

## NEWSLETTER 39 August 2006

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### News from Justin Hoad, Farm Manager

Cicerone would like to welcome a new member to the NSW Dept of Primary Industries team, Alison Strong. Alison brings a wealth of experience and enthusiasm to the district, having previously been based in Bourke with NSW DPI and will be filling the position left by Bob Marchant's retirement, as sheep and wool officer for the Armidale district. Alison will be helping Cicerone with the delivery of the seminars to the surrounding district next month.

#### *The farmlets*

Cicerone has finished shearing around 1400 sheep to cut 25 bales. The wool was offered in the Newcastle sale on the 21<sup>st</sup> of August. Adult wool averaged 17 micron and sold for around 1050c/kg with the hogget wool averaging 15 micron and was passed in. Due to the end of the AWI funding cycle the ewes were not joined this year nor were there any stock or wool measurements taken. The stocking rate was also reduced with the plan not to buy feed for the sheep.

The silage that was cut of paddock A1 is being fed out to the A farmlet sheep. The paddock was cut just before Christmas due to the ground being too wet to drive on any earlier. The pasture was dominated by mature Phalaris with an under story of Lucerne, Chicory and Clover. The bales that were dominated by Phalaris are very stalky and the air was not excluded resulting in mould growing and spoiling the bales. The sheep only pick through it, leaving the stalks. Urea/protein blocks are being fed to help them utilize this dry feed. Any bales that were mostly finer grass with more Lucerne, Clover and Chicory made good quality silage with the sheep eating most of it.

The farmlets are stocked with merino sheep only. The A Farmlet is running 10 dse/ha and being fed silage and urea blocks. The sheep are being run in three mobs moving around slowly to ration out the green feed. At any one time 7 paddocks have no stock in them. This is allowing some regrowth by using the silage to feed out. The stock are in the lowest condition of all farmlets but are running at twice the stocking rate.

The B Farmlet is running 5 dse/ha with no supplement. The mobs are split up so 7 paddocks are stocked and 3 paddocks are rested. There is very little stock movement between paddocks. The low stock density allows a high degree of selective grazing. As the green shoots show they are eaten. This has allowed the B farmlet to hold their body condition better than the other farmlets, but to the detriment of the pasture.

C Farmlet is running 5 dse/ha with no supplement. The adults are in one mob and the hoggets are run in front of the adult mob. Therefore there are two paddocks grazed and 38 paddocks rested at any one time. The graze period is between 4 to 7 days and the rest period is between 120 and 150 days. The C farmlet has the most pasture on hand with the stock not quite as good as the B farmlet but better than the A farmlet.

This overall program of reducing the stocking rates/ not joining/ and not purchasing fodder has left the sheep in lighter condition than last year but there is not the massive feed bill.

#### *Funding*

Cicerone has sent out a funding prospectus to a range of organizations with some good responses. These will now be followed up to try to secure a future for Cicerone.

If we can find support from other organizations Australian Wool Innovation will also contribute, but they are unwilling to be the sole funding body of the project.

If additional funding is not found the stock and plant will be sold, the land will be returned to CSIRO and Cicerone will be disbanded by October this year.

Any letters supporting Cicerone from producers to funding bodies carries a lot of weight as farmer support is key to successful research adoption in the field and funding organizations need to see practice change to make their money work for them.

Thank you for your support  
Justin Hoad  
Cicerone Farm Manager  
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**TAFE Training**  
**Attention all Rural Owner/Operators,  
Managers and their Sons and Daughters!**

Do you need assistance with Physical and Financial Planning for your rural business?

**We have a fantastic opportunity for you to learn about both!**

The New England Institute of TAFE is offering members of the NSW Farmers Association the opportunity to enrol in two Federal Government funded programs:

- **Rural Business Management**
- **Sustainable Environment Planning**

Both of these programs have been designed to aid rural business owners in drought affected areas of the New England region. A nominal enrolment fee of \$375 per semester will apply, however your rural business has EC status, the fee will be waived.

The courses are offered by a flexible based delivery in convenient locations, combining a mix of home based study and hands on practical sessions. If both of these courses are completed successfully, you will be eligible to receive a Certificate IV in Agriculture. But better still, you will gain the knowledge to achieve better physical and financial viability run your business during these challenging times.

