NEW ENGLAND
LIVESTOCK HEALTH AND PEST AUTHORITY
LHPA
Safeguarding Agriculture in NSW

NEW ENGLAND LHPA NEWS

MESSAGE FROM THE CHAIRMAN

Whilst we in New England are bracing ourselves for our normal cold winter, the current and earlier rainfall has afforded us the benefit of good grass cover and strong livestock.

Commodity prices are relatively strong and re-stockers are paying well for their renewal of animals.

Changes in staff and a restructure of positions at the Orange Head Office of the Livestock Health and Pest Authorities of NSW has allowed for a positive start to the new financial year ahead. A new CEO – Nigel Milan has been appointed, who is enthusiastic and ready with Ian Donges, the Chairman of the State Management Council, to start working for the benefit of LHPA ratepayers.

Director Charlie McCowen and myself have been able to have quite strong input into the State Policy Council meetings thus far and I'm sure that Director Bill O'Halloran who will take Charlie's place on this Committee will be putting in more than his two bob's worth!

Aerial and ground baiting of wild dogs and foxes has been keeping the staff of the New England LHPA occupied and we thank the volunteer members of these groups and associations very much for their input and co-operation. It would be much harder to achieve the outcome without them.

At the June Authority Meeting we were able to say thank you and goodbye to Harold Officer from the Walcha Office. Harold has been with the original Pastures Protection Board, Rural Lands Protection Board and now the LHPA for a total of 36 years. Harold has a quite busy retirement planned and we wish him well.

Looking forward to Spring!

Robyn Jackson
Chairman

STAFF CHANGES

Ranger Harold Officer - The Authority says goodbye to long serving Ranger Harold Officer who retired from the organisation in July after 36 years of service. Harold has been a well known Ranger in the Walcha area for many years and the Authority and ratepayers will miss his skills and experience.

Ranger Paul Berder - Paul is taking a well earned long service leave break until 2012. Other Authority staff will take over Paul's responsibilities during his absence. Customer Service staff will direct ratepayers to the appropriate staff member.

Customer Service Officer - We are pleased to welcome Wendy Fitzgerald who commenced as Customer Service Officer in the Armidale office in July. Wendy brings a wide range of skills and knowledge to the LHPA team.

LODGEMENT OF ANNUAL RETURN OF LAND & STOCK

It is a requirement of the Rural Lands Protection Act 1998 that ratepayers submit an annual return by August 31st each year. All landholders who have received the form must fill it in even if you don't carry any livestock. It is also extremely important all landholders who were sent forms fill out the appropriate details, even if stock on the property is not owned by the landholders. You will be able to lodge the form on-line. A User Reference and Password will be supplied on the Return to enable you to submit it on-line. On-line submission is the quickest and most efficient method of lodgement. If you do not have access to the internet, you can attend our offices and staff will help you lodge the return.

Rates are now overdue and accruing interest. If you would like to enter into a payment plan to clear the debt please contact

Debbie Cuneen on (02) 6732 1200

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CONSIDERING BUYING BOBBY CALVES?

The purchase of young dairy and dairy cross calves is a common practice. They usually come direct from dairy farms or through sale yards, are grown out and sold either as grass eaters or ready for slaughter.

While some people have managed good results purchasing calves, others have encountered serious problems, losing large numbers of calves to pneumonia and scouring (bacterial or viral). Another serious risk if buying heifer calves is the possibility of introducing Bovine Johne's Disease (BJD) into your herd if the heifers are kept for breeding.

Most calves from dairies are presented for sale between one and two weeks of age (the umbilical cord should be dry and shrivelled up) as the dairy will be keen to have them gone as soon as possible.

Any heifer calves sold at a sale yard must be accompanied by a Dairy BJD Assurance Score Declaration, and the assurance score displayed and announced before the calves are sold.

