# dairynews

**ISSUE 4, MARCH 2008** 

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#### **EDITORIAL**



#### **Tony Dowman**

Technical Specialist, West Kempsey

It is easy to think that the drought is over for the NSW dairy industry as I look out the window of my office on the north coast at the seemingly endless wet days. The Richmond River has had major flooding, while the other major river systems including the Tweed, Clarence, Bellinger, Macleay and Manning Rivers have been discharging countless mega litres a day into the ocean. Major flooding has only been one good storm away as all the north coast catchments are saturated.

Pasture growth has been out of control producing low dry matter poor quality feed, while those with maize and other silage crops are wondering if the paddocks will dry out in time for harvesting. The nature of farm enquiries has also changed reflecting the wet summer. Lameness and mastitis as a result of the wet, muddy conditions are now the main concerns of coastal farmers. The position is similar for the Hunter Valley and south coast.

But the drought is far from over for the central west and Riverina dairy farmers where 25% on the state's milk is produced. The dam levels in these regions where irrigation is essential for pasture and crop production are still at critically low levels. As at the 3<sup>rd</sup> March this year the two Lachlan Valley dams are at 10% and 13% capacity; the three Macquarie Valley dams 19%, 21% and 25% capacity; and the two Murray Valley dams are 14% and 16% capacity. The main dairy concerns in these areas are still centred on alternate feeding strategies, the financial consequences, and when will the irrigation water be available. If the dams do not replenish over winter, the irrigators will be going into another waterless summer.

We tend sometimes to forget how spread out the NSW industry is, and that not everyone is experiencing the same seasonal conditions.

#### BOVINE JOHNES DISEASE (BJD) RULES CHANGE FROM 31ST MARCH 2008

#### **Tony Dowman**

Technical Specialist, West Kempsey

As from the 31<sup>st</sup> March this year, it is a legal requirement for a completed Dairy BJD Assurance Score Declaration Form to accompany all cattle (dairy and beef) moving from a dairy holding, unless going to slaughter either directly or via a slaughter only sale. This includes cattle moving to agistment.

All dairy herds will have a base herd score between 0 and 10 depending on the degree of risk they pose in spreading the disease to purchasers of their cattle, and the infection status of their herd.





BJD herds at present in quarantine will be released, but their herd score will inform potential buyers of their cattle what the risk is in buying their animals. The vast majority of NSW herds will be either score 3, (dropping back to score 0 on the 1<sup>st</sup> July 2008) indicating that the herd is "non assessed", or score 7 indicating that the herd is not suspected of having BJD and the annual screening test on fifty adults is negative. So, what is the most appropriate score for you to have for your herd?

**Score 0 (after 1/7/08)** is adequate if you only ever consign all your cull cows and bobby calves to slaughter, do not intend to have a closing down sale in the foreseeable future, and have never seen animals in your herd with the typical symptoms of BJD.

**Score 7** is adequate if you dispose your cull cows and calves through the saleyards or privately, planning a dispersal sale in the future, or selling animals to beef producers.

**Scores 8, 9, & 10** are herds in the BJD Market Assurance Program and would interest stud breeders.

**Scores 1 to 6** are for known BJD infected herds and the different scores indicate the prevalence and control strategy.

A few other points to remember:

- you do not have to fill in the Declaration when consigning animals direct to slaughter.
- introducing cattle with lower scores than your base herd score will drop your base herd score down to their score.
- the beef industry's recommendation to their producers is to only buy dairy animals with a score of 7 or higher.
- beef herds do not have a score.
- · adults cannot infect adults.
- · calves cannot infect calves.
- only infected and bacteria shedding adults can infect animals under 12 months via contact with infected faeces.
- the 3 step calf rearing plan will help break the infection cycle from adult to calf.

For more information on the new BJD scheme contact your vet, Rural Lands Protection Board or DPI Livestock Officer.

