

Mango pre-harvest meeting hits the mark!

Khamla Mott, Technical Officer, Katherine Research Station

A mango 'Pre-harvest Meeting and Benchmarking Brief' was presented by the NT Mango Industry Association (NTMIA) in conjunction with the Australian Mango Industry Association (AMIA) at the Katherine Research Station (KRS) on the 14th of August.

In attendance were members from both the NTMIA and AMIA board, local producers, representatives from PISAFE (Primary Industry Safety Advice) and DPI&F staff.

The meeting commenced with an early crop forecast for the 2013 mango season, by NTMIA's Ian Baker. Early predictions are indicating a 'late and light' harvest. This is due to the warmer than average temperatures this Dry Season within the Top End. The higher than average daily temperatures in the Katherine region have led to scattered flowering which in turn has produced a poor fruit set. This may lead to a reduction of up to 15% overall volume for Katherine growers, with a predicted 1.7 million trays of mangoes being produced, compared to 2012 harvest figures of 2.05 million trays. The 2012 total actual volume produced for the Darwin and Katherine region was 4.1 million trays (Figure 1), which was slightly less than the 2012 forecasted value.

The quality of mangoes going to market was also discussed, with AMIA's Chairman Gavin Scurr explaining the importance of dry matter percentage (%DM) and brix testing to ensure retailers receive ripe fruit. It's recommended that a DM of 14% and a Brix of 12% minimum when ripe, be introduced as the minimum standards for the industry. For further information on %DM and Brix testing, please refer to the DPI&F fact sheets in this issue.

2012 ACTUAL (4.1MIL) VS FORECAST (4.2MIL)

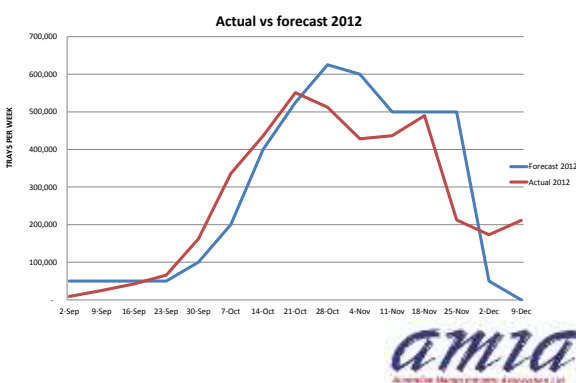


Figure 1. A close call: the 2012 actual production peaked on the 21st of October with figures slightly less than the forecasted production.

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Next on the agenda was promotions and marketing for the 2013 mango season. This year's activities will be targeted at increasing purchase frequency and increasing the weight of purchase. The spotlight will be aimed at the importance of quality at point of purchase, varietal education and versatility. Activities within the full season campaign for AMIA will see peaks at the 1st Melbourne Auction (mid to late October) and will include the 'Mango Mess-tival' on the 1st of December at Sydney's Bondi Beach. NTMIA are currently updating their website and are excited about social networking, where they plan to promote 'OMG – Our Mango Growers', a facebook page to regularly profile mango growers from all over the country.

Howard Hall the Managing Director of CDI Pinnacle Management Pty Ltd, concluded the afternoon with his presentation of the financial Benchmarking Pilot Program that was conducted for the 2010-2011 harvest. The program results showed that the sample captured 16% of industry production, which included NT and QLD. The NT was the only region to look profitable in the 2010-2011 harvest, due to the drastic weather conditions suffered by QLD growers. Another benchmarking program will be commencing this harvest and all mango producers are invited to participate.



Photo 1. Up to date with the latest in mango matters! Left to Right: Trevor Dunmall (AMIA), Kaara Ainslie (PISAFE), Helen Foster (Seven Fields), Gavin Scurr (AMIA), Ken Rayner (mango breeder), Howard Hall (CDI Pinnacle), Ian Curtis (King Producers Pty Ltd) and Ian Baker (NTMIA).

Assessing mango harvest maturity

Chelsea Moore, Industry Development Officer, Darwin

Warren Hunt, Industry Development Officer, Darwin

The NT MIA and AMIA recognise that the 2012 season saw failures with harvesting of significant volumes of immature fruit to southern market destinations. Exactly how this eventuated is arguable, and is ultimately an industry issue. It did nothing for the reputation of NT mangoes and severely disadvantaged some growers supplying mature fruit in the wake of the immature fruit. On the chance that there has been a failure in industry's awareness of the basic assessment for maturity, it is appropriate to revisit some long established and proven practices.

As a mango ripens it goes through a number of different processes. Skin colour changes from green to yellow/orange. This is caused by increasing levels of carotenoids decreasing chlorophyll.