To take advantage of this fantastic offer or to express your interest in either or both courses, contact:  
Patrick Fagan at NEIT on 6773 7117 or email: [Patrick.fagan@tafensw.edu.au](mailto:Patrick.fagan@tafensw.edu.au) or  
Pauline Smith at NEIT on 6773 7110 or email: [Pauline.smith@tafensw.edu.au](mailto:Pauline.smith@tafensw.edu.au)

**Don't wait, call TODAY!**

**Letter to the Editor**

Dear Sir/Madam

Having recently heard presentations by Terry Coventry and Jim Scott on the Cicerone Project at the 2006 Australian Society of Animal Production conference, I am writing to share some thoughts re its pending demise.

From an outside perspective, you have in Cicerone an incredible resource of which we are extremely envious, and allowing this project to finish – after a mere 6 seasons - seems a great travesty!

Our research group has had similar farmlet ideas since the early-90's when we started investigating grazing management tactics to better utilise pasture. The whole-farm effect of these tactics was very difficult to describe with confidence to the farming community. This has resulted in slow adoption due largely to farmer belief that, in a 'real' system, our management tactics would require 'skyhooks' during summer to cater for increased stock numbers. Clearly, data from closed-systems demonstrations would have been extremely valuable in promoting our key messages.

It seems a great shame that Cicerone may cease without having had the chance to test 'normal' or even 'good' seasons. And who knows what increases in productivity would have been measured had lambing time changed to better match ME requirements for breeding ewes?

In summary, on behalf of our research group, your funders would be nuts to let this project fold..... in the next 5 years, *someone, somewhere*, will want Cicerone, and of course will have to pay 10x what you did to set it all up again!

Best of luck saving your project!

Mike Hyder  
Research Officer  
Department of Agriculture and Food  
Albany WA  
26 July 2006  
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## **Cicerone Project gets National Exposure**

*Prof. Jim Scott, UNE*

Recently the Cicerone Project received national exposure at the Australian Society of Animal Production 26th Biennial Conference in Perth. The theme of the conference "Science and Industry" focused on partnerships between producers and researchers. Accordingly, the conference organisers invited the current and former Chairmen of the Cicerone Project, Terry Coventry and Hugh Sutherland, and Professor Jim Scott from the University of New England's Centre for Sustainable Farming Systems to present the findings from the Cicerone Project in the McClymont Lecture. Both Terry and Jim attended the conference and presented the paper jointly.

This lecture is a key-note address in honour of Professor Bill McClymont. Professor McClymont was the inaugural Professor of Rural Science at the University of New England. Starting back in

1956, he developed an understanding of the climate-soil-plant-animal-economic complex which influenced the whole-of-farm approach taken by the partners in the Cicerone Project.

Following the conference, Jim was invited to travel to Albany to visit with the Western Australia Department of Agriculture and Food who are planning a similar farming systems project in their region.

Jim reports that the trip was very worthwhile - "it was great to have a chance to show the fruits of our collaborative research over the last six years, and to learn about other producer-researcher partnerships".

The abstract of the paper is reproduced below. If you would like a full copy of the paper, please contact Jim on 02 6773 2436 or [Jim.Scott@une.edu.au](mailto:Jim.Scott@une.edu.au) or write to him c/- UNE, Armidale, NSW, 2351.

*Abstract:*

### **Reflections on the Cicerone Project – an experimental partnership exploring the sustainability and profitability of grazing enterprises**

Authors: J.M. Scott<sup>A</sup>, T. Coventry<sup>B</sup> and H. Sutherland<sup>C</sup>

<sup>A</sup>Chair of Mixed Farming Systems, University of New England, Armidale, NSW, 2351  
([Jim.Scott@une.edu.au](mailto:Jim.Scott@une.edu.au));

<sup>B</sup>Chairman, Cicerone Project, "Bailey Park", Armidale, NSW 2350;

<sup>C</sup>Inaugural Chairman, Cicerone Project, "Deeargee", Uralla NSW 2358

*The broad agricultural ecosystem approach developed some 50 years ago by Roe and McClymont and further developed by Willoughby for the study of grazing systems has been an appropriate model for the conduct of whole farmlet system studies carried out by the Cicerone Project on the Northern Tablelands of NSW from 2000 to 2006.*