Calves from sale yards are the riskiest buy as they may have been without feed for some considerable time, have suffered the stress of transport to the sale yards and further stress of being in the yards. They then have the trip home, adaption to a new climate and new feed to contend with.

WHEN BUYING CALVES

DO

1. If possible purchase direct from the dairy rather than through sale yards.
2. Buy calves with a Dairy Assurance Score of 7 or higher. This is essential for heifer calves, preferred for male calves.
3. Always transport calves in a covered vehicle (eg. horse float, tarped trailer). Open trailers, sheep crates on utes and standard stock trucks are not suitable as they allow the calves to become chilled and even more susceptible to pneumonia.
4. Have clean dry bedding (hay or straw) in the transport vehicle.
5. Transport calves early in the day and provide a small feed as soon as possible on arrival home.
6. Keep new arrivals separate from other stock on your property in a clean, dry, sheltered shed or yard.
7. Have a separate "hospital" shed and move any sick or scouring calves to this as soon as problems are seen.

DON'T

1. Purchase calves if the umbilicus is still wet. Only buy calves that are at least a week old.
2. Buy calves that are scouring, have nasal discharge or look "off colour".
3. Buy calves if you do not know their Dairy Assurance Score.
4. Buy untagged calves. All cattle including calves must be tagged before leaving their property of origin.

JOHNE'S DISEASE EXCLUSION AREA SURVEY

The survey undertaken by the New England LHPA in March 2011 has resulted in the continuation of the OJD Exclusion Area.

67% of sheep producers surveyed responded and 96% of responses were in favour of retaining the Exclusion Area.

Thank you to all who took part in the survey. The result demonstrates strong support by our local sheep industry and an ongoing commitment to control Ovine Johne's disease.

WINTER & SPRING EWE MANAGEMENT 2011

For more information on pre lambing ewe management contact your NSW DPI Livestock Officer.
Chris Shands - Glen Innes Phone 6730 1928
or Jim Meckiff - Armidale Phone 6738 8505.

Graziers are in the middle of their busiest time of year with shearing and pre lamb management being undertaken. With expectations of higher than average lambing rates due to excellent ewe condition at joining, pre lamb ewe management will need to be planned and organised to ensure lamb survival rates are high. Graziers who scanned and identified "twinners" have a great opportunity to maximise the survival of twin lambs by giving those ewes the best opportunity to rear both lambs.

Twin lambs are most vulnerable to poor ewe nutrition in the last trimester of pregnancy. Ewes with a fat score < 3 and grazing low quality and quantity pasture will give birth to lambs with lower than optimum birth weights and therefore have low survival rates. Scanning and shearing operations present graziers with the opportunity to access condition or fat score of the mob and make decisions about allocating better pasture or supplementary feeding ewes with a lower fat score.

During the last 50 days of pregnancy the foetus undergoes most growth and development; regardless of the ewe condition and pasture available, energy and protein is directed to the developing foetuses. Stresses of shearing and adverse weather disrupt this development resulting in lighter birth weights. Twin bearing ewes should not be subjected to nutritional stresses prior to lambing as this can cause decreased energy intake and reserves resulting in pregnancy toxaemia.

Maintenance of body condition is best achieved through quality pasture however this is not always available and feeding a well balanced energy and protein supplement at least 3 weeks prior to lambing to meet the higher nutritional demands of multiple births may be needed.

All ewes with a fat score <2 need to be managed separately and are at a higher risk of mortality and reduced lamb survival. Adverse weather at lambing will affect these ewes and lambs the most.

The most important message to take into lambing is that lamb survival relies on ewe fat score and lamb birth weight. Optimise these factors and you are on the way to higher lamb survival which means more lambs weaned. For a typical fine wool - self replacing merino enterprise an increase in weaning from 83% to 91% equates to an additional $4.25/DSE not to mention the most efficient way to build up your flock numbers.

Oh and don't forget to choose the best lambing paddocks with shelter, feed and water, vaccinate, control predators and pray the weather holds out.

