



# VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

MAY 09



Above the winning team - Alice, Rowan, Rachel and Emma.

Rowan and Rachel Baker are over the moon about winning the regional Dairy Industry Award for Sharemilker of the Year. Rachel and Rowan who sharemilk for Peter and Denise Ritchie at Shannon say there are no secrets to their success. "Do the basics well and get the timing right". Constant monitoring of pasture quantity and quality, production, cash flow and young stock are key indicators. The goal is to "farm for trends rather than worry over all the daily noise".

Their 'team' approach is helped by a clear understanding of each other's expectations. They maintain regular contact with the accountant and their bankers and expect their vet to keep them up-to-date with current developments in building a healthy herd. Their efficiency in animal health is reflected in a budgeted 13 cents per kgMS for animal health, 78% of which is for preventative measures.

The competition gave them the opportunity to go through their business with a fine tooth comb. The competition sets deadlines to be achieved. Positive critical feedback from the judges was also well received. Meeting people and building networks proved an added benefit.

Totally Vets congratulate Rowan, Rachel, Alice and Emma and wish them every success at the national finals on May 16<sup>th</sup>.

## Something new

It doesn't seem so long since we were advised to learn to live with anthelmintic drench resistance (AR) and adopt more sustainable parasite management. More recently a new class of worm drench was discovered and will be released on the New Zealand market in May 2009 as Zolvix by Novartis Animal Health.

Twenty-five years have elapsed since the avermectins were introduced. This time lapse perhaps highlights the technical complexity of drug development and the commercial realities governing the necessary and risky investment.

Monepantel is the first anthelmintic from the recently discovered amino acetonitrile derivatives (AAD) class of drug to be developed for use in sheep. Research in NZ and overseas has demonstrated that Zolvix will be effective against both mature and larval stages of a wide range of worms.

What lessons have we learnt from the fear of the loss of effective existing drenches? Within

two to three years of avermectin's introduction to the market there were reports of AR to this drench. Significant AR was reached within 25 years. Can we manage a new drench to last longer?

The timing of the release of Zolvix coincides with increasing AR and subsequent efforts to develop sustainable parasite control measures. Monepantel is being introduced into an environment that has better knowledge than when the avermectins were introduced 25 years ago.

Suppressive drenching is costly, unnecessary and counter productive. In NZ we understand the need to maintain a population of susceptible worms (refugia), and have developed research-backed parasite control strategies that reduce selection pressure for AR.

It is vital that we all capture the opportunities of a new drench for the benefits of the sheep industry and hopefully other ruminants. Totally Vets will be bringing you more on how and where the new drench can add to your productivity.





# Totally Vets current stock health

Cooler temperatures have seen grass minimum temperatures falling and along with them Facial Eczema spore counts. FE has been a bit of a silent and erratic foe this year. There have been a number of clinical cases. Keep monitoring FE spore counts at [www.totallyvets.co.nz](http://www.totallyvets.co.nz)

Continue to monitor young replacement stock growth rates. Someone once said the best dairy heifer graziers are beef finishers. They know how to put condition on!

Prescription and supply of veterinary medicines require an authorisation from a veterinarian. This is a statutory requirement. It's a great opportunity to revisit the medicines you have been using and reviewing your best options.



## HA HA From Paul

A little girl asks, "Mum, can I take the dog for a walk?"

Mum replies "No, because she is on heat."

"What does that mean?" asked the child.

"Go and ask your father. He's in the garage."

The little girl goes out to the garage and says "Dad, can I take Lulu for a walk? I asked Mum, but she said the dog was on the heat, and to come and ask you."

He took a rag, soaked it in petrol, and scrubbed the dog's backside with it to disguise the scent, and said "OK, you can go now, but keep Lulu on the leash and only go once around the block."

The little girl left and returned a few minutes later with no dog on the leash.

Surprised, Dad asked "Where's Lulu?"

The little girl said "She ran out of petrol about halfway round the block, so another dog is pushing her home."



## Change your rubber liners regularly

How often do you change your milking machine liners (inflations)? If the answer is once or twice yearly, then most likely that won't be enough.

Liners are designed to flex and squeeze the teat during each pulsation. Liners play a vital role in massaging the teat during the milking process. Milk is drawn from the teat under vacuum, but this action has a side effect of also sucking blood and fluid into the teat tissue, causing congestion of the teat. Rubber liners relieve this congestion by collapsing back against the teat every time the vacuum is released, about 60 times per minute throughout milking.