### RATIONCHECK – REMOVE THE WONDERING

#### **Col Griffiths**

Livestock Officer (Dairy), Kyogle

As a dairyfarmer, how often have you scratched your head, wondering whether the ration your herd is receiving is balanced, why you're not getting the production you think you should, or maybe

whether or not you should be feeding all the minerals that the fellow up the road swears by. Wonder no more. Welcome *RationCheck*, an easy to use computer program which can analyse the current ration for your milkers (or dries, or replacements) and identify which, if any, of the major feed components (including minerals) are not balanced to the herd's requirements, given its current level and stage of production, stage of pregnancy or stage of growth.

Based on NRC Standards, *RationCheck* has been developed by NSW DPI dairy feedbase team with technical input by Dr. Brad Granzin, former dairy research officer with NSW DPI, now Milk Supply Manager with Norco Cooperative, Lismore.

RationCheck is not a ration formulation program but one designed to allow you to check to see what nutrient(s)/mineral(s) may not be balanced in the ration fed as evidenced by the production in the vat

Given cow size, level of production and milk composition, type of terrain and distance walked and body condition score change, *RationCheck* compares the herd's nutrient requirements, with that likely to be supplied in the ration.

RationCheck is fitted with some 150 feeds in a base feed library and has a custom feed library with the capability of creating Total Mixed Rations (TMRs), entering new feeds or editing feeds in the base library with known feed analyses.

As RationCheck looks at what has happened, and not predicting what should happen, it is able to estimate quite accurately pasture/crop intake – most ration formulation programs require "x" amount of dry matter of pasture/crop to be entered before cows enter the paddock, and who's to say you put the fence in the right spot to allow for that amount? One of the main reasons why what is predicted and what is achieved with formulation programs don't match up is the unknown quantity/ quality of pasture/crop being fed.

RationCheck results compare nutrient intake required (calculated from your data entered) against nutrient intake supplied, together with the nutrient concentration in the diet, as for some nutrients it is the level of concentration and not the total amount in the diet that is the critical factor. For example, fat should be below 5%, starches between 25-30% and sugars 3-6%. Nutrients that meet requirements and fall within the desired concentration are given a green tick, but nutrients either failing to meet requirements or outside the critical desired concentration are highlighted with a red cross with the comment that it should be checked.

Like all computer programs it is important that the data be entered accurately and correctly before making alterations to the ration based on RationCheck results & it is strongly recommended that you discuss the results with your qualified nutritionist or local livestock officer.

No longer will you need to wonder why, I know the guys who wrote the program!!

Food Set History									
Notriert Intake	Intele Required		Intale Units	Diet Conc Reg	Diet Conc Supplied	Disk	% of Requirements Mat	Recult	Connect
Metabolisable (norg/ (ME)	147.6	167 6	40	6.0	10-2	HUTE	,00	HE SH	QF.
Dry matter (DH)(max)	15.9	15.3	76		Y	76	61		Check.
Crude protein (CP)	2250.1	2076.1	g	11.0	10.0	16	129	2	OK.
Effective rumen degradable protein (eRCP)	1600.7	2038.8	g	8.5	13.3	%	127	100	OK
Digestible undegraded protein (UDP)	560.2	400.0	9	3.0	2.6	%	71		Check
Neutral detergent fibre (NDF)(max)	7.7	6.3	kg	10.7	41.2	16	62		OK
Effective neutral detergent fibre (eROF)(min)	4.3	5.3	kg	73.0	34.8	16	123	(8)	OK
Fax (max)	915.1	539.0	g	5.0	3.5	76	57		OK
Nonstructural carbohydrates (NSC)(max)	7.6	4.8	kg	40,0	31.3	16	63		Check
Starch			-	25-30	17.4	%	1		Check:
Sugers				30	9.0	76		- 13	Check
Celcium (Ce)	92.0	43.1	g	0.5	0.3	₩.	47	63	Check
Phosphorus (P)	50.7	52.7	0	0.5	0.5	%	90	(3)	Check
Sodium (Na)	34.0	99.1	9	0.2	0.6	16	266	W	<b>OKbut High</b>
Sulphur (S)	37.8	33.9	9	0.2	0.2	%	90	-	Check
Magnesium (Mg)	57.8	35.3	9	0.2	5.0	16	96	*	Check:
Potassum (K)	170.1	307.6	0	0.9	2.0	14.	181		OK but High
Chloride (Cf)	17.3	112.9	0	0,3	0.9	No	302	80	OK but High
Calcium:Phosphorus (Ca:P)	1-7	0.0			1,3645		30300	2	Check
K:(Ca+Mg) (max)	2.0	3,9							Check.
Iron (Fe)	945.1	1749.3	mg	\$0.0	119.1	marke	165	V	OK but High
Copper (Cu)	199.0	65.8	mg	10.0	4.9	ng/kg	35		Check
Manganese (Mn)	756.0	386.4	mq	40.0	25.2	mg/kg	51	0	Check
Zinc (Zh)	756.0	211.5	mg	+0.0	15.0	ing/kg	32		Check:
Distary Cation Anion Difference (DCAD)	<120	35.0	meg			100		100	OK