For additional information on some of the disease issues listed below you may need to deal with -
Contact your
District Veterinarians, Steve Eastwood - Armidale, 6772 2366
Andrew Biddle - Glen Innes, 6732 1200 and Lisa Martin - Tenterfield, 6736 1355.

1. PREGNANCY TOXAEMIA (TWIN LAMB DISEASE):

This is more likely to occur in cross bred ewes carrying twins but can affect all ewes – including fat ones!! During pregnancy there is a much higher requirement for energy and this requirement increases as lambing approaches. At the same time the lamb gets bigger the rumen has less space and has to work much harder. The ewe reaches a point where she is unable to eat enough in a day to satisfy the lamb and her own energy demands. Metabolism of the ewes fat reserves is a normal part of pregnancy however if these reserves are exhausted or being used too quickly the ewe will die.

Pregnancy toxaemia occurs in two ways:

a. Pregnancy toxaemia associated with a sudden cease in feeding. This is associated with management events (such as shearing) or another disease (such as foot abscess) where the ewe suddenly stops eating for a 24-48 hour period. This form is more likely to respond to immediate treatment with oral propylene glycol (eg Ceton, Ketol). To prevent this, avoid holding ewes off feed for longer than 12 hours.

b. Pregnancy toxaemia associated with a prolonged decline in condition. Common with ewes joined in good to fat condition and allowed to slowly lose condition over the term of the pregnancy. The ewe copes for several weeks until her fat reserves are used up and she collapses. In most cases the ewe will not respond to any treatment and will die. If this is occurring you MUST provide high energy, additional feed to the rest of the ewe mob to prevent further losses.

A word of caution with the green pick about. Often the green feed is young and provides very little energy. In addition ewes also waste more energy chasing the pick leading to greater energy loss. Seriously consider supplementary feeding several weeks prior to lambing and take into account changes in weather and higher energy demands post shearing.

2. FOOT PROBLEMS:

Given the wet start to winter the likelihood of ewes getting foot abscess this season is high. Foot abscess is common in heavy ewes grazing wet paddocks. Infection between the toes makes its way into the foot bone and causes significant pain. This is enough for ewes to stop walking and in some cases even standing. When this happens they stop eating and this will result in pregnancy toxaemia.

If you experience foot abscess in your ewe mob, you will need to paddock monitor the ewes closely. Consider carrying a long acting antibiotic with you and spray mark those that have been treated. If you have a drier paddock consider moving the mob into it (prior to lambing) but be aware of the potential change in pasture quality. Foot bathing the mob with Zinc Sulphate may help. Contact your private vet or district vet for advice.

3. VACCINATIONS:

Vaccinate all ewes four to six weeks before lambing with a 6 in 1 vaccine. Consider doing this at shearing. To all ewes give a booster of Eryvac four to six weeks before lambing if you have a history of lamb (erysipelas) arthritis on the property. If this is the first time you have used Eryvac and the ewes didn't receive the first vaccination at joining, then do it now. Give the second vaccination 4 weeks prior to lambing.

4. PARASITES:

Give an effective broad spectrum drench to ewes to eliminate scour worms pre-lambing. Consider using Zolvix or a potent ML such as abamectin or moxidectin. If shearing and lice is an issue then use an effective backliner. Don't dip off shears in July/August unless you want dead sheep. **If you have a known fluke problem don't forget the fluke drench.**

FOX NEWS

With lamb prices the way they are it is even more important to carry out fox control. The cost of one lamb saved will buy a lot of fox baits. Fox control is best carried out in groups of properties baiting together at the same time, baiting programs such as this can increase lambing percentages by up to 30%. In the New England area fox numbers are between 4 to 7 foxes per sq kilometre and adult foxes eat between 300 and 450g of food per day. Foxes prey on small native animals, birds, reptiles and amphibians and they also eat fruits and vegetables. Foxes also spread weeds such as Chilean Needle Grass, St John's Wort, Blackberries and Briars. Foxes also carry and spread diseases such as distemper and mange.