Liners are one of the hardest working parts of the milking machine, each one stretching and collapsing 5,000 to 10,000 times a day. Once rubber liners have been used to milk **between 2,000 and 2,500 cows**, the changes in the elasticity and surface of the rubber are sufficient enough to reduce the speed and completeness of milking, to increase teat end damage, and to increase the risk of mastitis.

**The most reliable method to detect liner deterioration is to count the number of milkings for each liner.** For example, for a 300-cow herd being milked twice daily through a 30 aside herring bone shed, the liners need to be changed every 100-125 days. When liners are being changed, estimate when the next 2,500 cow milkings will have occurred, and mark the date to replace the liners on your calendar.

If the liners are not changed regularly, the massaging effect of the teats is reduced and, hence, teat health is compromised. Mastitis could also be spreading from cow to cow at milking. If you would like help in calculating the life span of your liners, please contact one of Totally Vets dairy vets.

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## Dairy

- Check "light" cows that fail to gain weight for FE, Johnes, minerals, liver abscesses, etc
- Lepto vaccination for all classes of stock
- Carry out mineral tests on cull cow livers
- Condition score all classes of stock
- Treat rising 1's with a drench that handles Ostertagia
- The winter feed budget should be in place
- Your dry-off date should have been determined

- Leave lice treatments as late as possible.
- Dehorn those calves that somehow snuck through
- Plan "spring" with Totally Vets now
- Take a break

## Sheep and Beef

- Liver sample dry beef cows for trace mineral levels
- Trichostrongyles are still about and can be as devastating as barber's pole

## Equine

- Microchipping and branding young horses are grand opportunities to initiate a vaccination schedule for your horse
- As with all other animals grazing pasture, welcome autumn rains bring unwelcome parasites. Drenching with Parade Equine Gel or Genesis Horse Wormer is likely to be a good move at present. (Registered pursuant to the ACVM Act 1997 No A9029 and No A7459).

# Product return policy

Totally Vets have always been very lenient when it comes to return of product. Many of the products we deal in are perishable, require specific storage and handling conditions or are used in less than savoury conditions. The following product return policy applies to products sold by Totally Vets Ltd to its clients.

1. Non-refrigerated goods supplied by Totally Vets Ltd may be returned for credit only on agreement from the Practice and only if items are in their original condition and packaging and returned within 14 days of purchase
2. Refrigerated goods supplied by Totally Vets Ltd are non-refundable, no exceptions
3. Variations to Totally Vets' product return policy may occur from time to time, and Totally Vets Ltd will notify the customer by way of invoice - receipt of which shall be deemed to be acceptance by the client
4. Totally Vets Ltd reserves the right to withhold further provision of products where there is any outstanding amount due by the customer to TVL
5. Prices include GST unless otherwise stated
6. Prices quoted for products may be adjusted from time to time, and the client hereby agrees to pay any such adjusted price, e.g. in instances where cost of goods change, government surcharges change, errors or omissions by Totally Vets Ltd or its representatives.

If in doubt mention your concerns to our reception team who will make every endeavour to accommodate your needs.

# Bovine virus diarrhoea (BVD) surveillance



BVD is a common viral disease of cattle in NZ. The disease has many signs ranging from ill-thrift in calves to infertility, increased somatic cell counts and production losses in adult cattle.

Totally Vets are investigating the BVD status of herds we service. This autumn we are offering you a Free BVD Bulk Milk Antibody Test. This test gives an indication of whether

the herd is likely to have an active BVD infection, what the level of herd immunity to BVD is and the risk which BVD poses to your herd.

Early results indicate over 50% of herds have high antibody levels. These herds have had significant exposure to BVD virus and it is highly likely they are experiencing reproductive failure and disease in young stock.

**To take part in this survey, simply provide us with a small sample of milk from your vat.**

# DCT still a good investment

Consider the long-term effects before crossing dry cow therapy (DCT) from the animal health budget.

Drying-off is a grand opportunity to clean up mastitis and 'reset the clock' on the herd's udder health. Up to two thirds of mastitis at calving is caused by sub-clinical infections carried over through the dry period.