Other changes include:

- Acidity decreases.
- Aroma increases.
- There is a change in sap from milky to transparent.
- CO₂ production increases.
- Ethylene production increases.
- Flesh firmness decreases.
- The fruit sweetens.
- Starch is converted to sugar.
- The total soluble sugars increases

Not all mango varieties mature quite the same, for example some mangoes remain green skinned when ripe (Keitt), others experience a lessening of blush (Hayden) etc.

There are so many factors that change as the fruit matures equally there are a number of guides that can be used to assist in determining optimal harvest maturity:

- Heat sums
- Flesh colour
- Dry matter
- Brix (TSS)
- Flesh firmness
- Shape & skin colour
- Near Infra-red spectrometry.

In this article we will focus principally on heat sums, flesh colour and dry matter determinations in assisting growers in determining their harvest maturity.

Heat sums: Mango fruit mature on the tree based on the daily maximum and minimum temperatures. If the season is “average” many growers can predict when they will harvest based on previous experience. When the season is variable, or markedly different (either hotter or colder than normal), rules of thumb don’t work. This is because it is degree days that are important not days alone. Therefore, ‘heat sums’ can be used to closely predict fruit maturity (dry matter of 14%) from flowering data. It is based on the following calculation:

$$\text{Heat sums} = [(\text{max temp} + \text{min temp})/2] - 12$$

The heat units per day are added together until a threshold (variety specific) point is reached (between 1600 for KP & 1800 for R2E2). Heat sums serve as a useful guide for an estimate of the onset of harvest. Final determination should be confirmed by appraisal for colour (cut) and shape/filling out.

Plant Industries has an online heat sum calculator available for industry use: http://www.nt.gov.au/d/Primary_Industry/index.cfm?Header=Fruit%20-%20Mango

Heat sums are calculated from growers detecting flowering at either of two stages i.e., stages 6 and 14 (see below).



Stage 6



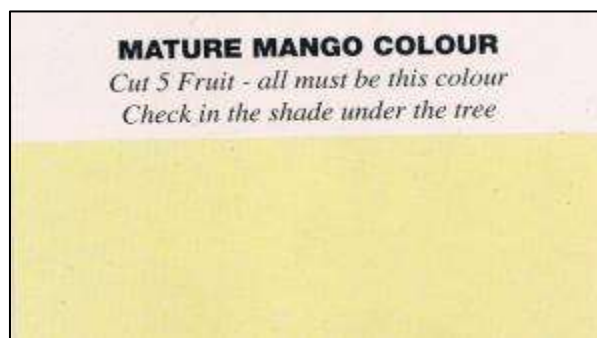
Stage 14



NOTE: Kensington Pride (KP) and R2E2 growers should count the flowers at stage 6 of panicle emergence (the first time the bud can be seen). Some growers prefer to use stage 14 (about 2/3rds open) however; this means your threshold will be around 300 units less.

Flesh colour (the cut test):

As mangoes mature there is a change in internal flesh colour from the seed outwards. Varieties experience this change differently, for example the colour chart for Calypso is different to the KP. Below is a 'legacy' fruit maturity card produced locally by the NTMIA for KPs. Our thanks to Ian Baker of the NTMIA for digging this out. It is a simple guide for performing the pre-harvest cut test.



Plant Industries has decided to develop a new guide for KP (Calypso already has an effective colour card set). More to follow on this in the future.

Dry matter: As the fruit matures there is a change in the water content of the fruit, known as the Dry Matter. This also related to the TSS (sugar content) and is often used as a measure of maturity. For KP the minimum DM for harvest is 14%. It is important to note that dry matter can be affected by as much as 2% by irrigation practices or rain.

When a mango has 14% dry matter it is considered mature enough to pick and will ripen properly with a good flavour. The procedure set out below shows how dry matter percentage can be calculated simply and accurately. Mango dry matter should be used in conjunction with the other maturity indicators of heat sums, internal flesh colour and external colour and shape. Essentially dry matter is the difference between the mango flesh sample when it is freshly cut and full of water compared to the weight of the sample after all the water has been dried. The result can be converted to a percentage of the original wet weight, known as the dry matter percentage.

Equipment required for dry matter testing:

- Cutting board
- Large knife
- Apple corer
- Microwave or drying oven
- Patty/cup-cake papers.
- Accurate scales (0.1g accuracy)
- Calculator Notebook or spreadsheet to record the results.

Method:

1. Select some "average" fruit to be tested from your block (avoid obviously forward or backward fruit).
2. Weigh the patty papers and write the weight or a code number on the bottom of the paper. Using two papers together for each sample works better as the samples can become quite gooey.
3. Cut off both cheeks of the mango to be sampled.