CONTACT YOUR NEIGHBOURS - FORM A FOX CONTROL GROUP AND CONTACT YOUR HELPFUL LHPA RANGER.

RABBIT CONTROL - TENTERFIELD NELHPA

Rabbits are Australia's most widespread and destructive environmental and agricultural vertebrate pest. Impact on agricultural production is greatest where pasture production is low and rabbits increase to high densities and compete with stock. Overgrazing by rabbits removes plant cover and contributes to soil erosion.

The reduction of rabbits to lower numbers has been mostly due to a combination of myxomatosis, rabbit haemorrhagic disease virus (calicivirus), strategic 1080 poison use and warren ripping. Come along to a Field Day and learn more about these and other effective control measures.

The Tenterfield office of the NELHPA in conjunction with Granite Borders Landcare has been conducting a series of Rabbit Control Field Days in the region. Locations at Steinbrook, Bolivia and Mingoola have been covered with anticipated days at Sunnyside, Deepwater, Torrington and Bonshaw.

Contact the Tenterfield office of NELHPA on (02) 6736 1355.

WEEDS

Weeds season is only around the corner. Unfortunately the satisfactory pastoral conditions we have experienced will again benefit most noxious weeds within the Authority.

The New England LHPA is committed to the control and suppression of weeds on lands under our control. Targeted weeds will include, but not limited to St John's Wort, Chilean Needle Grass, Mother of Millions, Blackberry/Briars, Box Thorn, Lantana, Golden Dodder, Hemlock, Patterson's Curse, African Lovegrass where declared noxious and Tropical Soda Apple. As a pro-active approach we once again request landholders assistance by notifying the Authority of noxious weeds you may observe on the Travelling Stock Reserves. In order to stop the spread we are particularly concerned with new incursions and noxious weeds on high risk pathways.

The majority of fenced in TSRs managed by the NE LHPA have been successfully tendered for as annual grazing permits (AGP's).

A requirement of the AGP is for the relevant permit holders to control the weeds. Rangers will be inspecting these AGP paddocks to ensure this requirement is complied with.

HENDRA VIRUS VACCINE ON ITS WAY

CSIRO scientists have shown that a new experimental vaccine helps to protect horses against the deadly Hendra virus. Dr Deborah Middleton, from CSIRO's Australian Animal Health Laboratory, announced the successful progress to develop the vaccine, saying that trials so far have shown that it prevents the infection of horses with Hendra virus.

"A horse vaccine is crucial to breaking the cycle of Hendra virus transmission from flying foxes to horses and then to people, as it prevents both the horse developing the disease and passing it on," Dr Middleton said.

Since it first appeared in 1994, the deadly Hendra virus has been confirmed in 40 horses and seven humans. Five of the 14 known outbreaks have spread to people; all horses either died or were destroyed and four of the people died. [**Editor's note** These figures do not include the current 2011 outbreaks in Queensland and New South Wales].

Hendra virus is carried and transmitted by flying foxes, especially in the northern half of Australia. As there is currently no specific treatment for Hendra, it is extremely important to implement the following simple preventive measures in risk-prone areas:

- It is strongly advised that you avoid contact with sick horses and their blood and body fluids until a veterinarian has excluded Hendra virus infection as the cause of illness.
- If contact with a sick horse is absolutely unavoidable, you should seek advice from your veterinarian about appropriate personal protective equipment such as gloves, protective eyewear and a face mask.
- If you have had contact with sick horses, shower with soap, wash your hair and put on clean clothes and footwear before handling other horses.
- Remove any clothing contaminated with body fluids from a sick horse carefully to ensure there is no contact with your facial area, particularly your eyes, mouth and nose.
- After handling any horse, wash your hands with soap and water and dry, or use hand wipes and waterless hand hygiene solution.
- Place horse feed and water containers under cover if possible.
- Do not place horse feed and water containers under trees, particularly if flying foxes are attracted to those trees.
- Do not use feed that might be attractive to flying foxes if they are known to be in the area. Fruit and vegetables (eg. apples, carrots) or anything sweet (eg. molasses) may attract flying foxes.
- If possible, remove horses from paddocks where flowering/fruiting trees have resulted in a temporary surge in flying fox numbers. Return the horses after the trees have stopped flowering/fruiting.
- If it is not possible to remove horses from paddocks, try to temporarily remove your horses during times of peak flying fox activity (usually at dusk and during the night).
- Keep any sick horse isolated from other horses, people and animals until you have obtained a veterinarian's opinion.
- Do not allow visiting horse practitioners (farriers, etc.) to work on sick horses. They should only work on healthy horses. If there is more than one horse on your property, handle unaffected horses first and then only handle sick horses after taking appropriate precautions.
- Make sure gear exposed to any body fluids from horses is cleaned and disinfected before it is used on another horse. This includes things like halters, lead ropes and twitches. Talk to your vet about cleaning agents and disinfectants to use.
- Seek veterinary advice before bringing any sick horse onto your property.
- Do not take sick horses to events such as competitions or pony club.

DO YOU HAVE A RABBIT PROBLEM?

During the early months of 2011 the rabbit population within the Authority area remained at a static level. The excellent grass cover hid the actual population but now that winter has started and we have lost this cover there is a lot higher rabbit population on most holdings.

Winter is an excellent time to carry out all forms of control, poisoning with Pindone carrots and the use of Calicivirus works well because rabbits are not breeding and there is also a lack of available food in the form of green grass.

Landholders are reminded that it is their responsibility to control rabbits on their holdings. If you require advice or assistance on different forms of control please contact your Local Office and speak to the Ranger for your area.

KEEP OUT UNDESIRABLE SHEEP WORMS

Steven Love

Veterinarian, State Coordinator-Internal Parasites

Industry & Investment NSW - Primary Industries, Armidale NSW

There are two ways to get drench resistant worms: breed your own, or buy someone else's. The aim of a quarantine drench is to keep out undesirables, whether drench resistant worms, or worm species you don't already have on your farm.

It's time to re-think the quarantine drench, as resistance has marched on.

Until recently, this was the current recommendation: treat all imported sheep with four unrelated drench actives.

But the latest information is that there are NO drench actives or products on the market in Australia – single active drenches or multi-active combinations – that are unscathed when it comes to resistance. The only exception is 'Zolvix' (monepantel), which is from a brand new drench group – the 'AADs' - from Novartis. Another one which we may get some time – New Zealand already has it – is 'Startect' – which is a combination product (derquantel + abamectin) from Pfizer. The derquantel active is a member of another brand new drench group – the 'spiroindoles'.

So, with resistance the way it is, it is now possible to purchase sheep which have worms which will not be killed by a 4-way or other treatments, unless one of the actives is monepantel.

This is because, in addition to combination resistance to 2-way combos (i.e. benzimidazole (BZ)+levamisole (LEV), which first appeared over 20 years ago, we also have resistance to triple combinations (macrocyclic lactone (ML, mectin)+BZ+LEV) and now even to a 4-way combination. As far as we know, most of this 3- and 4-way resistance is in barber's pole worm in the summer rainfall zone of north eastern NSW and south eastern Queensland.

We don't know how common 4-way resistance is, but you need to consider the risk.

The optimal quarantine drench now is four unrelated actives, with one being monepantel (Zolvix). This may seem like overkill, especially as Zolvix as far as we know kills all known resistant worms, but this will change in time, and you don't want to be caught with your pants down.

Having decided on the drench actives to use, you can give them sequentially – up and down the race a number of times – using a choice of single or multi-active drenches. The multi-active drenches can be off the shelf products, or an on-farm mix, if the product labels allow for this.