#### **PLANNING FUTURE FEED NEEDS**

#### **Kerry Moore**

District Agronomist, Kyogle

The last few years of drier seasons with reduced security of irrigation water, along with the trend of increasing cow numbers and more hungry mouths to feed, has hammered home the need for good feed planning and putting away adequate reserves of conserved feed.

A Feedplan computer program developed by NSW DPI is available to assist dairy farmers in their future strategic feed planning. It calculates the feed demand of the herd and compares this with how much feed the farm's pastures can produce under a wide range of conditions. Feedplan is a fairly broad-brush approach to predicting how much you can grow throughout the year. To fill the pasture feed gaps you can then look at various options including:

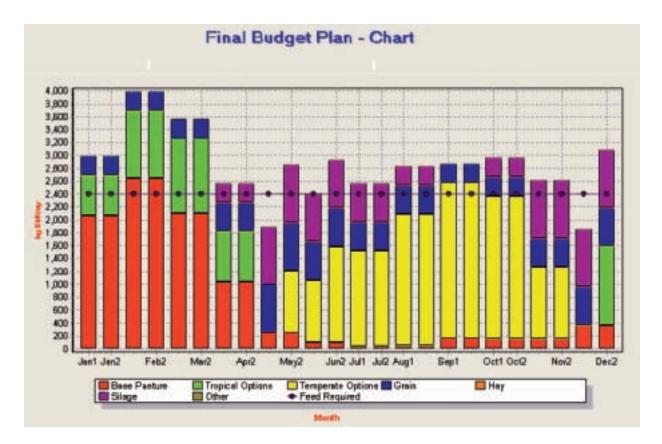
top-dressing grasses with nitrogen to grow extra feed

- conserving genuine pasture surpluses to feed back in times of deficit
- · changes in pasture or crop areas
- buying hay or growing extra crops to make silage or hay
- feeding extra concentrates

To give an example of what the program can do, the graph below shows a scenario of 150 milkers (on 16 kg dry matter daily intake) on a 50 hectare milking area on a North Coast farm made up of:

- 13 ha of kikuyu kept all year, and top-dressed with nitrogen in late summer/autumn,
- 13 ha of kikuyu over-sown with 13 ha irrigated annual ryegrass in early May
- 24 ha of irrigated annual ryegrass rotated with summer crops consisting of 12 ha of millet, and 12 ha of maize for silage (at say 40 tonne per hectare, producing 480 tonne of fresh maize silage).

The 2400 kg dry matter line on the graph is the daily feed requirement for the 150 milkers. Almost all the pasture feed gaps in this scenario are filled in by using around 178 tonne of purchased grain and 450 tonne of home made silage.



The early May feed gap still showing after the grain and silage input can be made up by carrying over some of the surplus kikuyu produced in the previous weeks.

Likewise, the early December pasture gap left after the ryegrass fizzles and before the kikuyu and millet gets going can be filled by carrying over the small surplus of feed in October and November.

The example in this graph is for pasture growth on a NSW North Coast farm on good soil and under average seasonal conditions. The program also has pasture and forage crop production figures for other dairying areas in NSW and provision to modify growth rates according to above or below average conditions.

