

2007 BVCS Conference

- Venue

Rugby

- Guest Speaker

Claire Whitehead, Royal Veterinary College, UK

- Topics

Care, diseases and problems of the neonate

Neurological disease

Reproduction and infertility

Medical problems

Formulary

- Other presentations

Estimating the weight of camelids from body measurements

Parasitic gastroenteritis

Jaw abscess

Fly strike

Orthopaedic cases

Twinning in alpacas

Demonstration of ultrasound scanners

Gait abnormality

TB

Bluetongue

Emerging diseases in South American camelids

Topics from the 2007 international camelid conference

Practical sessions planned to be held at Toft Alpacas but foiled by Foot and Mouth disease outbreak

- Report

Our conference this year was held at the end of September and was something of an international affair with vets originating from Germany, Belgium, French, Holland and New Zealand as well as the Brits

We wanted hands on experience so the three and a half day conference was planned to allow plenty of time for practical sessions at nearby Toft Alpacas. Owners Rob and Shirley Bettinson had a host of routine tasks stacked up for us on the first afternoon – tooth and foot care, vaccinating, microchipping and ear tagging. A selection of females at various stages of pregnancy were reserved for the ultrasound workshop during the second session and Marty McGee was to make a brief appearance to discuss and demonstrate handling of camelids for veterinary procedures

Unfortunately, our careful plans were foiled by the foot and mouth situation in the UK. We could not put the livestock and livelihood of Toft Alpacas at risk, so at short notice cancelled the practical sessions. This necessitated a few rapid changes to the programme, but in the event we had more than enough topics and discussions on offer. We were particularly grateful to Shirley and Rob who took the time to come and tell us all about their alpaca business, and then had to face doing the routine tasks on their own

Our venue was the Brownsover Hall Hotel – a Victorian Gothic mansion nestling in 7 acres of woodland near Rugby. It was comfortable and had all the usual facilities but we most appreciated the home made cookies! Although we worked hard, we also had plenty of time to socialise. Our Saturday evening barbecue could have been a wash out but the weather remained clear though cold – there was a rapid exodus to the warmth of the bar once we'd eaten all the food

Principal guest speaker for the weekend was Claire Whitehead, lecturer in camelid medicine and reproduction at the Royal Veterinary College. Both she and Karin Mueller, who is in charge of the farm animal department at Cambridge Veterinary School, are happy to take camelid referrals and can be contacted at their respective colleges

Claire has spent most of her life working with camelids, including 3 years at Ohio State University, and had some fascinating insights to share with us. She feels that neonatology is a much neglected area where a little effort at the right time can pay huge dividends. Beginning with the pregnant female and methods of promoting milk production if necessary, she went on to discuss routine care of the cria. Unless there is an obvious problem, minimal interference is the key. For example, do not remove the waxy tips from teats – their disappearance is a good indication that the cria has a good strong suck reflex. Remember that there is only a narrow window of opportunity for effective absorption of colostrum. After the first 8 hours the gut starts to lose the ability to absorb antibodies and by 24 hours, antibody absorption ceases altogether. A cria which is unable to feed naturally will need colostrum equivalent to 10-20% of its body weight in the first 24 hours, administered little and often. Diagnosis and treatment of failure of passive transfer is absolutely vital – not only for immediate survival but also for long term health and Claire discussed this topic in some length

She continued with other neonatal problems and diseases, giving practical tips throughout. Some cases will need intensive care which can prove expensive: 7 to 10 days in the ICU at the RVC would cost in the region of £1500 - 2000. However, much can be achieved with basic techniques. Hydration can be maintained with intravenous fluids, and in an emergency 20mls of 50% dextrose solution can be administered per rectum to provide a short burst of energy – perhaps to give a boost prior to transport for more specialised treatment. This first session provided comprehensive coverage of neonatal care and set the standard for Claire's other talks over the weekend

Vet student Tom Lyons told us about his final year project comparing methods of estimating the weight of camelids from body measurements, then local vet Tom Waterworth presented some interesting clinical cases – one highlighted the possibility of severe anaemia which can be caused by the blood sucking worm *Haemonchus contortus*

After lunch one of her colleagues asked for our help in a future project on fly strike in camelids, then Claire began her session on neurological disease by warning us that many metabolic or musculo-skeletal problems may present with similar signs to true neurological disease and can only be differentiated by careful history taking, physical examination and the use of appropriate diagnostic tests. She covered a wide range of conditions from congenital to infectious diseases, including trauma, toxicities and hypo/hyperthermia. For each we learned about presenting signs, common findings, further diagnostic tests, treatment and likely outcome. She pointed out that many of these cases would require hospitalisation, particularly for intensive nursing care or when specialised imaging techniques are required