After treatment, the sheep need to be held somewhere for 3-4 days to allow for existing worm eggs in the gut to pass out. You don't want these worm eggs – possibly from resistant worms that came with the sheep - to develop and hatch into larvae for pickup later by sheep on the farm. So, during these 3-4 days, keep them in a yard and feed and water them, or hold them on a paddock which won't have stock (sheep, goats, alpaca) on them for at least 3 months (summer) or 6 months (winter).

After the clean out, the sheep can go out of quarantine onto the farm, preferably a wormy paddock. This is an added precaution. The idea is to get home-grown worms to 'dilute' any resistant worms that might have survived the quarantine treatment. To be doubly sure, you can do a worm egg count – a so-called "10-day DrenchCheck" – 7 to 14 days after the quarantine drench, to make sure it did the trick.

This whole business about quarantine procedures – not just for worms, but also lice and other diseases – might seem like a whole lot of work and expense – but consider the cost if you don't do it properly.

Talk to an expert adviser about this and also go to the NSW DPI (sheep health section) and WormBoss websites for more information.

Lastly - get your thinking caps on cattle people; drench resistance is not coming your way, it is already here.

Stephen Love
Veterinarian (N2380), State Coordinator-Internal Parasites
Industry & Investment NSW University of New England
Armidale NSW 2351
T: (02) 6738 8519

KETOSIS IN CATTLE (PREGNANCY TOXAEMIA)

The wet June has meant that in some parts of the Authority there is a green pick available that normally wouldn't be there at this time of year.

Care must be taken with pregnant cows grazing the green pick (particularly those heavy in calf) as there is very little energy available. Being green, the cows are inclined to chase the pick and this inevitably leads to a marked energy deficit and can result in ketosis (or pregnancy toxaemia). We are already seeing this in the western part of the Authority. To avoid this you may need to provide an alternate energy source such as good quality hay, grains or whole cottonseed.

Talk to your local LHPA office or beef livestock officer for more information.

WINTER, STOCK FEEDING AND BIOSECURITY

With better pasture available in many areas of the Authority compared to recent years, the need for supplementary winter feed may be lower this year. However those producers intending to purchase feed should remain on guard for weed seeds, pest infestations, chemical residues, moisture, mould and physical contaminants.

Increased water flows such as were experienced in several parts of the Authority this year, may often distribute weed seeds. Weed seeds can also be carried on or inside animals, to be deposited later elsewhere, harming pasture production and may present a toxicity and poisoning problem. For this reason, it is important to maintain strict quarantine and inspection controls on all new livestock entering a property. Isolating new livestock for about ten days, and inspecting both the animals and their faeces, will help prevent the potential spread of disease to existing stock. Quarantine treatment of new stock introductions for both external and internal parasites can also minimize the introduction of resistant infestations to your property.

Some animals tolerate the cold better than others, but many will huddle together for warmth, increasing the chance of transfer of external parasites like lice or ticks. Some animal classes like the very young or heavily pregnant will also have higher feed intake requirements in cold weather than other groups. It is a good idea to inspect livestock more often, ensure they have access to nutritious feed and are kept in good health, thus raising their ability to withstand winter diseases.

Please remember that feeding Restricted Animal Material (RAM) to ruminants is illegal in Australia as it is linked to the spread of bovine spongiform encephalopathy (BSE or Mad Cow disease). Ruminants include cattle, sheep, goats and deer. RAM is feedstuffs that contain meat, meat and bone meal, poultry offal meal, feather meal, fishmeal or any other animal meals or manures.

Swill feeding of pigs is also illegal in Australia. The feeding of any foodstuffs that contains animal matter or has had contact with meat, bones, offal, eggs and fish is illegal. Also banned are any food scraps containing leftovers from restaurants, hospitals, supermarkets, bakeries and domestic households that contain the listed foodstuffs. This is a dangerous practice which has led to the spread of diseases such as foot and mouth disease in many countries. If in doubt about any alternative type foodstuff, leave it out and don't feed it to pigs or ruminant animals.

