DISEASE AND KID DISBUDDING ON AGENDA AT GVS AUTUMN MEETING

Author: David Harwood

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David Harwood reports on a Goat Veterinary Society meeting and the variety of topics discussed, including disbudding, diseases and husbandry issues

THE Goat Veterinary Society (GVS) usually meets at racecourses around the country, courtesy of its secretary (a keen racegoer). However, the autumn 2012 meeting was held at the Pride Veterinary Hospital (part of the Scarsdale group), in Derby at the invitation of Rose Jackson, a GVS committee member, who also arranged tours of the new facilities for delegates (Figure 1).

At the start of the meeting, Rose was presented with a cheque from GVS for the British Heart Foundation in memory of former Scarsdale colleague James Hollingworth, who died in 2010.

Housing

Housing and ventilation for the dairy goat was the opening presentation from Brian Pocknee of The Dairy Group.

Problems can arise as a result of poor building design, inappropriate stocking rates, mixing age groups in the same air space, and inadequate maintenance of existing buildings. The ultimate aim of any housing system is to ensure a comfortable environment for the goats, and one in which they remain clean and dry, on a well-bedded area and free from injury.
Longer-term considerations when designing new buildings include the potential impact of climate change. By 2050, mean ambient temperature is likely to be 2°C warmer, with increased rainfall and fewer winter frosts. Straw-yarded goats must have a lying area of more than 2m² per goat, bedded daily, cleaned out every two to three months and have good access to feed and water. The speaker recommended a feed stance 2.5m deep, 0.2m to 0.5m wide, with a raised feed table (to aid feeding and digestion) of 450mm (Figure 2).

Moving on to ventilation, the speaker reminded the audience to use their eyes and other senses when assessing air movements within a building. The presence of spider webs confirms poor circulating air currents, and condensation is another sign of inadequate ventilation. Smoke bombs/generators can visually demonstrate airflow. The importance of the stack effect was emphasised (where stale warm air rises), and this, in turn, relies on good air flow including adequate inlet and outlet ventilation. Inlet ventilation should be around 50 per cent of the surface area of the side of the building, and special attention paid to nearby trees and hedgerows that could interrupt air flow.

TSEs and scrapie

The second paper on TSEs in goats and an outline of scrapie research was presented by Angel Ortiz Pelaez from the AHVLA epidemiology unit in Weybridge, who set the scene by looking at UK goat numbers.

Recent census figures (DEFRA, 2011) suggest 93,627 goats in Great Britain (87.7 per cent England, 4.2 per cent Scotland, eight per cent Wales). These goats are kept on a total of 7,903 holdings, giving an average of 7.9 goats/herd, although there are 21 holdings with more than 1,000 goats.

Scrapie in goats has been notifiable since 1993, with the first confirmed case in a goat reported in 1975. In addition, two cases of BSE have been confirmed in goats, one in France and one in Scotland.

As a result, goats have been included in national surveys alongside sheep, with fallen stock (6/7,428 positive) and abattoir (2/5,596 positive) surveys between 2002 and 2011. Since 2004, seven holdings have been placed under scrapie restrictions, two holdings were culled in 2008 and three remain under restriction.

Genotyping has been successful in reducing scrapie incidence in sheep, and research is aimed at identifying similar polymorphisms in goats. Knowledge within the UK and overseas is limited, but some initial results are promising. AHVLA is collaborating with partners to take this forward, by involving the goat sector in participating countries with a view to generate a reservoir of resistance allele carriers and recording production trait information.
The plan is to sample around 2,000 goats from roughly 100 herds with more than 10 goats in the UK, with a long-term objective to develop breeding strategies to control scrapie.

**Parasites**

Neil Sargison of the University of Edinburgh, made a return visit to the GVS, to consider the impact of issues other than resistance on parasite control, with his presentation on parasitic gastroenteritis and fluke in goats.

He began by reminding the audience most anthelmintics will only improve performance and remove parasites for a few days. If they return to contaminated pasture, then the problem rapidly escalates as a new burden is established. The twin aims of all approaches to nematode control in sheep are to limit the host challenge to a level that does not compromise performance or welfare, while at the same time enabling the development of immunity.