If you are interested in using the Feedplan please contact your NSW DPI District Dairy Livestock Officer or Agronomist.

#### FEED PADS, FEEDLOTS, FREESTALL BARNS, LOAFING AREAS AND SACRIFICE PADDOCKS

#### **Tony Dowman**

Technical Specialist, West Kempsey

Regardless of what you call these facilities, they all do the same thing – restrict the herd's access to grazing paddocks. The reasons for doing this include no paddock feed such as during a drought, protection of the pastures during wet periods,

increase pasture utilisation, feeding a total or partial mixed ration, high intensity farming, and the belief that this system is more profitable.

But these facilities and their use come at a cost, including capital outlay, maintenance and labour, which should be weighed up against their benefits. Feed pads in particular are becoming more popular as dairies intensify, relying more on supplementary feeds to routinely form the basis of the cow's diet.

Some of the specifications and requirements for these facilities are:

#### Approvals

Some local councils require a development application for the construction of a these facilities, others only if there is a roof included in the design, while other councils have no requirements. If a DA is required, detailed plans including set back distances, an effluent management plan and a statement of environmental effects may be required. Check with your local council before construction.

#### Size

The size required depends upon how long cows will be spending in these facilities.

Three square metres per cow if the herd is only in the facility to eat supplementary feed, then move off to paddocks. All the cows can eat at the same time. Nine square metres per cow if the herd is spending extended periods in the facility, but still have access to other loafing areas. If feeding is occurring in the facility, only half the herd generally eat at the same time.

Fifteen square metres per cow if the herd is continually locked into the facility except for milking. If feeding is occurring in the facility, only half the herd generally eat at the same time.

#### Surface

Non slip concrete is the most serviceable, easiest to clean, maintenance free, but the most expensive. Compacted gravel is cheaper and better suited for occasional use and lower rainfall areas. Dry scraping is then the only cleaning option. Loafing areas and sacrifice paddocks are not normally surfaced and require rehabilitation when they are no longer serviceable.



Slope

The slope depends upon the cleaning option. Flood wash prefers 1:40 slope to minimise the volumes of wash water required. The slope required for hydrant wash and dry scrape is not critical; a 1:80 minimum slope is adequate. Loafing areas and sacrifice paddocks require some slope to reduce bogging and extend their life.

#### Feed Troughs

Allow 750 mm length per cow if all the cows are required to eat at the same time. Allow 300mm per cow if the herd is spending extended periods in the facility and not all cows need to eat at once. The width depends upon whether the cows have access on one side or both sides. Allow 1200mm width if cows eat from both sides, 600mm if only eating from one side.

A rail or hot wire is required down the centre of the wide troughs to stop cows walking across the trough. A 5 metre wide feeding alley is another

option which allows the mixing wagon to deliver feed while the cows are in the facility. Troughs that can be re-located to a new area are an advantage to spread the nutrient loading and allow rehabilitation of sacrifice paddocks.

#### Effluent Management

Effluent management for all these facilities can be a major problem if poorly designed, particularly if there is no roof over the facility. All runoff and the nutrients must be captured and managed to prevent pollution.

If the effluent is directed into the existing dairy effluent system, it must have the capacity to handle the extra loading. Local council approval will require adequate documentation of the proposed effluent management system to ensure it complies with the legal requirements.

If you require more information on the design, use and effluent management of these facilities, contact your nearest NSW DPI office.

## REACTING TO THE ONSET OF WET CONDITIONS

#### Countdown Downunder

Simple changes to milking management and teat disinfection can make a real difference to the prevention of mastitis infections when the weather suddenly changes for the worse.

It is often not easy to avoid muddy paddocks and lanes after the sudden onset of a wet period, but if your preparation and laneway maintenance has been done, the risk will have been minimised.