4. Take a sample from both cheeks of the fruit using the apple corer. The sample should be taken from the centre of the round part of the cheek and be around 1 cm thick.
5. Slice the skin off, so that only the flesh remains on the sample.
6. Weigh and record this weight as the "Wet weight + patty paper".

Drying procedures - Microwave oven

Fill a coffee mug 2/3rds full with cool water and place it in the microwave. This is essential to stop the samples burning instead of drying. Don't overfill the cup as it will boil over onto the sample.

Run the microwave with the sample and coffee cup for about 3 minute intervals. Replace the cup of hot water with new cup of cool water every 3 minutes.

Repeat the above for 3 minutes and then 2 minutes, then 1, weighing in between each run. Continue at 1 minute intervals until there is no change in weight of the sample - indicating that the sample is completely dry.

Record the dry weight + patty paper.

Drying procedures – Drying oven

Place the sample in a drying oven and leave for 24 to 48 hours at approximately 65oC.

Higher temperatures will cause burning.

Record the dry weight + patty paper.

Calculation:

$\text{Dry weight/Wet weight} \times 100\% = \% \text{ dry matter}$

The weight of the patty /wet weight minus the patty paper is the wet weight.

Likewise, the weight of the patty /dry weight minus the patty paper is the dry weight.

Divide the dry weight by the wet weight and multiply by 100% to bring it to a percentage. This is the % of dry matter.

General notes

Scales must be accurate to at least 0.1g. This test is only useful when the sampled fruit is consistent with the fruit to be harvested. Use dry matter testing in conjunction with the other tools mentioned earlier in the article. For more information on mango harvest maturity please contact Chelsea Moore on Chelsea.Moore@nt.gov.au

NOTE: NIR Technology NIR technology is a non-destructive method for assessing fruit maturity that has been proven to work in mangoes. It is commonly used in Calypso orchards where external characteristics are difficult to determine age/maturity. It is also in use as an aid with Wepack in KPs. It is not without its challenges as annual calibration is required, and the equipment for measurement is expensive. More on this in future issues.



The following is a research paper that was presented recently at the Northern Beef Research Update Conference by CSIRO. The conclusions drawn from this paper have led to further research which will be reported in the KRR as soon as they are available. For further information, contact Trudi Oxley (08) 8973 9763.

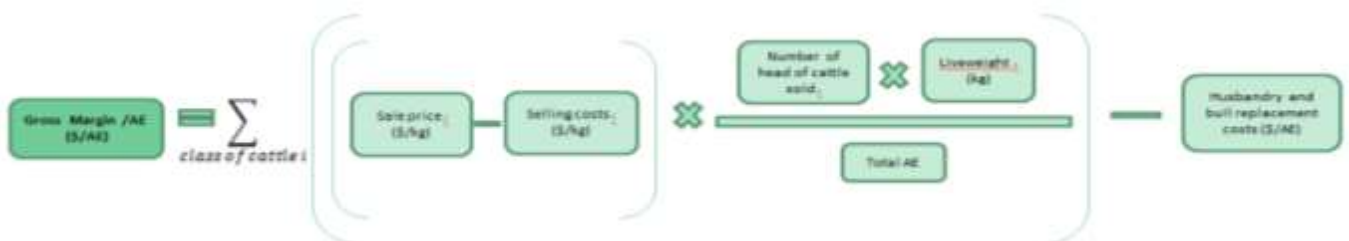
Options for northern beef producers: a case study examining the impact of establishing an abattoir in the NT and market alternatives to live export

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The Indonesian market represents almost two-thirds of Australian live cattle export (Gleeson *et al*, 2012), with the northern beef industry being the most reliant on it, with 33% of their production sold into this market (ABARES 2011). This situation puts the industry at risk should the market be disrupted. A long-term solution would be to extend the market to other importing countries, particularly in South East Asia. Another would be to develop a processing meat industry in the Northern Territory to be able to finish and slaughter cattle within the region. This paper investigates the impact on herd turn-off and income of selling northern cattle into alternate domestic markets with the establishment of an abattoir in Darwin and in the absence of live export trade to Indonesia.