*This project has seen the development of close links between livestock producers, researchers and extension workers, all of whom have learned considerably from each other. The project has undertaken studies comparing three adjacent farmlets by considering as many aspects of complex farm systems as possible using an approach summarised as 'compare-measure-learn-adopt'. This 'living laboratory' has provided an opportunity to investigate the sustainability and profitability of grazing enterprises at a scale which is seen as credible by both producers and researchers. A brief overview of results collected to date is presented, including soil, pasture, livestock, economic and sustainability findings.*

*The nature of short-term funding of research and development programs is a threat to the continuation of farmer-scientist partnerships. The power of farmer leadership can also be seen as a threat by some in research and extension agencies as well as within research funding bodies.*

*There is a role for governments to assist in the development and delivery of objective evidence of sustainability and profitability over an inter-generational timeframe through 'fact farms' located across the many agroecological regions of Australia.*

*Such farms need to be focused on issues of relevance to local farmers as well as to research and extension partners. Partnerships comprising farmers, extension professionals and research teams need to see funding provided to all partners if the maximum value of the partnership is to be realised. Real ownership by producers is seen as a necessary condition for achieving substantial practice change.*

*The considerable challenges of developing an integrated, long-term, multidisciplinary approach to resolving issues of sustainability and profitability should not of themselves be a deterrent to attempting to realise this objective. Creating and maintaining 'sustainable' farmer-scientist partnerships will assist in this endeavour.*

### **The Real Value of Fat Scoring**

*Michael Lollback, District Livestock Officer  
(Sheep & Wool), NSW DPI, Tamworth*

Fat scoring has been promoted as a tool to monitor the condition of ewes especially during pregnancy. It is a simple technique that provides an accurate picture of the average body condition of a mob. However it appears that fat scoring could be a more useful tool than we have realised. Results from the Cicerone Project and the Lifetime Wool project indicate that the annual fat score profile achieved by ewes could be closely associated with enterprise performance (gross margin \$/dse).

Fat scoring because it is convenient and more accurate is preferred to body weighing as a means of monitoring the condition of ewes. In any mob of sheep there is variation in frame size which can lead to significant differences in body weight. Fat scoring overcomes the problems of variation in frame size and consistently and accurately indicates the fat reserves on an animal.

An annual fat score profile is simply a series of fat score targets for critical times during the year for example weaning, joining, day 100 of pregnancy and pre-lambing. If these fat score targets are met it is an indication that the ewes are receiving adequate nutrition and that their production levels will be close to their genetic potential. Similarly, it also indicates that the nutritional requirements of the lamb or lambs that the ewe is carrying will also be adequately met. If the targets are not met then there are

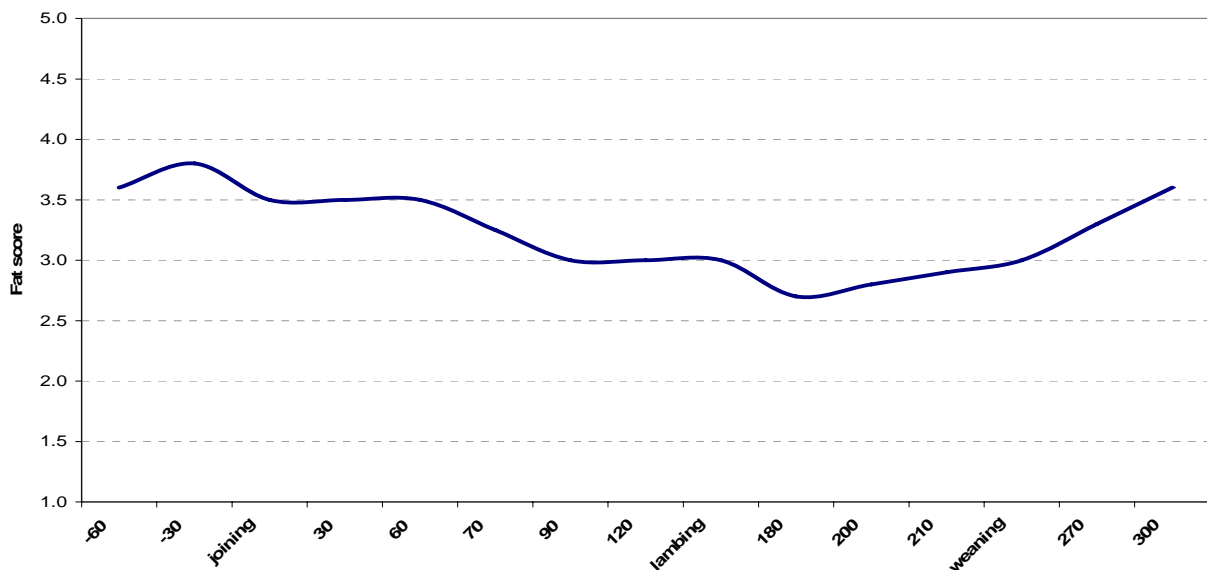
production losses in terms of ewe performance and the performance of her progeny.