When cows enter the dairy, remove excess mud and dirt prior to milking by washing and then drying teats with paper towels before cups-on. However one of the key opportunities for infection to occur is during the first few minutes after cups off, before the teat canal has fully closed and sealed. Because this is such a critical period, try to ensure that cows are not left milling around or lying down in areas of mud or excessive faecal contamination immediately after they leave the dairy. These areas will become even more critical after the onset of wet weather, with the potential for huge numbers of bacteria to contaminate the teat skin and teat canal opening.

Prepare for this by cleaning the area immediately outside the dairy exit, and try to ensure that cows can leave the area immediately without needing to spend time in a parking bay or holding yard.

The action of the teat disinfectant will also be critical to reduce the numbers of bacteria on the teat, and the action of the emollient in the mixture will be important to maintain teat skin condition.

So take a little extra care and make teat disinfection an absolute priority – try to get as close to 100% coverage as possible. Perhaps even consider extra emollient in the mix for a short period – consult your vet for advice in this regard.

These simple techniques can substantially reduce the risk – and at very little cost.



Minimise mud and faeces at the dairy exit

## KEEPING RECORDS FOR PEOPLE ON YOUR FARM



Does the following statement sound familiar...

"There are so many laws and rules about employing people, I don't know where to begin!"

It is true that we do live in a more complex environment for employing people today, particularly if you have never had employees before, it may all seem very daunting.



There are a broad range of employment records that need to be kept.

The three most important areas are:

- · employment records
- · safety records
- workers compensation records

When you have an employee on your farm you need to maintain records of salaries and wages. Issue a pay slip with each wages payment.

This payslip must include the employee's name, normal hours worked in that period, hours of overtime worked, rate of pay, and any deductions removed from the wage, such as taxation and superannuation.



You can download payslip templates and also read about the requirements for employing people in your business at:

www.industrialrelations.nsw.gov.au the official website of the Office of Industrial Relations in NSW or call on 131628.

Farm safety is important for all who work in dairying. Farms can be dangerous places to work and the statistics are alarming.

Between 1990 and 2000 99 people lost their lives in farm accidents in NSW.

In the same period there were 15,915 people admitted to hospital. (Source: "Injuries on farms in NSW – The Facts – 2005" Australian Centre for Agricultural Health and Safety).

Maintaining OHS records contributes to creating a safer farm to work on. So what records do you need to keep?

#### Types of OHS documentation

Farm diary/daybook: keep regular notes about farm hazards, risks and work done to improve farm safety.

Consultation: record when you have held discussions and meetings about farm safety issues.

Risk management records: identify hazards and assess risk, write this down.

Register of farm chemicals: must be kept with your chemical store.

Training of workers: keep copies of First Aid certificates and other training; this will provide evidence of training in farm safety.

Farm injury register: keep a record of injuries.

The websites for downloading information on dairy safety are:

www.farmsafe.org.au or www.dairysafety.org.au If there is an accident at work, the employer's responsibility is to ensure that first aid and suitable treatment is given or arranged, a Register of Injuries is completed and the Workers Compensation scheme is notified within two days.

If there is a serious injury that keeps a person from working a suitable return to work program will be need to be organised.

Maintaining good Workers Compensation records are important when an accident occurs as is having the correct insurance coverage, paying particular attention to the classification of people working on the farm.

If you employ people as full time, part time, casual or in some cases as contractors you will need to have insurance coverage. Check the insurance coverage you need with your insurance broker or at www.workcover.nsw.gov.au

Setting up a system and maintaining good records creates a better place to work for all people on the farm. Another benefit could be to a better night's sleep for you!

More information about The People in Dairy program and future programs is available at www.thepeopleindairy.org.au or by contacting Michael Ison at NSW DPI on (02) 4939 8814.

#### **NEW TIMING FOR ABV RELEASES**

#### **Australian Dairy Herd Improvement Scheme**

Australian Breeding Values (ABVs) for dairy cattle will now be released twice a year in April and August.

The new dates also better match the times when dairy farmers make decisions about semen purchases for seasonal or split calving herds.

The Australian Dairy Herd Improvement Scheme (ADHIS), which releases ABVs, introduced the new timing to enable ABVs to be based on more up-to-date data.