To identify the scenarios a workshop was held with NT DPIF officers to explore alternate markets for cattle. The scenarios investigated were: Business As Usual (BAU, see Breedcow Beef CRC templates, Holmes *et al*. 2013); live export market + an abattoir in Darwin (+L +D); live export closed + an abattoir in Darwin (-L +D); live export closed + no abattoir in Darwin (-L -D). Breedcow was used to model each scenario giving gross margin (GM) returns before interest costs. With the live export market closed, steers from Katherine VRD and Top End were sent to Townsville at 3 and 4 year-old for slaughter. For Barkly Tableland, a smaller proportion of cattle go to the live export market and for the scenario where live export was closed the surplus heifers were sent to Longreach saleyards. As few cattle from Alice Springs go to live export trade, this region was not included. With the availability of an abattoir in Darwin, all cattle destined for slaughter were redirected to Darwin. In the absence of an abattoir in Darwin, old cattle were sold ex-Katherine with an appropriate downward adjustment to price to compensate the buyers for subsequent transport to a southern abattoir. Freight and other costs were adjusted for each scenario. Gross Margin per AE for each scenario was calculated as follows:



Results

For the Barkly region, the closure of the live export market and an abattoir in Darwin had little effect on gross margin as transport costs and market destination did not vary significantly across the different scenarios.

For Katherine VRD and Top End gross margin response to the different scenarios came from an interaction of sale price, selling costs and liveweight turn-off (see Table 1), gross margin per adult equivalent (GM/AE) for each scenario are shown in Fig.1.



In the scenario of continued live export and an abattoir in Darwin (+L+D) the gross margin per AE is slightly higher than if business continued as usual (BAU) due to an increase in sale price of old cattle.

If the live export industry were to close down, and there was an abattoir in Darwin (-L+D), there would be an increase in sale price for old cattle, but a reduction in the sale price for young cattle although they would have to be heavier at point of sale. Holding the young cattle for longer did not prove to increase husbandry costs and bull costs. This made the GM/AE of this scenario comparable to if business continued as usual.

Table 1: Key inputs for Gross Margin calculation for the various scenarios studied in NT.

	Katherine VRD						Top End					
	No. cattle sold ('000 hd)	LWT cattle sold (kg)	LWT sold (kg/AE)	Sale price (\$/kg)	Selling cost (\$/kg)	Husbandry + bull costs (\$/AE)	No. cattle sold ('000 hd)	LWT cattle sold (kg)	LWT sold (kg/AE)	Sale price (\$/kg)	Selling cost (\$/kg)	Husbandry + bull costs (\$/AE)
BAU	267	336	106	1.5	0.15	41.19	27	330	89	1.55	0.1	40.7
+L+D	267	336	106	1.57	0.14	39.69	27	330	89	1.61	0.08	39.51
-L+D	197	483	112	1.36	0.13	34.77	19	482	90	1.39	0.07	34.74
-L-D	197	483	112	1.27	0.31	35.25	19	482	90	1.32	0.35	35.1

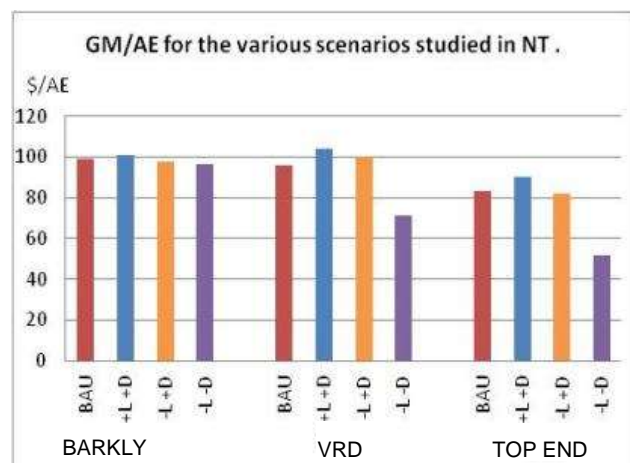


Figure 2. GM for market abattoir scenarios in NT

If the live export industry was shut down, the presence of an operating abattoir in Darwin would significantly affect the GM/AE. Without the Darwin abattoir or live exports cattle prices would decline and selling costs would increase thereby severely reducing GM/AE.

Conclusions

For Katherine VRD and Top End, the addition of an abattoir in Darwin to business as usual offers a slight improve in gross margin as older cattle do not have to be sent south for slaughter. However, in the absence of live export, a Darwin abattoir becomes extremely significant in terms of beef producers ability to maintain their GM at a level comparable to that being achieved with live export.