At the Cicerone Project fat scores of ewes on each of the farms has been recorded on a regular basis enabling annual fat score profiles of each flock to be graphed. The recent economic analysis of the three farms has enabled us to look at the relationship between enterprise performance (gross margin /dse) and the annual fat score profile of the breeding ewe flock on each farm.

The national Lifetime Wool Project (also an AWI funded project) which has a site in the Armidale area has also been looking at the role of fat scoring in managing ewes during pregnancy. The results of the Lifetime wool project have been used to develop recommended fat score profiles for breeding ewes for the various sheep production regions in southern Australia. These profiles vary depending on geographical location and the timing of major events such as joining, lambing and shearing in the annual management program.

The recommended fat score profile for merino breeding flocks on the New England Tablelands is presented in Graph 1. The basic features of this profile are that the target fat score at joining should be 3.5 and that during the critical last 50 days of pregnancy ewes should be maintained in fat score 3. The graph also indicates that during early and mid pregnancy the goal should be to maintain ewes in 3.0 to 3.5 fat score.

**Graph 1. Recommended fat score profile of breeding ewes on the New England Tablelands**

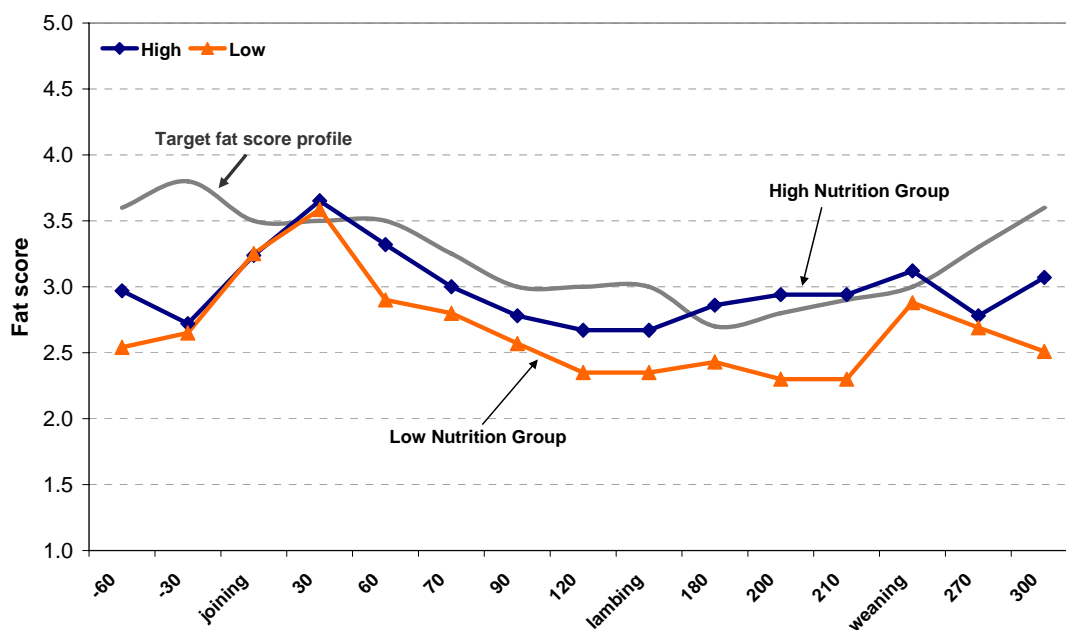


In the Cicerone project the gross margin calculations indicated that the A farm achieved the highest average annual gross margin followed by the B farm and the C farm. If the fat score profiles of each of the Cicerone farms is graphed against the recommended New England fat score profile it is the A farms profile that comes closest to matching the recommended profile; the B farm and the C farm profiles result in a less closer match which is in line with their gross margin performance.