First proofs for young bulls will be more reliable as the new timing will allow additional (two year old herd) test results to be included in newly proven bulls. The breeding values for bulls proven overseas will be released in January, April and August.

ADHIS' next ABV release will be on 7 April 2008. For more information contact:

Michelle Axford, ADHIS Project Leader, Genetics Learning Package, phone 0427 573 330, email maxford@adhis.com.au or www.adhis.com.au



#### WHAT DO YOUR CARBS LOOK LIKE?

#### **Anthea Young**

Livestock Officer (Dairy), Scone

In the world of human nutrition we hear a lot about carbohydrates in the diet, and the debate goes on about low carb diets versus high carb diets.

In dairy nutrition this is a relatively new consideration – behind the scenes nutritionists have calculated ideal levels but more recently feed test results and feed computer programs such as DPI's *RationCheck* have started to report on starches and sugars separately in their analyses.

The main function of carbohydrates is to provide energy to the animal and also maintain the health of the gastrointestinal tract.

Carbohydrates can be broadly grouped into "nonstructural" (starches and sugars) or "structural" (fibre).

Some structural carbohydrates are insoluble – insoluble fibre in forages is a typical example. These fibre molecules make up the cell wall of the plant, and are what makes the plant stand up straight.

The total NSC fraction should make up 30-40% of total DMI, though this will vary with the type of NSC. Starches should be around 25-30% and sugars around 3-6%

What does this mean for the cow's rumen?

Depending on the type of carbohydrate in the diet, different compounds will be produced. The main end results that we concentrate on are **lactose** (milk), **fats** (milk, body fat) and **protein** (milk protein and muscle).

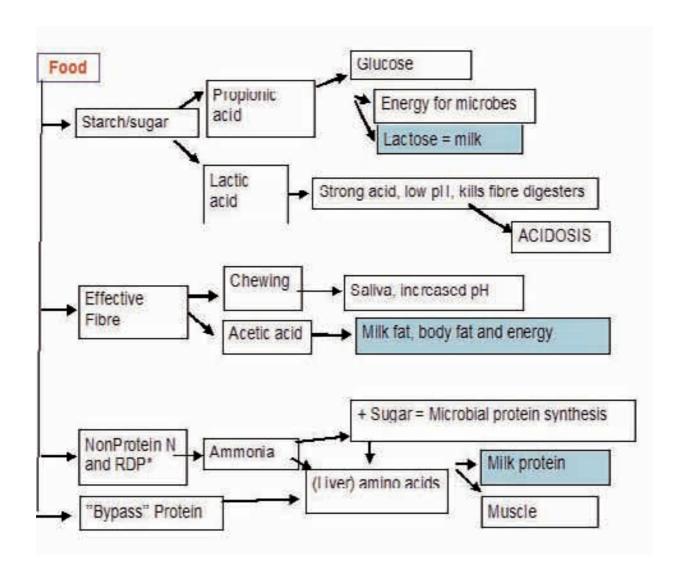
Not only the amount of starch in the ration, but also the rate of fermentation, have an effect on milk production – on high levels of feeding, slower rates of fermentation can reduce forage substitution and increase the milk response.

Rate of fermentation varies greatly with grain type and the type of grain processing – most processing will increase the rate of fermentation.

Higher rates of fermentation can leave the cow more susceptible to acidosis, depending on the amount and make-up of the rest of the diet.

Sugars are fermented very rapidly, as they are simple compounds and the microbes do not have to work hard to break them down.

Starches take a little longer, depending on the type of grain or forage, and depending on the particle size.



The requirement for higher amounts of starch compared to sugars is to maintain an energy source without as much fluctuation in rumen pH – this results in better utilisation of the roughages and proteins supplied.

Coastal dairy systems generally have very high levels of sugars compared to starch, as tropical grasses tend to be very low in starch and only slightly lower in sugars than temperate grasses, and grain feeding levels tend to be lower than inland systems.

The coastal cow can end up low in total NSC, and the balance of starch to sugars is too low.