Failure to use DCT can see Bulk Tank Somatic Cell Counts (BTSCC) rise the following season, with a manageable 10% becoming 20% through the year.

Clinical mastitis can cost up to \$150 per cow. Lost production of 2% of milk solids per 100,000 rise in BTSCC above 150,000 is an even greater cost.

If buying cows, ask for DCT to be completed as part of the contract. Existing herd members are at high risk of picking up sub clinical infection from bought in cows.

**If you haven't already done so, plan your drying-off strategy with Totally Vets.**



## Mineral testing in cattle

Going into winter is a good time to test a herd's mineral status. Typically, this testing would cover off selenium, copper and vitamin B12 levels. There are essentially three options available for doing this test, each with their own advantages and disadvantages.

### BLOOD TESTS

Testing mineral status on blood samples is quick and relatively cheap. This method does have some limitations when it comes to copper. Blood copper levels give an indication of the current copper status, but are not particularly useful at assessing copper reserves into the future. The liver is the storage organ for copper, so liver analysis will give more information about the reserves.

### LIVER TESTING ON CULL COWS

All that is required is a mineral check form (available from Totally Vets) to be sent with the driver delivering culls to the works. It is important that the line of cull cows be indicative of the rest of the herd. If these animals have had a long convalescence, are carry over cows or have been grazing a separate area of the farm, such as one which did not have selenium prills added, they may not be good indicators of the rest of the herd.

### LIVER TESTING ON LIVE ANIMALS

This involves a small incision on the right-hand side of the cow into which a sterile tube is passed and a small sample of liver collected. This method is known as a liver biopsy and requires a little more skill than simply collecting blood. Liver biopsies are therefore slightly more expensive, but they do circumvent the limitations of cull cow testing.

Your vet would be happy to discuss the best way of doing this job to suit your own requirements, so contact us at either branch of Totally Vets with any questions. **Craig D.**

## What's the goss?

On the 20th March about 320 people attended the Manawatu, Rangitikei and Horowhenua Dairy Industry Awards. Totally Vets clients were well represented among the winners:

Sharemilker of the year: **Rowan and Rachel Baker** of Shannon. Second, **Jack Zwart and Teri Standish-Zwart** of Bunnythorpe, and third, **Kyle and Virginia Marshall** of Rongotea.

Farm Manager of the year: **Josh Dondertman** of Waituna West.

Second, **Matt Johnson** and third **Kyle Falconer**, both of Moutoa.

Dairy Trainee of the year: **Luke Cosgrove** of Sanson.

### SHAREMILKER MERIT AWARDS:

Naylor Lawrence & Assoc Financial & Farm Records Award: **Rowan and Rachel Baker.**

Honda ATV Safety Award: **Jason and Ann-Maree McEwan** of Kairanga.

DairyNZ First Time Entrant Award: **Shayne and Rochelle Hutchinson** of Kairanga.

Ecolab Farm Dairy Hygiene Award: **Jason and Ann-Maree McEwan.**

# Cancer eye

The typical cancer eye of cattle is a squamous cell carcinoma, which often is highly malignant, i.e. it readily spreads to or invades surrounding tissues. Cattle with unpigmented eyelids appear to be more susceptible.

Cancer eye is easily confused with other eye conditions such as trauma (due to injury or grass seeds) and pink-eye. Therefore, it is recommended to have any cow with a "sore eye" examined by a veterinarian.

In case of cancer, surgery is not recommended if there is any evidence of spread. Slaughter is not an option either, as these animals invariably are condemned. Cancer eye cattle will be condemned when:

- There is evidence of spread from the eye to any lymph node or other structure
- The condition has involved the bony structures of the head, together with inflammation, a pussy discharge or necrosis
- The carcass condition is poor or there is evidence of toxic absorption, regardless of the size of the eye lesion.

Writing out a "Works Certificate" does not guarantee that the carcass will pass meat inspection.

Regular inspection of all cows and culling of early cases is the best approach to dealing with cancer eye. Affected cattle require prompt veterinary attention, and should not be kept in the herd to finish their lactation. If surgery is deemed appropriate, then records must be kept and the animal checked on a regular basis. Removal of the third eyelid (which is most often affected in Friesian cows in New Zealand) or the entire eye is no guarantee that all the cancer tissue/cells are being eliminated. Often the cancer recurs and is often of a more aggressive nature. Also, cancer eye has a reasonably high heritability and any treatment or surgery should therefore be approached with caution.

