

What I Learnt ...

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In a change from the regular “How I treat” column, this time we have a “What I learnt” article. Emails were sent to ACV members and conference attendees asking for small snippets of information that attendees had taken away from recent conferences. Most responses were in regard to the World Buiatrics Congress, held at the end of July in Cairns. The editor can’t promise that the recollections of all presented here are entirely correct! If you use something here, check out the proceedings USB ...

“What’s that?” Beggsy needs a quick summary of what I learnt at #buiatrics? Why that’s easy! I’ll just go back through my twitter timeline and pick out some pearls of wisdom:

Shearer:

- » Matrix metalloproteinase and hormonal changes at calving relax hoof ligaments: P3 sinks, damaging the corium below
- » Thin cows get lame (rather than the other way round) because the fat content of the digital cushion is really important
- » Lameness can lead to windup pain which is difficult to treat
- » And to quote: “As a profession, we spend too much time in the rectum and not enough time looking at the rest of the cow.” Do you agree?

Chesteron:

- » Worst case scenario of digital dermatitis (DD) in a pasture based grazing system: 2000 lame cows in a 19,000 cow herd!
- » DD infection leads to non-healing white line diseases with lots of bony change
- » The smell of a DD infected injury is the stink of a rotten metritis multiplied by 10
- » Control of DD skin infections doesn’t necessarily control DD infected wounds
- » This is a warning to NZ & Australia where traumatic injuries are common that DD introduction is a major risk

Ollhoff:

- » Suspects the cow rumen is the reservoir for Treponema
- » The organism was recovered from cow rumens in digital dermatitis positive herds and NOT from DD negative herds

- » How does it get from rumen to foot? Cows can lick their hind feet!

And what else did I learn?

- » That live tweeting can be harder than it looks
- » That live tweeting is fun!
- » That more people should live tweet
- » That Ian Lean is untweetable: metanalysis and funnel plots can’t be turns into 140 characters

@HowNowDownCow



Jakob Malmo and Neil Chesterton talk lameness

“I metricheck a lot of cows pre mating and assume if they are negative, they are free of uterine disease. Many cows will have an infection and not have a uterine discharge so cows should have an ultrasound at 21 days to confirm the absence or presents of infected fluid.

Giving scouring calves high levels of Bi Carb can over alkalise the animals and lead to an environment that encourages E.Coli and Salmonella.

Bulls that continually have their penis exteriorised have lower fertility in their daughters.

Morphology is a greater predictor of future breeding fertility than any other test.

Scrotal circumference should be related to live weight rather than age.”

Andrew Havadjia

“Dr Phil Poulton’s lectures on down cows taught me:

Down cows are a challenge to tackle, not an “oh no” event

The best way to examine a down cow (neuro function) is to get her up!

With the right advice and a dedicated owner, you can make a difference to recovery rates in down cows - it’s all about the nursing care of the cow

Rebel Skirving



“Biggest tip from any conference - never miss a session even if it appears irrelevant - you never know what you will learn.

More than “what I learnt” was a clarification and reinforcement of the holistic approach to production medicine. Geoff Fordyce’s brilliant presentation of “liveweight production in extensively managed beef breeding herds” highlighted the difference between performance figures and production figures in assessing total production of a herd -this will be a very useful tool when talking to producers and asking the right questions. This session was complemented by the preceding presentation by Mark Hilton “Beef production medicine -improving herd profitability”.

The sessions on subclinical ketosis in dairy cattle may have given possible answers to unexplained perinatal calf loss and low/slow conception rates in beef cattle under certain seasonal conditions.

Kevin McGrath’s “Jambro” fence fasteners was a very practical tip and showed the rewards of have-a-go innovations

The use of internet etc via iPad or similiar for daily and updated communications was particularly useful”

Guillie

“Subclinical ketosis in pasture based dairy systems more widespread than thought, should be doing more cow-side blood testing of individuals and herds

Use of ECG in NVO treatments showing real measurable benefits in pasture based dairy herds over large numbers of cows

Use of multiple vaccines at once in calves not ideal and maybe causing inadequate immune responses in these animals, vets should be more involved in setting up these vaccination programs for best results in immunity and production of these animals.

New tools of the trade different style of eye hooks and the Gynstick”

Anonymous



“The paper by Rast provoked thinking on differences between policy paradigms and reality of beef production.

Producer knowledge of exotic diseases was abysmal. Only 1.4% had a good knowledge and 57.3% reported no knowledge. More than one third (38.1%) had not called a vet within 12 months. The preferred information channel is newspaper.

The current government policy of divesting responsibility for disease to veterinarians and producers is not yet mature. More effort needs to be directed at correcting the investment imbalance and encouraging producers to accept the reality of investing in veterinarians to protect their assets and industry profitability.

Robert Hedlefs

Peter Constable - Aim for Consumption of 150g of IgG in neonatal calf. Colostrum with flakes and clots in it should be discarded due to bacterial contamination. Watery colostrum does not necessarily mean low IgG levels. Colostrum Brix refractometer measurements should be greater than 22%. One calf, one colostrum, don't pool colostrum. Feed 50g/l IgG level of colostrum and feed 3l of colostrum per calf for adequate colostrum intake. Brix refractometer measurement on serum of adequate colostrum intake of 7.8%, <5.2g/dl using a normal refractometer indicates failure of passive transfer.



Peter Constable giving one of many presentations

Gyn Stick - uterine detorsion device, useful tool, also Eye hooks designed by German veterinarian.