References

ABARES, 2011, *ABARES survey of beef cattle producers in northern live cattle export regions* http://www.nt.gov.au/d/Primary_Industry/Content/File/Live_cattle_export_regions_2011.pdf

Gleeson, T, Martin, P & Mifsud, C, 2012, *Northern Australian beef industry: Assessment of risks and opportunities*, ABARES report to client prepared for the Northern Australia Ministerial Forum, Canberra, May, CC BY 3.0, <http://www.regional.gov.au/regional/ona/files/20120621-abares-final-report.pdf>

Holmes, W, et al. 2013, *Representative Herds Templates for Northern Australia V1.00 – data files for Breedcow and Dynama herd budgeting software*, Beef CRC, DEEDI (Qld), DAFWA and DRDPIF&R (NT), viewed on 26 April 2013, http://www.daff.qld.gov.au/16_20534.htm



Tips for staying in touch with FutureBeef

FutureBeef is a collaboration of state agricultural research agencies and Meat and Livestock Australia, committed to bringing the best of beef research, development and extension (RD&E) to your door step. As a joint force, FutureBeef has worked hard to simplify a magnitude of valuable and relevant resources, ready for your adoption and application.

Stay in the loop on events, upcoming webinars and training opportunities by visiting the online calendar at the FutureBeef website www.futurebeef.com.au/events. You can search for an event by name, date or location. You can also submit a relevant event to FutureBeef staff for publishing at the online calendar.



We encourage you to sign up to receive the FutureBeef eBulletin. Issued every 6 weeks the eBulletin aims to keep beef producers and stakeholders updated about the latest research, tools and resources from across the north. The eBulletin currently has around 1500 subscribers and is distributed via email. You can sign up at the [FutureBeef website](http://www.futurebeef.com.au)

Just a few tips for staying in touch with FutureBeef.

Happy reading!

BeefUp Forums leading the way

Two MLA BeefUp Forums have recently been held in the NT. The forums featured information about business management, market updates and breeder management and profiled some local research project including the Phosphorus project, Pigeon Hole project, CashCow and the 2010 Pastoral Industry Survey. Both forums were well attended with 45 participants attending the Adelaide River forum and over 50 participants coming along to Mataranka Station.



Photo 1. Presenter Phil Holmes outlined the importance of having good business analysis skills.

In addition to the Mataranka BeefUp Forum, was the Northern Beef Industry's Next Gen Forum which attracted 19 participants from a variety of backgrounds. The aim of the event was to inspire the young people involved in the beef industry by assuring them that the future of the beef industry is bright, by assisting them in goal setting and by providing the opportunity to network with some inspirational industry leaders. One such person was Keith Holzwart, owner of Avago Station, who provided the closing comments and told his tale of how a ringer can become a station owner with the right mindset and a strong work ethic. Feedback from the event was very positive, providing inspiration to organisers to facilitate a larger version of the workshop in 2014.



Katherine Show display focuses on key essentials

The Department of Primary Industry's Katherine Show display once again attracted public interest with a wide variety of displays put forward by each group.



Photo 1. Part of Plant Industry's display at the Katherine Show, demonstrating the amount of water needed to grow commonly eaten products

The Plant Industry group display followed this year's Show theme of water by demonstrating how much water is needed to grow or make commonly consumed food items such as a cup of coffee, one bag of rice or even one tomato. In addition to this the Plant Industry group provided information about the different types of irrigation used in the district and a display of fruit and vegetables which had been kindly donated by local producers. This display created a lot of interest amongst locals and tourists alike who were not aware that such a variety of produce could be grown in the region. Red Dirt kindly donated locally grown watermelons for taste testing, which were extremely well received by all who visited the pavilion.



Photo 2. The Water Quiz prize pack won by Mick O'Rourke

The Pastoral Production Group produced a display titled "Our People, Our Future" which profiled some local identities and the important roles that they play in keeping the beef industry running. Key figures included, Paul Thompson (Fleet Manager, Road Trains of Australia), Kayla Kurnof (Leading Hand, Victoria River Downs), Anthony Cox (Manager, Delamere Station), Dan Ward (Pilot) and our very own Beef Extension Officer, Trisha Cowley.

Raising awareness about exotic and endemic animal and plant diseases was the main focus of the Biosecurity and Productivity display. John Eccles, Chief Veterinary Officer, said, "It is essential that producers are aware of what disease symptoms could be expected so they are better able to recognise and identify unusual diseases. Australia currently has access to many overseas markets due to our disease free status and clean, green image."



Photo 3. Locally grown produce in the DPIF display

Stuart Henson was in attendance providing information about Myrtle Rust which is a fungal disease affecting Acacia trees that is currently found in New South Wales and Queensland and is a threat to the Northern Territory. Livestock Biosecurity Officers were also present during the event promoting the Hendra virus vaccine which is now available for horses.

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Fresh Faces at KRS

Dr Melissa Fraser

Position: Team Leader Plant Industry



The Plant Industry team would like to welcome Mel Fraser back from 12 months of maternity leave!

Mel joined the DPIF as Team Leader for PI in February 2010 and came to us from Adelaide

where she was completing her PhD in soil science at the University of Adelaide.