## In calf - the words we like to hear!

Pregnancy testing is mostly done and those two words 'in calf' should hopefully be resounding in your ears! Recently we began a series of articles through the newsletter based around the InCalf programme. With most of the pregnancy testing now completed, it is timely to think about why we got the mating results we did.

With DairyNZ's InCalf programme now well bedded in, InCalf aims to start delivering on its vision -

"to enable dairy farmers to achieve measured improvement in herd reproductive performance."

InCalf offers farmers and their advisors a logical stepwise process along with a set of resources and tools to:

- Assess a herd's current performance - where am I now?
- Identify options for improvement together with potential benefits - what needs to change?
- Develop, prioritise and implement effective action plans to achieve it - what area(s) for improvement should I be focusing on?

- Monitor & review outcomes - what progress have we made?

InCalf users can now look at the pregnancy testing results, and in particular their fertility focus reports (FFRs), to assess how things have gone. It is a good time to do this as things are only going to get busier between now and the calving season and any changes that may be needed and could be made, will most likely need to be thought about and acted on in the short term before it's too late!

Totally Vets view InCalf as a powerful, industry-backed resource in the battle against declining herd fertility. Totally Vets now has six trained InCalf advisors, Craig Tanner, Greg Smith, Hamish Pike, Peter Aitken, Lindsay Rowe and Craig Dickson. If you would like to discuss InCalf more with any of the advisors please don't hesitate to give us a call. **Peter.**

Federated Farmers of New Zealand (Inc)  
Award: **Rowan and Rachel Baker.**

LIC Recording and Productivity Award:  
**Shayne and Rochelle Hutchinson.**

Totally Vets congratulates all those who took part in the Awards.

**Anita and Arno** have finally made it all official and tied the knot on April 18th with a shindig at Makoura Lodge. Congratulations and best wishes to Mr and Mrs Renes.

**Emma Clarke** has left the Palmerston North branch to fulfill her overseas experience requirements. Emma's unflappable happy demeanour will be sadly missed.

**Tara Baker** moves to Palmerston North on a full time basis to take on Emma's duties and **Kayla Houghton**, a veterinary nurse, joins the reception team in Feilding.

May and June are 'conference' months for vets. There are equine, sheep and beef, dairy,

companion animal, veterinary business management and a few others that just escape the editor. Your favourite vet may well be away at one of these conferences in the next couple of months.

**Greta and Richard** are tutoring at the Introductory Course to Successful Small Holdings run by the Feilding Learning Centre. This course starts in May so contact Jo Brew on 06 323 4029 or [clc@feildinghigh.school.nz](mailto:clc@feildinghigh.school.nz) for further information.

# Hind pregnancy scanning

Just a reminder, that if you are planning to scan your hinds for pregnancy, please book with us well in advance.

Hinds can be diagnosed in fawn from 30 days pregnant until around 120 days pregnant. After 120 days, the pregnancy tends to drop down into the abdomen increasing the risk of calling a pregnant hind dry.

In other words, **it is best to scan hinds 30 days after the stag was removed, and before 120 days after the stag was introduced.**

For a 3-cycle mating, this leaves only a 3 week window for scanning.

Stag in - 10th March

Stag out - 13th May

Scanning date - 13rd June to 8th July

If you wish to have pregnancies aged (ie. early versus late fawners, or those pregnant to AI) then scanning needs to be done as early as possible (as close to 30 days after stag removal as possible).

**Hamish.**



# Customised trace mineral mixes can reduce costs

# High costs of heifer mastitis

A nationwide study shows that costs due to heifer mastitis average \$197 for every first case, and \$2020 for the average 340-cow herd.