Similarly at the local site of the Lifetime Wool project the fat score profile of the high nutrition treatment group more closely matched the recommended fat score profile than the low

nutrition treatment group (see Graph 2). Again, the production level of the high nutrition group was significantly higher than the low nutrition treatment group. More importantly the progeny of the high nutrition treatment group achieved significantly higher production levels at twelve months of age than the progeny of the low nutrition treatment group. Production levels of the two progeny groups will also be measured at two years of age to monitor if the superiority of the high nutrition treatment group progeny is maintained. This has already been confirmed at other sites of the Lifetime Wool Project and at the Cicerone Project.

**Graph 2. Lifetime Wool Project – fat score profiles of high and low nutrition ewe treatment groups**



Results from the Lifetime Wool project and the Cicerone project have produced a clearer definition of the production losses associated with not meeting recommended fat score profiles in terms of ewe and progeny performance. This will enable the costs and benefits associated with supplementary feeding during pregnancy to meet fat score targets to be more precisely calculated.

**The Proceedings of both the Cicerone Symposia 2005 and 2006 are available. \$25 hard-copy or CD. Contact Cicerone to place your order.**

**Soils Field Day**  
 12<sup>th</sup> September 2006  
 1.00pm – 4.30pm  
 Liaison Centre, Chiswick, CSIRO  
 New England Hwy Armidale.

Cost non-member \$10, Cicerone members free.

Topics include

- What is Soil Biology
- Cicerone soils information
- What are your soil information needs?

Contact Clare Edwards  
 NSW DPI 6738 8500 or Cicerone on 6778 3871

### **What Shelter Features are in Your Current Lambing Paddock?**

*Alison Strong, Livestock Officer (Sheep and Wool), NSW DPI Armidale*

Most producers have planned to lamb their ewes in the next couple of months. Lambing paddock selections should have already been made with consideration to grazing and worm management but is it the best one for providing shelter? You can increase your lamb marking percentage significantly by decreasing mortality rates due to the chill.

Many lambs die in the first 3 days of their life, mostly due to mismothering, starvation and/or exposure. Newborn small lambs do not have the fat reserves to generate enough body heat and without shelter and warmth they are at risk of dieing.

The natural behavioural habit of ewes is to find the highest and driest part of the paddock to have their lamb. Sheep can determine height change in topography by as little as one metre. This could well be the most exposed area.

Wind speed is the one element of exposure that animals can be protected from in the paddock, as opposed to temperature and rainfall. If you want to try and provide better wind protection and shelter for your ewes this lambing season, consider the following:

- Shelter can consist of tall standing dry grass, tussocks or shrubs. A combination of timber, understory and tussocks will provide some protection which is much better than a bare paddock.
- Determine the main wind direction and identify the most protected area/s.
- The direction your fences run in relation to the access sheep have to the higher points or less protected areas of the paddock. Depending on the topography of the paddock a temporary fence will redirect the ewes and keep them sectioned into the more sheltered areas. An increase in lamb marking percentage will help off-set the cost of the fencing over several years.

A well designed lambing paddock will have access to a clean supply of water, adequate shelter so ewes can lamb with privacy and enough cover to reduce wind speed.

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### **Cicerone's Lambing Experiences**

*Justin Hoad, Cicerone Farm Manager*

Over six years with three farmlets operating under different management, the Cicerone ewes have effectively experimented with 18 different lambing years. Following are some of the Cicerone experiences.