Prior to that, Mel was in QLD where she worked as a Technical Officer for QDAFF and assistant Farm Manager on a broadacre cropping farm on the Darling Downs.

She has a bachelor of Agriculture she gained from the University of Adelaide and the University of Guelph, Ontario, Canada. Mel is passionate about broadacre agriculture and also has a love of cooking – paddock to plate in the true sense! You may have also seen her around town in her role as the Secretary of the CWA Katherine Branch.

Mel's looking forward to working with the fodder industry and is excited by the opportunity that diversification of pastoral leases presents for researching new crops and agronomic practices in the NT.

Welcome back to work Mel!

PISAFE Primary Industries Safety Advice



PISAFE provide advice and promote Work Health & Safety awareness across the Primary Industries in the Northern Territory. This **free** service is available to help owners, managers and employees establish safe work practices, minimise the chance of accidents and create a safe workplace.

PISAFE attended the latest Mango Pre-Harvest meeting in Katherine earlier this month to help promote Work Health & Safety within the farming community. There was much discussion on how to improve WHS and also what impact there is if your workplace is not compliant.

If you'd like to take advantage of their free workshops or a one on one consultancy to ensure your workplace is compliant, then please contact PISAFE on 0889810055 or whsadmin@pitac.org.au



Attention accredited pregnancy testers: Changes to export pregnancy testing requirements

On 4 July 2013, the Department of Primary Industry and Fisheries (DPIF) received notification from the Australia Department of Agriculture, Fisheries and Forestry (DAFF) of changes to the identification and reporting of the pregnancy status of cattle sourced and presented for export. The Export Advisory Notice (attached) outlines these requirements. These changes took effect on **1 August 2013**.

The changes follow the review of the Australian Standards for the Export of Livestock (ASEL) and reports of discrepancies in the pregnancy status of cattle arriving at export yards, during the voyage and post arrival in the importing country that have been previously certified as not pregnant by accredited pregnancy testers.

Under the new requirements, exporters must provide pregnancy or spey declarations that clearly and individually identify any female cattle that are presented for export, their pregnancy status (slaughter/feeder and breeder) and stage of pregnancy (breeder) as well as the date that cattle were pregnancy tested or speyed.

This will require changes in procedures during the preparation of female cattle for export.

Accredited pregnancy testers will need to:

1. Ensure all animals pregnancy tested are individually identified.
2. A record of the pregnancy status for each individual animal is recorded which is linked to their individual identification.
3. The date that each individual animal is pregnancy tested is recorded.

This information will need to be provided to the exporter. Radio Frequency Identification Devices (RFIDs) and National Livestock Identification System (NLIS) readers should be used for this purpose.

Exporters have requested that a hard copy of this information is provided together with the vendor declaration.

DAFF have advised that if there is evidence that a pregnancy status declaration is inaccurate; all cattle identified in that declaration may be re-tested to confirm their pregnancy status and stage of pregnancy. This non-compliance will be reported to DPIF who may take action to revoke the accreditation for the individual pregnancy tester.

Therefore please ensure that your pregnancy testing is accurate and recommend that you consider gaining further training or experience prior to conducting the pregnancy testing procedure for export cattle if you have recently had cattle returned by exporters. The return of pregnant cattle to the property of origin has been an expensive and awkward exercise for both the cattle owner and pregnancy tester and can lead to serious welfare issues that endanger the whole live export program.



Top of the world delivers top training for FMD

Tennant Creek Livestock Biosecurity Officer, Greg Maguire jetted off to the top of the world recently in order to strengthen Northern Territory biosecurity capabilities.

Greg spent five days in the Federal Republic of Nepal to participate in Foot and Mouth Disease (FMD) real-time training. The training was designed to help participants investigate, recognise and report suspect cases of the disease, in order to strengthen the NT's early warning and response capacity.

The training provided Greg with a valuable opportunity to familiarise himself with a disease that could have significant economic and social effects on the Territory and in particular, the cattle industry.

Specifically it allowed him to gain an understanding of the impact that FMD can have on livestock producers in a different cultural setting and take part in an FMD investigation and diagnosis process.

He was also able to discuss the appropriate measures to manage and control the disease in the producers' herd or flock and community region.

It is vital that veterinarians and livestock biosecurity officers have these skills to assist with planning and conducting a successful response to any potential future outbreak and is part of the Australian emergency animal disease preparedness strategy.

Greg said it was an invaluable training exercise providing essential experience necessary to protect and minimize the impact of an FMD outbreak on the NT livestock industry.

The training program and travel was jointly funded by the department and the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF).

DAFF commissioned the Food and Agriculture Organisation of the United Nations to deliver the FMD training tailored for Australian animal health professionals and producers from FMD susceptible industries.