Jessica Kidd presented a series of camelid orthopaedic cases she had dealt with whilst at Cambridge Veterinary College. A 4 week old cria with a nasty open midshaft metacarpal fracture healed well after reduction and the use of an external fixator. An adult female with a fracture of the upper femur was not so lucky and a high amputation was necessary. A 9 month old animal had recovered well from a fractured femur incurred at birth, but became very lame in the same leg after shearing. There was severe muscle atrophy and the fetlock had become unstable, but the leg became usable after fusion of the joint

After such an intensive day, we were all happy to relax during our annual dinner that evening but were ready bright and early the following morning for two further sessions from Claire on reproduction and infertility. Beginning with basic anatomy and physiology, she went on to breeding behaviour and patterns. Her feeling is that multiple breedings can cause trauma to the female reproductive tract and increase the risk of uterine infections without any positive effect of improving the chance of conception. Her recommendation is a single breeding followed by behaviour testing (spitting off) at 7 and 14 days post mating to confirm ovulation and conception respectively. Testing can then confirm the early pregnancy, repeated at 60 days after the risk period of early embryonic death. Further tests at 4 months and again at 7-8 months ensure that any subsequent losses are detected early so that rebreeding can be done without too much loss of valuable time. Reconfirmation of pregnancy is especially important if a pregnant female is subjected to the stress of transportation to another farm. Claire uses ultrasound examination as the gold standard as it allows direct visualization of the foetus

Claire told us that the majority of infertility problems in camelids are confined to individuals, but remember to look at the whole animal, not just the reproductive tract and also take into consideration the wider view of herd health, nutrition, management and environmental conditions. Heat stress may reduce conception rates in females and lead to temporary or permanent sterility in males. Try to breed so that crias are born in the spring – they grow better than autumn or winter crias and suffer from fewer diseases such as diarrhoea or rickets. In addition, when overheated in the summer, a heavily pregnant female may eat less leading to increased risk of pregnancy toxemia or may become uncomfortable and roll more frequently, increasing the chance of uterine torsion. She led us through breeding soundness examinations of both male and female camelids, following a logical plan to establish a diagnosis

Graham Duncanson gave a short presentation on twinning in alpacas and we also had recent news of twin llamas, both doing well a week later. The afternoon was devoted to the BVCS AGM followed by a demonstration of the latest ultrasound scanners by Nitin Patel of Pie Medical. One useful practical tip when in a dirty environment is to protect your valuable scanner by wrapping it in cling film, carefully leaving any cooling vents uncovered

The final day of the conference began with a joint presentation by Robert Broadbent and Karin Mueller on a valuable alpaca with a gait abnormality which prevented him working as a stud male. Despite intensive investigations including radiography and scintigraphy it was impossible to make a definitive diagnosis and with the exception of acupuncture there was little response to symptomatic treatment

Aiden Foster from the Veterinary Laboratory Agency gave us an overview of emerging diseases in South American camelids which led on to one of the most heated discussions of the weekend. DEFRA is making it very clear that it will not be funding any form of testing or eradication programme for bovine TB in camelids, despite the fact that numbers are rapidly increasing in the UK with a total population of around 70,000 expected in the next few years. Likewise, it will be up to the owners' societies to decide what best to do about BVD which is likely to become a big problem unless biosecurity issues are addressed, particularly on holdings which provide a breeding service for visiting females

We had hoped to include reports on topics covered at the last two International Camelid Conferences in Ohio in 2006 and Oregon in 2007 but our time was fast running out so we went straight on to Claire's final session on medical problems. She finds that clinical signs are often non specific, usually consisting of depression, weakness, lethargy and anorexia, regardless of the underlying cause. In addition, she notes that a sick alpaca will often progress to a dead alpaca within 24 hours if not treated. For these reasons she feels it is essential to perform abdominal ultrasonography and blood tests as soon as possible. In addition to colic, tumours, abscesses and blockages, metabolic diseases should always be considered. Female camelids have high metabolic demands in the form of gestation, lactation and fibre production and are often re-bred within 4 weeks of giving birth. This means that they can easily tip into a negative energy balance, leading to metabolic disease

Overall, we had an excellent weekend covering a wide range of topics and came away with some useful practical tips as well as a lot of new knowledge