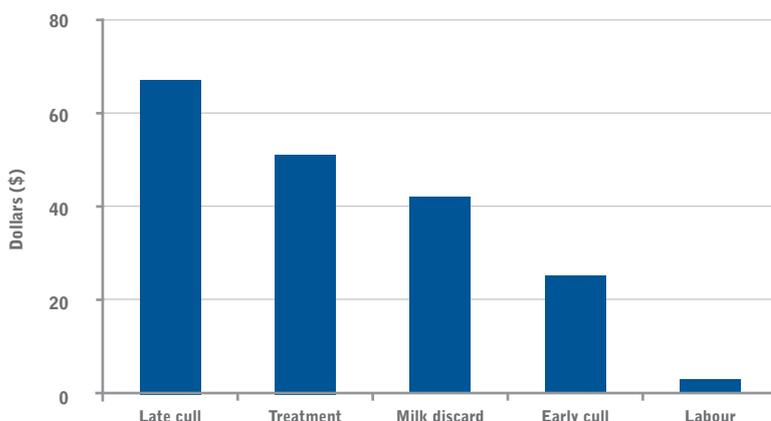
Mastitis in heifers is common. Almost all clinical cases occur within 7 days of calving and the bacteria isolated usually come from the environment. Recent research has helped understand this common and frustrating problem, given some practical methods to control it, and for the first time, an accurate estimate of its economic costs and benefits of prevention.

In the 2008/09 season, a survey involving 40 herds from 4 dairying regions of NZ, has sought to better define the costs of this disease and to provide farmers with cost-benefit budgets for different control options.

Data were collected on the number of cases on each farm, costs due to extra time involved in managing and treating these heifers and purchasing additional replacements because of culls and deaths following cases, and losses due to discarded milk and lost production in the current and following season. These are separately shown in the graph below assuming a \$5.50 per kgMS payout, \$750 difference between cull and replacement heifer, and \$17.50 per hour labour cost.

The cost of treatment (\$51) is only a quarter of the total cost because of 'hidden' losses and costs. Each case of heifer mastitis required only 1 minute per milking or 12 minutes per case to manage for the duration the animal was having milk withheld from supply, meaning the labour costs per case are low (\$3). However, most farmers will know that frustration and worry over mastitis can't easily be defined by a dollar value.

Nevertheless, a cost of about \$200 per case is also a good reason to find out from Totally Vets what can be done to prevent cases in the future.



Some form of trace mineral supplementation is conducted on nearly every dairy farm in New Zealand. It is estimated that farmers spend at least \$60 million dollars on trace mineral supplements for dairy cows every year. That is a lot of money compared to some other animal health requirements!

The animal health budget is often a first candidate for cost-cutting measures, especially where the cost-benefit ratio is not well defined. Compared to countries like the US with ad lib supplemental feeding, the return on investment from any trace mineral programme is difficult to ascertain under NZ's predominantly pasture grazing feeding regime.

To cut out all trace mineral supplementation would obviously be poor economy. Compared to a decade or so ago, many farms now



# Liver fluke in sheep - is it an issue?

Although liver fluke is thought to be a reasonably common parasite, the significance of the disease is variable depending on the geographical location and cumulative effects of the fluke on the liver. Liver fluke is known to be widely distributed throughout the North Island but it causes clinical disease in only some areas.

The life cycle of the liver fluke *Fasciola hepatica* is slightly different from other parasites as it involves a small aquatic snail as an 'intermediate host'. The adult flukes 'graze' on the lining of the bile ducts creating an inflammatory reaction and scarring. This results in protein loss and anaemia, and can compromise liver function if severe.

Fluke snails live in areas of reasonably clean, slow moving water that does not dry up in summer. The snails predominate from late summer through to early winter, so this is

when the most juvenile flukes are available to livestock. Ingestion occurs when stock graze in the wet areas where the snails live, so often fluke infections can be worse after dry summers.

The liver fluke infects the liver of many animals, but is mostly an issue in sheep. Although cattle are able to develop quite a strong resistance to fluke infection, sheep do not generate immunity and can potentially suffer ongoing liver damage from repeated infections. Thus we normally see fluke 'disease' in older ewes as their livers become more scarred over time.

Most of the white drenches on the market will kill adult liver fluke. However, immature flukes are only killed by a couple of specific drugs. If fluke genuinely is an issue, treatment is recommended in autumn/early winter to ensure removal of both adults and immatures. The ideal timing of these treatments depends on how early fluke infection starts on your property.

A diagnosis of liver fluke as the cause of ill-thrift should be based on careful examination of the underside of the liver. Adult fluke may be seen in the bile ducts (the big white 'veins' on the underside of the liver) but the presence of one or two adult flukes in a 6yo ewe may have little to do with the reason she has lost weight. The scarring can be a bit trickier to

define as the bile ducts are quite thick-looking normally.