Specifically the course provided participants with real experience in identifying FMD, implementing biosecurity strategies and conducting initial disease investigations and, as a result, increase the likelihood of early detection of FMD in Australia as well as response capability.



Figure 1. Lesions on the tongue of a cow with foot and mouth disease



Figure 2. Typical dairy farm in Nepal



Round the Region



Above left: Malcolm Bennett and Grant Cutler, recording pongamia pod counts at Coastal Plains Research Station in early September, as well as rating pod load. Pongamia is a naturalised legume tree that is a potential biofuel, where the pods are harvested to extract their oil.

Above right: The Katherine Biosecurity and Product Integrity Team. Front: John Eccles and Greg Scott. Behind: Josh Haigh, Stuart Henson and newest team member Renae McLean.

Left: We would like to wish our favourite newlyweds all the best in their future together – Congratulations Trisha Cowley and Stuart Austin.



Live Cattle Exports via Darwin Port – SEPTEMBER 2013

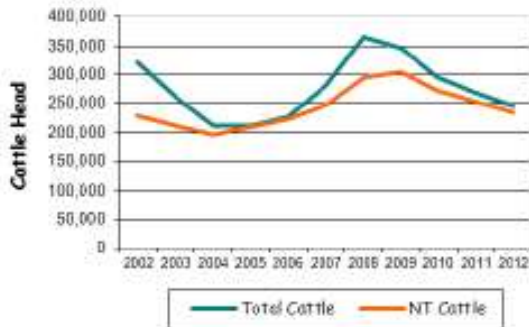
Please note that the "NT CATTLE" figures are NT cattle exported through the Port of Darwin only, some NT cattle are exported through interstate ports.

Destination	TOTAL CATTLE (including interstate)							# NT CATTLE						
	2011	2012	Last year 30/9/12	YTD 30/9/13	1-30 SEP	Previous Month	Difference	2011	2012	Last year 30/9/12	YTD 30/9/13	1-30 SEP	Previous Month	Difference
BRUNEI	4,163	4,639	3,612	4,043	1,009	950	+59	4,163	4,639	3,612	4,043	1,009	950	+59
INDONESIA	239,346	201,748	176,364	174,539	3,100	20,919	-17,819	223,526	189,994	164,630	149,175	2,150	15,919	-13,769
PHILIPPINES	16,068	27,324	13,862	19,987	2,456	2,175	+281	16,068	26,337	12,875	12,647	2,456	2,175	+281
SABAH	0	460	460	0	0	0	0	0	460	460	0	0	0	0
SARAWAK	1,197	0	0	800	0	800	-800	1,197	0	0	800	0	800	-800
W-MALAYSIA	2,535	10,018	10,018	14,952	0	5,417	-5,417	2,535	10,018	10,018	12,094	0	4,417	-4,417
VIETNAM	945	2,801	0	26,975	6,790	5,791	+999	945	2,801	0	24,385	6,200	3,791	+2,409
EGYPT	5,363	0	0	0	0	0	0	5,363	0	0	0	0	0	0
TOTAL	269,617	246,990	204,366	241,296	13,355	36,052	-22,697	253,797	234,249	191,595	203,144	11,815	28,052	-16,237
							+36,930							+11,549

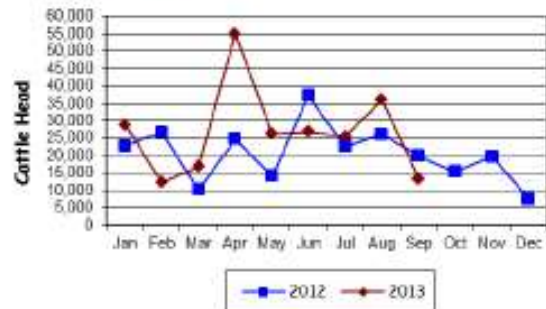
SEPTEMBER at a glance

- 13,355 head of cattle through the Port of Darwin during September, 22,697 less than August and 6,506 less than September last year.
- 2013 total cattle figures indicate 36,930 head more than last year. NT cattle 11,549 more than last year.

