation why not review your business with MilkBiz, a comprehensive program that helps assess your financial situation and to plan ahead. Contact your local dairy officer for the latest information on MilkBiz.

Protein in pasture during spring

Dr John Roche

Main Message: Fresh spring pasture is an excellent source of high quality protein. The crude protein concentration of spring pasture is usually around 25%, although in some cases, particularly in reseeded pastures, crude protein may be as high as 30%. This is the exception rather than the rule.

In general, supplement cows with energy in a feed deficit situation. Supplementing cows with energy to 'mop up' excess protein is unlikely to be economic.

Types of protein: Protein is generally measured as crude protein. Crude protein is a measure of the amount of nitrogen in a feed and a multiplication factor is applied to calculate the amount of crude protein (x 6.25). However, all nitrogen does not exist as protein and in lush spring pasture between 30 and 40% of crude protein can be as non-protein nitrogen (NPN).

The rumen microorganisms combine this non-protein nitrogen and ammonia from the protein with the sugars and fermentable fibre in the plant to grow. However, pasture does not have enough rapidly usable sugars for the rumen microorganisms to use all the non-protein nitrogen. The surplus nitrogen is converted to urea in the liver and excreted.

WHAT HAPPENS IF I SUPPLEMENT THE COW WITH CARBOHYDRATES (SUGARS)?

If cows are offered supplementary energy, 1 of 2 things will happen.

1. If substitution is low (i.e. energy intake increases), the cow will produce more microbial protein and will probably produce more milk. Where pasture is well utilised, this response is approximately 60 g MS/kg energy supplement in spring.
2. If substitution is high (i.e. energy intake does not increase greatly), the cow will not produce any more microbial protein and the increase in milksolids production will be small.

IS IT POSSIBLE TO SUPPLEMENT COWS TO 'MOP UP' EXCESS PROTEIN IN PASTURE?

In general it is very difficult to synchronise the supplementation of energy with the release of protein from pasture. If you feed the energy at exactly the same time as the pasture, there is a short period during which the rumen microorganisms make better use of the protein.

However, this only happens for a very short period of time and has not been shown to increase milk production. Additionally, this is not what occurs in practice. In practice cows are supplemented at the shed before going back to pasture.

The sugars in feeds like molasses are used by the rumen microorganisms within 10 to 15 minutes and hence the energy is used before the cows begin eating pasture. The energy in more slowly degraded energy supplements (eg. cereal grains or maize silage) is not released quickly enough.

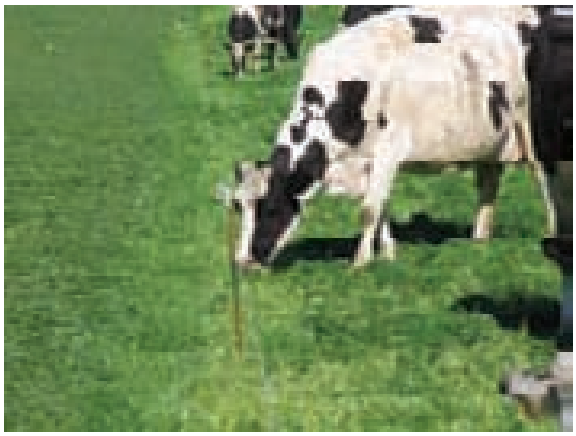
WHAT HAPPENS TO THE REST OF THE CRUDE PROTEIN?

The remainder of the crude protein (true protein) is used in either 1 of 2 ways. It is either used by the rumen microorganisms to grow (rumen degradable protein) or is allowed to pass to the small intestine undigested (bypass protein). The true protein that is degraded by the rumen microorganisms is degraded at approximately 10-20% per hour.

The energy in high quality pasture is released at a very similar rate and hence supplementing with an energy supplement to utilise more of the protein in pasture will not improve milk production.

IS THE BYPASS PROTEIN IN PASTURE GOOD QUALITY?

The structure of pasture protein is very similar to the structure of microbial protein and supplementing high yielding cows on pasture with protein will not increase milk production.



Recruiting people for your farm

Michael Ison

Dairy Officer – Human Resources, Tocal

Does the following statement sound familiar…

"It is so difficult to find people today with the skills and knowledge I need to keep this farm going!"

The "skills shortage" is the most commonly heard catch cry of all industries today. This is a phenomenon that is occurring world wide in all developed economies. There are two aspects of this situation for the dairy industry that are important to consider;

1. We are in a strongly competitive labour market.
2. Rarely will new employees have the skills we require of them.

In all areas where the dairy industry operates there will be other industries that will compete. In the Hunter Valley of NSW, for example, mining, tourism and the wine industry are strong competitors for people.

Many dairy farmers have concluded that because of poor profitability in dairying, competing with other industries on pay rates will be next to impossible.

I would suggest that for many people, money is only part of the reason they choose one job over another. There are people out there that would love to work on a farm, so let's examine what we can do on the farm to attract them.

Accommodation

Providing a comfortable home can mean a lot to someone who has to move from another location. Many people would like to live on the farm; it makes sense and reduces the travel to and from work.

What if you don't have a home available? Many local councils will look favourably to approving the construction of worker cottages and if this is possible, there are many prefabricated homes that are reasonably priced, easily erected and would add significantly to the assets of the farm business.