Insist on a Vendor Declaration Form and Animal Health Statement to maintain traceability and ensure the quality of the livestock you are purchasing and the product you are producing.

More information on water and feed biosecurity, as well as Animal Health Statements, are available from www.farmbiosecurity.com.au. Feed and Fodder Vendor Declarations are available from www.mla.com.au.

Field staff recently undertook biosecurity training for responding to an emergency animal disease.

MAKE YOUR NEXT BULL PURCHASE COUNT

Jason Siddell
Industry and Investment (I&I) District Beef Livestock Officer based at the Glen Innes Research and Advisory Station.

With the bull buying season now upon us and the spring joining season fast approaching, it is time if you haven't already done so to assess your breeding goals. Without a sound knowledge of the product you are trying to produce and hence the markets you are targeting i.e. domestic, Japanese/Korean long fed it is difficult to make an assessment of the traits of economic importance that are relevant to your beef business.

Whether you are operating a straight breeding, crossbreeding or composite breeding program, once you have established your breeding goals i.e. if your customer feedback indicates that your steers tend to be too light, with excessive fat cover, then you need to select bulls with greater growth potential and increased leanness. By establishing your breeding goals you will be in a better position to choose the most appropriate bulls to best achieve progress towards improved profitability in your herd.

Currently beef producers have a number of genetic and genomic evaluation tools at their disposal to rank potential candidate animals for selection i.e. BREEDPLAN (estimated breeding values (EBVs) and selection indexes) and DNA marker technology (molecular value predictions (MVPs)). These tools have all been designed to assist in you in sire selection and should all be utilised in conjunction with selection for structural soundness, temperament and 'maturity patterns' using visual assessment and skilled judgement.

Many producers may feel that raw data is easier to understand but keep in mind these phenotypic measurements need to be adjusted for known non-genetic influences i.e. environment and management, and this is the role of BREEDPLAN. Many MVP traits will also be incorporated into BREEDPLAN once validation within Australia has occurred.

The decision you make today could still be affecting your herd in the next ten years, so utilise all the selection tools at your disposal to buy the right bull.

Bull selection checklist –

1. Buy registered performance recorded bulls.
2. Select bulls which will complement or enhance the traits which are essential to meeting your breeding goals and hence business profitability using selection tools available and visual assessment.
3. Ideally source bulls pre-vaccinated for diseases of relevance to your district i.e. clostridial diseases (5 in 1 or 7 in 1), vibriosis, three-day sickness and treated for internal and external parasites (or treat on property arrival). Bulls should be tested and vaccinated for Pestivirus as well.
4. Ensure bulls are evaluated using Bull Breeding Soundness Evaluation (BBSE) which includes structural soundness, reproductive soundness, semen quality and serving ability or by another credible system.

HORN/POLL GENE MARKER TEST

Trevor Rose, Livestock Officer
Beef Products, Casino

Most producers would be well aware of the problems associated with handling horned cattle. Bruising from horns is estimated to cost the industry approximately $22.5 million dollars annually in downgraded or discarded meat. In addition there are also losses relating to hide damage and other livestock injuries. Horns are also a source of potential injuries to handlers, especially during yarding. Horned animals will often exhibit dominant behaviour towards polled animals in yards, feedlots and during transport.

Many producers use dehorning to reduce these problems, but there are some drawbacks to this practice. Firstly, animal welfare groups are increasingly scrutinising our industry. Secondly, dehorning is time consuming and carries the risk of wound infection and temporary setback. All in all, it is a fairly unpleasant job and I have never met a producer that says they enjoy dehorning!