Alternative methods of diagnosis include:

- Blood tests to look at liver function, protein and red blood cell levels
- Faecal egg count - a different method of counting needs to be used, so please tell us if liver fluke is what you are interested in
- An ELISA blood test which tests for an immune response to the fluke. This can be done on individual samples or on a pooled sample (up to ten animals). The antibody only persists for three months after infection

Chronic disease will present as ill-thrift, anorexia and anaemia. Severe disease may also cause bottle-jaw. Do not neglect the other potential causes of these signs: chronic intestinal worm challenge, Johnes disease, molar tooth problems, old pneumonia lesions, liver damage from other causes and small intestinal cancers are just some of the reasons we see for wasting ewes.

The diagnosis of liver fluke solely on the visual appearance of sheep is hazardous and prone to error. Totally Vets can assist you to identify the reason(s) for the tail-end. Post mortems can be very useful in this regard. If fluke is an issue Totally Vets will help you to target any treatment to the most appropriate time. **Greta.**

supplement with trace minerals. The problem with many unmonitored trace supplementation regimes is that the minerals may be overdosed (wasteful and potentially dangerous), or underdosed (reduced benefit).

Apart from excess or too little trace mineral supplementation being either wasteful or inefficient, the form of mineral being given may not be cost-effective. In the face of high levels of antagonists like molybdenum, iron and sulphur, copper uptake from copper

sulphate can be very minimal. It may be more cost-effective to use an organic form of copper which is less affected by antagonists than increase the copper sulphate level or use copper injections.

Topdressed selenium prills are an effective way to supply a herd's selenium needs, but there is a cost. However, adding selenium to a customised trace mineral mix for delivery via the water system can be done for virtually no additional cost.

Your veterinarian is the best person to advise you on a trace mineral programme that most cost-effectively meets the needs of your farm. Please contact Totally Vets at either Feilding or Palmerston North for our recommendation on customised trace mineral mixes for your property.



# First aid for the horse

The hunting season is upon us and with the ground likely to get more slippery and the Manawatu winds lurking to stir up equine spirits, it's time to review first aid. Ward off disaster by being prepared. Ensure that you have everything you need in your first aid kit and that your horse is vaccinated for tetanus.

## PRINCIPLES OF FIRST AID

- Don't panic - that won't help!
- Assess the situation - can the horse safely be approached? If not, wait for help

- Try to keep the horse calm and move it to a safe place if possible
- Do not try to walk a horse that is non-weight bearing

Bleeding - if blood is bright red and pulsing, an artery may be involved -call us and mention this on the phone! Apply direct pressure to the wound to stop bleeding. Use a sterile dressing in contact with the wound. Clean towels or clothing can be used in an emergency. If the bandage becomes blood-soaked, apply another layer rather than removing it and upsetting any clots that are forming.

Foreign bodies - seek advice before removing foreign bodies such as nails or wood from wounds or hooves. It will help us determine how deep and in what direction any foreign bodies have travelled.

## WHEN DO I NEED A VET VISIT?

- Excessive bleeding
- Large or deep wounds
- Bone or tendon is exposed
- The wound is near a joint - even small innocuous-looking wounds may be very serious if they involve a joint or tendon sheath
- The horse is lame or depressed
- If your horse is not protected against tetanus or hasn't had a recent booster
- If the wound is not healing well e.g. swelling, discharge, proud flesh

**Totally Vets have first aid kits in stock and we'll be happy to discuss your vaccination programme. Margaret.**



# What's old? What's new? What's on the horizon?

## SHEEP & BEEF FARMERS

Totally Vets wishes to take the opportunity to address some current issues and to discuss what's old, what's new and what's on the horizon.

Wednesday 20th May 2009 - 3.30pm  
Oroua Rugby Club Rooms, Kimbolton

- New drenches on the market
- What we have found from our faecal egg count testing
- New cattle bolus available soon
- Dectomax trial - what are the outcomes?
- Declining efficacy of anthelmintics vs Haemonchus
- Trace elements + Multimin
- Tail-end ewes and post mortem findings
- 5- in-1 sensitisers and boosters
- Bopriva - a new product - possible uses
- Brucella ovis - short case presentation and options for control and prevention.

BBQ AT CONCLUSION