Diets of high sugar content and high quicklyfermented starches can lead to more ups and downs in rumen pH, the microbes break them down very quickly and they get used very quickly.

Slower rates of fermentation – such as starch from maize and coarsely ground barley – lead to a more even rumen pH, however some sugars are essential to keep the microbes well fed and happy.

Feed	Starch %	Sugar %
Cereal grains	55-70 (can be very fast fermentation)	2-6
Maize silage	30	3.5
Ryegrass	6	14
Kikuyu	2.6	10.5
Forage sorghum	2.5	15
Lucerne	4.8	11.3

#### In summary

Inland dairy systems that are based on temperate forages (ryegrass, oats, lucerne) and grain should end up with a good balance of starch to sugar, and if cows are being fed to their appetite, the total amount of NSC should be adequate.

If forages are in short supply, maize silage is an excellent and safe source of starch, rather than feeding higher levels of grain to compensate for the shortage of forage.

Dairy systems where cows are based on tropical grasses and lower grain levels may need to consider a source of starch to provide energy to cattle without increasing the risk of acidosis.

Providing high sugar and low starch supplements such as forage sorghum hay will result in a quick fermentation in the rumen and more variation in rumen pH, which will have an impact on milk production and components, and possibly cow health.

#### Ration examples

"Coastal" dairy – 18L/cow, fed 5kg barley and grazing 100% young kikuyu

Starch	Sugar	NDF	Comment
17.1%	9.1%	37.7%	These cows would have trouble maintaining constant energy in the rumen to digest the amount of fibre in the kikuyu. Rumen pH would be likely to fluctuate, as the sugars break down very quickly. Cows have to do lots of ruminating to digest the feed.

"Inland" dairy – 24L/cow, 7kg barley/wheat mix, grazing lucerne & perennial ryegrass

Starch	Sugar	NDF	Comment
28%	9.9%	28%	These cows have a good amount of starch in the diet, maintaining the energy supply in the rumen. The high sugar content (from the ryegrass) & the high rate of fermentation of wheat will probably be balanced out by the good starch levels in the diet but the farmer would need to watch for signs of acidosis.

#### **FARMER OF THE YEAR AWARD**

First prize of \$10,000 is again up for grabs for a NSW farmer that demonstrates the right mix of sustainable and profitable farming management skills, Minister for Primary Industries Ian Macdonald and NSW Farmer's Association President Jock Laurie jointly announced today.

Organisers of the annual Farmer of the Year awards used the Beef Spectacular event at Dubbo to declare the 2008 awards officially open, which focus on farm profitability and environmental sustainability.

Minister Macdonald said judges would again be looking for innovative ways of coping with environment challenges, such as the ongoing drought.

"These awards play an important part in recognising the sustainable farming practices our farmers are using today - and how innovation is helping them stay profitable during tough times," Mr Macdonald said.

"Our judges know all too well how tough this drought has been, so they are looking for farmers that have put the best strategies in place."

NSW Farmers Association President Jock Laurie said the finalists played an important part in educating urban audiences about farmer's contribution to primary industries production.

"What we are looking for are farmers that can share their approaches with their industry peers, and also act as ambassadors to the broader community," he said.

"There are some excellent results being achieved in the farming sector - we want as many people to apply as possible so we can celebrate these achievements."

Beef cattle stud manager from Baryulgil Rob Sinnamon, who won the 2007 title, was on hand for the awards launch and described the award as a rewarding experience.

Sheep and goat producers Ben and Liarne Mannix of 'Gumbooka', Bourke, and mixed grazing farmers who also run an artificial breeding service for sheep and cattle, Stuart and Alex Blake, of 'Winterbourne' at Walcha jointly took out the 2007 Young Farmer title.

The annual awards are coordinated by the NSW Department of Primary Industries and NSW Farmers' Association, and supported by Rural Press and the Royal Agricultural Society.

To download the application form go to:

http://www.dpi.nsw.gov.au/aboutus/news/recentnews/agriculture-news-releases/dairy-producingmore

## TAMWORTH DAIRY FARM PRODUCING MORE WITH LESS



Rex Tout (left) with Upper Manilla dairy farmer Rob Cooper, who also participated in the Managing Pastures for Profit course. (Rob Cooper milks 800 cows at "Buena Vista", Upper Manilla.)