Good ewe nutrition is vital to ewe and lamb survival. Unfortunately lambing in September, the ewe's requirements are the highest off shears, late pregnancy in August when the pasture supply and quality is the lowest. Added to this is that the ewes have a decreased intake with the fetus taking up abdominal space. Every winter ewes need supplementary feed and special attention in hard winters. Not only will a well nourished lamb survive better but it will also be more productive for the rest of its life because of better wool follicle development, leading to lower micron and higher cuts.

Having said this, feeding through lambing is very hard to achieve successfully without mismothering. Confinement feeding ewes prior to lambing, resting the lambing paddocks and allowing hand feeding to cease during lambing may be a good strategy.

Stock density at lambing is also important. Set stocking twin bearing ewes at stock densities above 20 ewes/ha was found to mismother many twin lambs leading to high mortalities. Best results were achieved with small mobs at low densities. To drift ewes through lambing in a rotation successfully would take a good stockman with well behaved ewes to move them through contiguous paddocks.

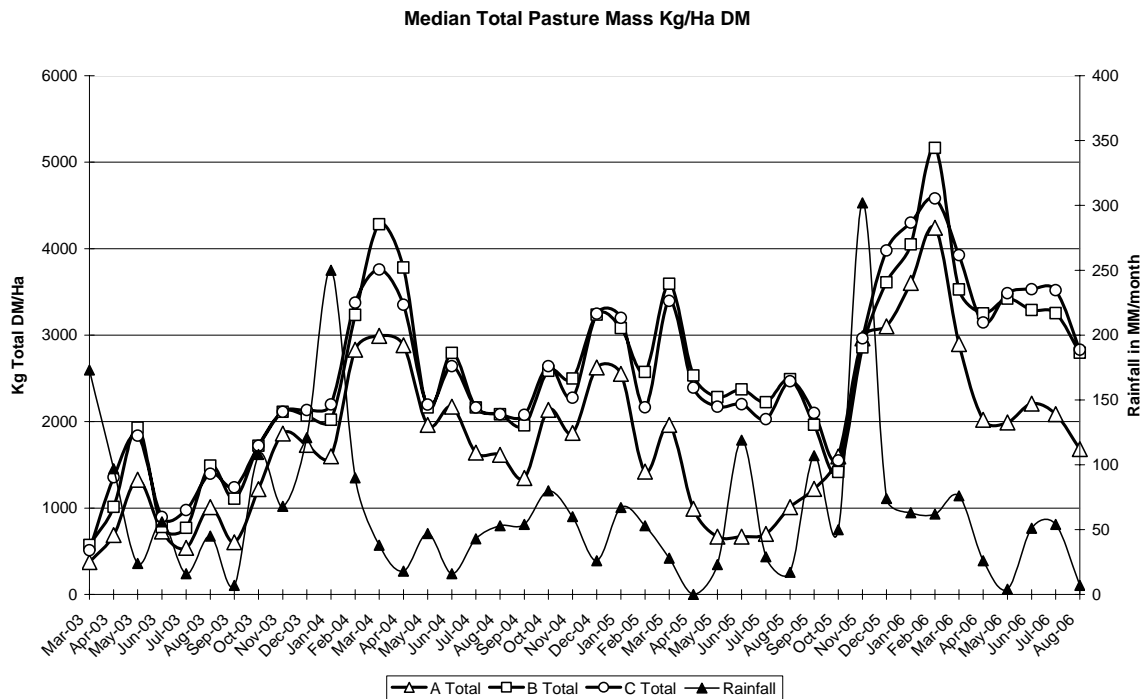
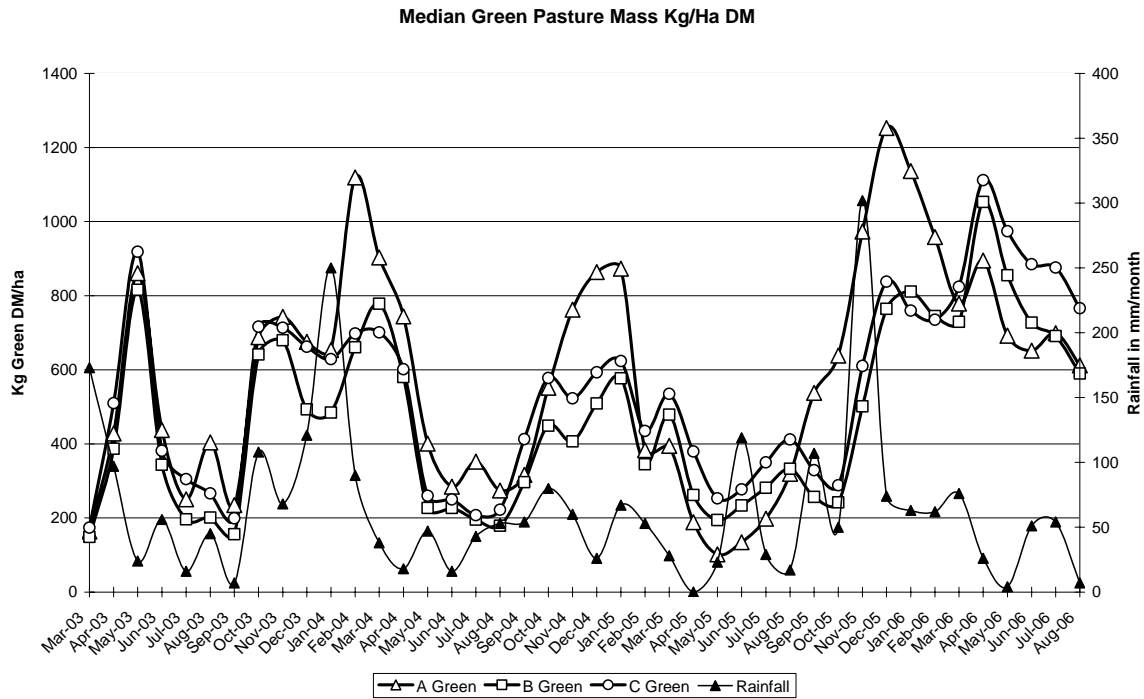
The Cicerone farmlets are very open and unprotected leading to lamb losses, attempts were made to fix corrugated iron to the fences in the prevailing wind, but the sheep would not use them. Trees were planted with lambing paddock engineering in mind. The trees were planted on the highest corner to the prevailing wind so the sheep would camp under their shelter on the high part of the paddock. The trees are only just becoming large enough to make a difference. The best protection was the poa tussock that cuts wind speed at lamb height. Paddocks with logs and shrubs would be just as good.