If these ideas aren't workable than providing rental assistance may also help attract new people. If you are able to offer accommodation, ensure you have a legal rental agreement in place.

Conditions at work

While the romantic notions of farm work as the rugged outdoor life, working with animals and machinery all great fun and adventure, we all know that many jobs on the farm are difficult, dirty, and dusty and can be dangerous.

These jobs need to get done and someone has to do them, right! How can we make these jobs bearable? Providing a roster to share the jobs around, ensure that protective clothing or equipment is in good working order and easy to use. Provide instruction, training and assistance as needed.

If the job is a dirty one, are there facilities to clean up afterwards. Many jobsites offer lunch rooms with shower, washing machines and locker facilities for workers to clean up after work. This can make a big difference to worker comfort and enjoyment.

Leave and flexible work hours

For many people, being able to get the job done and meet other responsibilities they have outside of work is critical. If you can provide some flexibility in working hours the pay-off will be in higher productivity and a more attractive place to work.

Longer term career and ownership

Is there a clear pathway for people to progress in dairying? Can you provide a way of helping your people up by offering recognition, increased responsibility and ownership. Having a performance based approach to work and providing a method of assessing this performance can help give people the recognition they need. If performance is then rewarded with more responsibility or a step up in pay a positive relationship will develop.

Longer term ownership of aspects of the dairy business recognised through a sharefarming arrangement can also be considered as a way of encouraging people to be involved in your business.

Training opportunities

When a new worker comes onto your farm an effective induction program will ensure the smooth transition into to farm routine and the way things are done around here. This is only the beginning and new skills will be developed only with continued support and training.

This can be provided both on the farm and off. There are a number of short courses, traineeships,

field days and skills recognition programs that can support on-the-job learning. As well, some training is compulsory such as chemical user certification.

When providing these benefits to employees and others remember that there will be Fringe Benefits Tax implications that should be discussed with your accountant.

In summary, think about what attracted you to farming. Those characteristics are also important to future workers and need to be highlighted.

More information about The People in Dairy program and future programs is available at www.thepeopleindairy.org.au or by contacting Michael Ison at Tocal College on 4939 8814.

Store silage safely

Wrapped silage bales must be stored safely so they are good when needed. Silage bales will float in flood, burn in fire and will be chewed by animals. Ensure they are stored on high level land and keep rubbish clear to reduce risk of damage by fire or vermin.

Silage bales will float in a flood and burn in a fire!

Reduce wastage when feeding hay or silage

Neil Griffiths

District Agronomist, Tocal

Baled hay or silage may be easy to feed but don't under estimate wastage.

During drought, after flood or fire or when production feeding wastage and losses will add to costs and can contribute to pollution.

Feedout areas should be convenient and safe from pollution risks if rain occurs. A hard base, controlled access and offering high quality silage or hay will all reduce wastage.

A ring feeder increased production and reduced wastage when feeding steers

	Hay on ground	Hay in ring feeder
Kg/head hay fed	350	295
Liveweight gain (kg/head)	38.5	57.4
Hay cost $/head	35.00	29.50
Cost ¢/kg liveweight gain	91	51

Steers using ring feeder gained more weight and used less hay than when feed directly on ground.

See Topfodder Successful Silage or talk to your local NSW Department of Primary Industries advisor for further information.

PEOPLE, PLANNING, PROFIT
Subtropical Dairy Annual Forum

Subtropical Dairy, a Dairy Australia Regional Development Program each year hosts its Forum in a different region across Qld and Northern NSW.

15 – 16 October 2007

Casino RSM Club, Casino

The Forum is renowned for showcasing farmer driven research, interactive farm visits and quality keynote speakers. Keynote speakers for this forum include:

* Barb Bishop *(Time Management and Communication)*
* Steve Spencer *(Industry Situation and Outlook)*
* David Barber *(Animal Nutrition)*
* Mark Callow *(Pasture Management)*
* Katrina Sinclair *(Climate Change & Climate Variability)*
* Michael Ison *(Sharefarming options)*

NSW Farmer of the Year Finalist, Stuart Larsson will also be speaking along with Wayne Clarke on his experience with FutureDairy work on his farm. For further information check out conference details on dairyinfo.biz.

The forum is FREE for dairyfarmers and $55 per day for industry representatives.

RSVP: 10 October 2007

Contact Janine Teese, Subtropical Dairy Program Manager for a registration form or download the registration from www.dairyinfo.biz. Phone 0438 715 625 or email Janine@dairyinfo.biz

COMING EVENTS

September 18	Farming for Climate Change (3 day course), Tenterfield Cost: $90 Contact: Greg Reid 6626 1202
September 25	Calf Rearing Day, Bega, Contact: Dick Buesnel on 6492 1733
September 26	Calf Rearing Day, Berry, Contact: Vicki Smart on 4464 1251
October 8	New Zealand Dairy Tour, Contact: Anthea Young 6545 1800
October 15-16	Subtropical Dairy Annual Forum Casino RSM Club, Casino – Contact: Janine Tease 07) 5462 2281
	Calf Rearing Days in Taree, Singleton & North Coast to be held October/ November, Contact: Ray Johnston on 6552 7299.

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