Live Cattle Exports thru the Port of Darwin (last 10 years)



TOTAL Live Cattle Exports thru Port of Darwin 2012 v 2013



NT Live Cattle Exports thru Port of Darwin 2012 v 2013



PREVIOUS 8 YEARS															
Total Cattle, Port of Darwin								NT Cattle, Port of Darwin							
2005	2006	2007	2008	2009	2010	2011	2012	2005	2006	2007	2008	2009	2010	2011	2012
206,701	227,646	283,046	369,944	347,314	265,005	269,617	246,990	39,437	223,407	247,981	286,536	304,818	273,748	253,797	234,249



OTHER LIVESTOCK EXPORTS VIA DARWIN PORT (includes NT and Interstate Stock)

Destination	Buffalo			Camels			Goats			Horses			Sheep			Pigs		
	2012	2013	1-30 SEP	2012	2013	1-30 SEP	2012	2013	1-30 SEP	2012	2013	1-30 SEP	2012	2013	1-30 SEP	2012	2013	1-30 SEP
BRUNEI	628	400	301	0	0	0	635	1080	730	0	0	0	0	0	0	0	0	0
INDONESIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHILIPPINES	0	199	0	0	0	0	0	0	0	15	0	0	692	0	0	0	0	0
W-MALAYSIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SABAH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SARAWAK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	628	599	301	0	0	0	635	1080	730	15	0	0	692	0	0	0	0	0

NATIONAL CATTLE PRICES - W/E 27/9/2013

HEAVY STEER									MEDIUM STEER								
Estimated dressed weight price (cents/kg)									Estimated dressed weight price (cents/kg)								
SALEYARDS				O.T.HOOKS					SALEYARDS				O.T.HOOKS				
NSW	QLD	SA	AV (Aust)	NSW	QLD	SA	AV (Aust)	NSW	QLD	SA	AV (Aust)	NSW	QLD	SA	AV (Aust)		
This week	332	322	356	331	312	305	Nq	327	This week	313	295	nq	308	304	295	Nq	323
Last week	351	316	Nq	329	310	305	Nq	326	Last week	336	265	326	331	302	295	Nq	322
Year ago	341	325	nq	335	333	313	nq	330	Year ago	335	318	352	324	320	300	Nq	325
MEDIUM COW									TRADE STEER								
Estimated dressed weight price (cents/kg)									Estimated dressed weight price (cents/kg)								
SALEYARDS				O.T.HOOKS					SALEYARDS				O.T.HOOKS				
NSW	QLD	SA	AV (Aust)	NSW	QLD	SA	AV (Aust)	NSW	QLD	SA	AV (Aust)	NSW	QLD	SA	AV (Aust)		
This week	276	256	264	269	249	245	265	259	This week	342	321	338	342	311	308	320	316
Last week	272	225	280	251	246	245	255	256	Last week	361	306	335	354	309	308	320	316
Year ago	275	261	266	263	274	271	265	273	Year ago	374	355	344	369	323	307	330	325
LIVE EXPORT QUOTES									<p>Prices courtesy of Meat & Livestock Australia</p>  <p>www.mla.com.au</p>								
Estimated live weight price (cents/kg)																	
LIGHT STEERS (260-360 kg)				LIGHT HEIFERS (260-360 kg)													
Darwin		Broome		Darwin		Broome											
This week	nq	nq	nq	nq	nq	nq	nq	nq									
Last week	nq	nq	nq	nq	nq	nq	nq	nq									
Year ago	190	nq	nq	170	nq	nq	nq	nq									

CURRENCY EXCHANGE RATES

Key Currencies 1AUD =	Current 2.10.2013	Previous month 1.9.2013	3 months ago 1.7.2013	1 Year ago 1.10.2012	Pre-devaluation 01.07.1997
Brunei Dollar	1.15719	1.11804	1.14343	1.25852	1.076
Indonesian Rupiah	10,791.2	9,676.94	9,042.38	9,900.09	1830
Philippine Peso	40.6095	39.5922	39.2771	43.1146	19.84
Malaysian Ringgit	3.03555	2.92041	2.88259	3.12290	1.9
Euro	0.69268	0.67272	0.70197	0.80688	N/A
US Dollar	0.93775	0.88931	.91328	1.03753	0.752

Prepared by the NT Department of Primary Industry & Fisheries

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Katherine Region Events Calendar

Event	Location	Date	
Territory NRM Annual Forum and Workshops	Darwin	5 November	events@territorynrm.org.au
NT ASH Awards Dinner	Katherine	6 December	http://www.ahsnt.com/

Please email with updates of events happening in your area: jodie.ward@nt.gov.au

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EXPRESSIONS OF INTEREST – 2014 RANGELANDS MANAGEMENT COURSE & STOCK COURSE

An interactive course developed for station staff to enhance their skills & knowledge in the area of land & production system management in the VRD/Katherine or Sturt Plateau regions.

What: 1½ -2 day course covering topics such as pasture species, dynamics and management | Weed management & poisonous plants | Animal nutrition | Biodiversity

Where: On-station

When: March-May – dates on request from stations

For more information or to organise a course on your station, please contact:

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