To bring this all together at the point of lambing takes much planning. The ewes need to be in good condition going into sheltered paddocks with quality feed and a low worm burden, without the need to continue hand feed during lambing.

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**Cicerone Pasture Mass**

The following graphs show the median green pasture mass and median total pasture mass from March 2003 to August 2006, measured on the three farmlets. Note the increase in pasture mass after a significant rainfall event.



**PRODUCER SURVEY NOW OUT**

*Cicerone is reviewing the last 6 years of extension activities. To do this we are asking for your help in reflecting on what activities you may have attended and information that you may have received. We are specifically asking what value Cicerone has been to you and your business. You should receive a survey in the mail in the next week or so and it is important to us if you could make comments and send it in.*

## **The Cicerone Roadshow**

To ensure that all producers on the Northern Tablelands have the opportunity to benefit from the findings of the Cicerone project over the last five years, Cicerone will be running a series of meetings to present and discuss the key messages from the research and demonstration projects conducted by the Cicerone Project. Dates and venues as follows:

**15 September, Bundarra Sport & Rec Club at 9am**

**22 September, Bendemeer Hall at 9am**

**26 September, Walcha sports Club at 9am**

**28 September, NSW DPI's Glen Innes Research Station (Shearing Shed) at 9am**

Date and venue is yet to be finalised for a meeting in Stanthorpe.  
To find out more about any of these meetings, contact the Editor.

## ***The Cicerone Project Inc.***

PO Box 1593,  
ARMIDALE NSW 2350

The Cicerone Project gratefully acknowledges the funding provided by Australian Wool Innovation Limited.

*another* australian wool  
limited

Newsletter Editors: Michael Lollback and Alison Strong, NSW DPI and Justin Hoad manager of The Cicerone Project Inc. This newsletter is copyright © and no part may be reproduced without due acknowledgment. The views expressed by the authors are not necessarily those of all members of the Cicerone Board.