To avoid dehorning, some producers opt to breed polled cattle and may choose to buy a polled bull. Some breeds such as Angus, Red Angus and Red Poll consider themselves 100% polled. All cattle in these breeds carry 2 copies of the poll gene.

However some other breeds, such as Brahman or Limousin, have both horned and polled types. Animals from these breeds may still carry a copy of the horn gene and so producers often opt to select and use polled bulls, to reduce the number of horned animals in their herd.

An important point is that, in breeds that have both forms, even though a bull may appear polled (a polled phenotype) he may be one of two genotypes. A polled bull carrying 2 poll genes is referred to as homozygous polled (sometimes referred to as a true poll). A polled bull carrying 1 poll gene and 1 horn gene is referred to as heterozygous polled.

A homozygous polled bull or a heterozygous polled bull may both appear to be polled. However, the homozygous will throw predominantly polled calves while the heterozygous will throw a higher proportion of horned calves. Using a homozygous bull will result in the desirable polled gene dominating the herd quicker, than if heterozygous polled bulls are used.

Note also that in some breeds, animals may also exhibit scurs. These are incompletely developed horns not attached to the skull. Scurs are controlled by a different gene to the polled condition. It appears that only animals heterozygous for polled/horned can express the scurs gene.

Confused? Let's look at a worked example to help clarify things. Let's assume a Brahman breeder has 100 horned cows (homozygous horned HH type) and he decides to breed polled cattle by introducing polled Brahman bulls. Progeny are retained and again mated to polled bulls.

Using Heterozygous polled bulls, after 2 generations you would expect 23 polls; 34 scurred and 43 horned animals.

But if the bulls used were Homozygous polled bulls you would expect 60 polls; 34 scurred; 6 horned animals.

This example clearly demonstrates that using homozygous (true polled bulls) allows the polled condition to enter the herd more quickly. By using homozygous polled bulls, in 2 generations you could be dealing with only 6 horned animals versus 43 if heterozygous bulls were used. Remember however that proportions of polled, scurred and horned animals vary by breed, and actual results may vary depending on breed and population.

Work undertaken by the Beef CRC and Qld University has resulted in a new test that can assist producers to select "true polled bulls" for their breeding enterprise. The test works not only in cattle of British or European descent but also in Zebu and Sanga (African) cattle, and has been developed using Australian herds. The test is approximately 90% accurate (but varies by breed due to differences in proportions of polled, scurred and horned animals) and validation is ongoing using larger populations of animals.

To take a test you need to provide a sample of DNA to the lab at the University of Queensland. The sample can be a hair sample with 30 or 40 follicles from the tail, a blood sample or a semen sample. At the moment the test costs $33 or cheaper if done through breed societies.

Further Reading and more information
http://www.beefcrc.com.au/PolledGeneMarkerTest

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Figure 1 - "It's all in the genes"

GRASS TETANY IN BEEF CATTLE

Grass tetany is a disease in cattle that occurs due to low magnesium levels. Symptoms include excitement, bellowing, staggering or they may be found dead suddenly.

There are many causes of grass tetany. Typically on the Northern Tablelands we see grass tetany when there is a sudden change to cold weather which can stop the uptake of minerals by the pasture. This has a flow on effect by creating a low level of magnesium in the body.

Cattle affected are often older cows with calves at foot. Calving and lactating cows have an increased requirement for magnesium. The older the cows get, the less able they are to access the magnesium that is 'locked up' in their bones. Despite older cows being the main culprits several steers died last year associated with grazing green, improved pasture combined with a cold snap.

If grass tetany is diagnosed on your property or you have a history of deaths due to grass tetany then preventative use of magnesium supplements is recommended. Causmag is the supplement of choice, is available from rural resellers and can be provided at 60g/head/day mixed in hay.

For further information please contact your district vet, local vet or download the grass tetany primefacts available on line at: ***http://www.dpi.nsw.gov.au/agriculture/livestock/health/specific/cattle***