Water shortages have helped a Tamworth dairy farm family to boost production using less land, without spending more money.

Recent dry seasons and irrigation water restrictions led the Tout family to attend the NSW Department of Primary Industries' (DPI) 'Managing Pastures for Profit' course in a bid to find new ways to produce more milk with less grass.

Now the Touts have achieved that goal, they have set their sights higher - aiming to produce 30 per cent more milk in the coming season by milking more cows on well managed pastures that have not been grazed this year.

Jenny, Wynta, Kiri and Rex Tout milk 150 cows on "Limestone Park" a 40 hectare dairy farm at Loomberah.

"Last winter we managed to graze 140 cows through the winter on 30 per cent less area and produce the same litres and milk solids," Mr Tout said.

"When we were focusing from day to day on giving the cows whatever feed we could, we were finding it really hard to predict what we would have in a week's time.

"Now a better understanding of how pasture actually grows, and the importance of leaf stage and grazing residuals has made a big difference.

"We learned about the importance of the 'zoom phase' of growth, where the ryegrass plant is putting up its third leaf and achieving the best growth.

"Irrigation is scheduled now to better take advantage of plant growth rates at that time".

NSW DPI Dairy Officer, Anthea Young, said the 'Managing Pastures for Profit' course gave farmers simple tools to get pasture allocations and quality right for the individual farm.

"It is designed to be practical - farmers have told us that after improving pasture management through winter, their pastures are in much better shape coming into late spring when paddocks can be a mess."

And it is also a valuable tool for training staff, according to Mr Tout.

"Wynta started a dairy traineeship on the farm in 2007 and was able to use a structured process to allocate pasture to cows," he said.

"All staff can walk into the dairy, look at the farm map and the one page tool, and know where the cows need to go to graze and how far the electric fence needs to be shifted each day.

A very simple spreadsheet is used to allocate the correct number of cattle for each paddock on any given day of the year, based on the owners' observations of their own paddocks throughout the year.

Ms Young said guess work is eliminated and farmers can easily predict surpluses for hay and silage production.

NSW DPI are delivering the 'Managing Pastures for Profit' course around the state. Registrations can be made by phoning Anthea Young at Scone on 0427 102 798 or your nearest dairy officer.

Information about PROfarm courses can be found at www.dpi.nsw.gov.au/agriculture/profarm



## FARMER TARGETS FOR CHANGE – FARM IN FOCUS

#### **Ray Johnston**

Livestock Officer (Dairy), Taree

Paul and Lisa Minett participated in the FTC program in 2003. Their dairy farm is located in Upper Lansdowne on the NSW Mid North Coast on a sensitive river catchment for rural landholders, recreational use and oyster growers at the mouth of the Lansdowne River.



Since 2003 Paul has completed several projects. He has installed 14 gravity fed water troughs and fenced off 4km of creek. The installation of water troughs and the fencing off of creeks has enabled the riparian vegetation to regrow and as a result the creek banks are now more stable.

Paul continued his farm development by recently installing a dairy effluent system. The solid waste from the dairy is trapped and the liquids are used for paddock irrigation.

The installation of the effluent system has allowed nutrients to be evenly spread over grazed pastures improving productivity and reducing the need for expensive inorganic fertilisers.





Paul is now concentrating on reducing soil erosion by improving his laneways. Cement pipes will be used to improve drainage.

Fencing will be erected to reduce the available area for stock to use. The laneway will also be resurfaced. He has also planted hundreds of trees on his property and is now involved in community tree planting projects in the local area.



Paul has learnt more about managing his farm and the natural environment. He still uses the farm maps he created in the farm mapping component of FTC. One of the practical outcomes of FTC has been the prioritising of future projects.

## COMING EVENTS Topfodder Courses 3, 4 & 5 June Tocal 24, 25 & 26 June Tamworth 21, 22 & 27 August Scone

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