Roger Blowey - Rethink toe length for trimming hoof wall, cannot necessarily use the Dutch foot trimming toe length of 75mm. Toe length growth of 5mm per month, 5mm growth per month in sole, sole depth is usually 20mm. Application of glue to blocks and cow slips should be concentrated on the weight bearing part of the foot, the hoof wall. Hoof fat pad size is related to body condition, good body condition- good fat pad size, skinny body condition- diminished fat pad and cushioning ability.

Jan Shearer - Digital cushion is repaired with collagenous connective tissue and less fat.

Tsuka - Computer tomography in dairy cattle, measure pedal bone length. Avg=85mm toe length inner/medial claw. Avg=97mm for outer/ lateral claw.

John Dawson - detection of twins using ultrasound. Divergent membranes, Yolk sac feature with tails. Bilateral pregnancies are infrequent. Additional membranes is a positive sign of twins, amniotic knots- hyper echoic oval areas, membrane knots. Double Corpus luteum detection. Rescan these cows due to greater likelihood of fetal loss.

Otto Szenci - Use of Ceftiofur in uterine infection, use Ceftiofur at 6.6mg/kg for treatment.

Daniel Ollhoff - Digital dermatitis. Treponema is found in the oral cavity of dairy cows; Treponema has the ability to alter cell growth in the host animal.

Chesterton - Digital dermatitis lesions of cows in Chile, non healing lesions. Can possibly be controlled with formalin foot baths.

Old dog's can learn new tricks; Ian Henderson talking about Alan Guilfoyle learning and using ultrasound in practice. If that old bugger can use one then surely I can as well.

Andrew Hoare

I had a very interesting chat about LDAs with Peter Constable after a lecture on laproscopic LDA surgery. At his university they perform right flank omentopexies. When asked why this was his preference and whether the abomasum was in a slightly unnatural position post op, he cited a study he and his colleagues had performed ultrasounding abomasums in normal cows and in post op LDA cows and found little difference in position PROVIDING the incision on the R flank wasn't too high. I thought this was fascinating.

Also his lecture of hypokalaemia was very interesting. Any downer dairy cow which is not responding to treatment should be checked for hypokalaemia

Charlie Carter

My anonymous tip is for cattle practices is to buy a box of The Vet Group's Calf Wise field guide for rearing calves and had them out to their farmers for a succinct, easy to read and practical guide on calf rearing. Leave one copy at the clinic so staff all give the same advice to clients. Learnt from Zoe Vogels!

Anonymous

I learnt from Peter Constable that at this stage blood glucose is the best measure of the time of calving.

I also learnt but not too sure who from that they are looking at adding vaccines to grasses using GMO technology OMG!!!

Susan Swaney

I learnt from Vic Cortese that anything which adversely affects weight gain in the first 8 weeks of a calves life will negatively affect future milk yield.

Matt Petersen

There seems to me to be a perception abroad that there is more known about the epidemiology of cattle diseases in the south than in the north. I have a view that the opposite may well be the case.

John Armstrong



Matt Izzo giving an early morning lecture

Phil Poulton – how to determine the prognosis for recovery of 'downer cows'. An excellent presentation. Use hoof testers on the interdigital cleft to determine deep pain. I've tried a few cases already!

Jenny Weston – Neospora. 65% of seropositive animals aborted vs 3% of seronegative.

Jock McMillan - Current CIDR's may not have high enough progesterone for larger and higher producing cows, so best to use two, one new and one re-used

Jan Shearer - Thin soles lead to separation of the wall from the sole. This is not a white line defect.

Richard Shepherd - GnRH at time of AI had no effect on conception rates in 1200 cattle

Transition cow issues - Still conflict of opinion. Some say it's feeding, others (Ian Lean) that its housing/management.

Daniel Ollhoff - Digital dermatitis treponemes isolated from rumen of DD positive cows but not DD negative.

Roger Blowey - DD treponemes can be spread via hoof knives and other eqmt.

Vanessa Gomes, Brazil - Freezing colostrum destroys the cellular component. Should always give colostrum from own dam

Theresa Scheu, Germany - When to intervene at calving. Data from 2800 calvings lead to 'two feet two hour' rule. Delayed intervention at calving lead to reduced lactate, low oxygen tension and increased stillbirths

Roger Blowey

Collecting good quality colostrum is easy! According to Ash Phillips with a few simple rules and a refractometer we can advise our farmers on how to collect good quality colostrum.

1. We need to collect the colostrum within 12hrs of calving,
2. Cows ideally should be less than 4 years old,
3. Cows must not have leaked the colostrum prior to milking, and
4. Calves should not have suckled prior to colostrum collection.

Then for less than \$50, a hand held refractometer can be used to ensure the colostrum is >22 brix. Too easy!



Ash Phipps talks colostrum

During the World Buiatrics Congress in Cairns, one of the topics raised was the use of blood sampling for pregnancy diagnostics in cattle and the economic impact it may have on the rural veterinary community. An enlightening lecturer by Dr Georg Eller from Germany informed us that the tides of change are coming and that, in his own words, we need to follow the cheese! If vets do not introduce this technology to farmers, then some else will. He suggested that we need to change the way we assist the farming community by increasing our input into nutrition advice and pre-calving management. It remains to be seen, as to whether this new technology will overtake more traditional pregnancy testing. However, we cannot afford to remain blind to the possibility of change.

Also, several presenters mentioned research that indicated that pre-weaning weight gain can affect future milk production by up to 25%. However, I have no idea where this figure came from.

Erin Noonan

Recombinant alfalfa with BVD antigens successfully vaccinates cattle against BVDV!

BVDV causes reproductive problems in pregnant ewes.

Greg Chambers

And a final word of wisdom ...

Mine would be ... it does not matter what challenges you come across, it is how you handle them that is remembered...

Anne Cover



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