The limited immunity following exposure in goats is even more problematic. Again, considering sheep, climatic factors seem to have led to changes in the epidemiology of a number of parasite problems, such as the emergence of spring teladorsagiosis and autumn *Nematodirus* problems, and in addition, cases of *Haemonchus contortus* (Figure 3) have been spreading northwards.

Using haemonchosis as an example, the speaker described how quickly pasture contamination can build up. One introduced ram, for example, could have shed 1,000 *H* *contortus* eggs per gram in 2kg faeces/ day and contaminated pastures for 30 days before mating (thus potentially shedding 60 million eggs). In favourable conditions – and assuming 75 per cent of these eggs could hatch to infective and available L3 (45 million) – then multiplication through other grazing sheep follows.

Similarly, liver fluke cases over the past few years have been seen increasingly outside the traditional western areas of the UK. More recently, there has been a noticeable increase in cases of paramphistome (rumen fluke), particularly in cattle. We can only extrapolate from our observations of these parasites in other grazing ruminants as to the likely impact on goats kept under current UK conditions.

**Student support**

GVS is always keen to support student projects, and fourth year University of Edinburgh student Rachel Simmons described her planned approach to gathering information from the dairy goat sector (Figure 4) on survivability and longevity “from kid to cull”. Representatives from a number of the larger herds were present, and agreed to cooperate in what should be a very worthwhile project, providing baseline figures we don't possess.

**Schmallenberg update**
After lunch, the author updated the audience on recent developments in Schmallenberg virus (SBV). AHVLA Winchester regional laboratory, where he works, was at the centre of the outbreak earlier in the year and received a high proportion of the deformed lambs and calves testing positive.

He described the disease as a “transparent one,” because information from the affected countries was being rapidly disseminated via veterinary and farming press, Pro-Med, DEFRA and AHVLA websites. There is also much collaboration and shared information throughout Europe. Fourteen countries reported infection, with recent evidence of infection in Northern Ireland, and the finding of seropositive (and purchased) sheep in Scotland.

Although several countries have reported classical disease in goats, no goat has currently been affected in the UK, although a number of suspect kids have been examined.

The author described a sheep survey in mid-2012 in England and Wales, in areas of the UK in which no clinical disease had been seen. Five new infected counties had been identified, and the conclusion was that in these areas at least six per cent of farms had at least 25 per cent sheep seropositive. Work in the Netherlands has shown SBV infection in midges is around 10 times higher than previously demonstrated for bluetongue virus – and perhaps this may explain the more rapid spread. He finished by describing a recent investigation in a large sheep flock reporting a higher than normal embryonic loss at scanning. Of interest was that all affected ewes were SBV-seropositive, and an SBV PCR gave a positive result on the brain tissue of one early fetal loss in the same group.

**Disbudding**

The remainder of the afternoon was taken up with a discussion on disbudding goat kids, prompted by recent media interest, and a statement of clarification from the RCVS (Figure 5). The author (AHVLA Winchester) covered the background legislation that had led to confusion and differing interpretations on the procedure.

A 1982 amendment to the Veterinary Surgeons Act (VSA) 1966, states “only members of the veterinary profession may disbud a goat kid that must be properly anaesthetised”. The current 1989 (and now very outdated) goat welfare codes reiterate this statement.

There was correspondence between RCVS, GVS and DEFRA in 2004 stating the RCVS view was that the procedure, but not the necessary pain relief, was suitable for delegation subject to certain safeguards. The legislation in place at that time was the VSA 1966 and the Protection of Animals Anaesthetic Act 1954.

The Animal Welfare Act 2006 repealed the 1954 act and later amendments, and made specific recommendations in section five (mutilations) stating that dehorning goats requires an anaesthetic,
but section five does not specifically mention the use of an anaesthetic to disbudd a kid.

In essence, although the RCVS had earlier stated that in its view the procedure could be delegated, this never became lawful, which in essence would have required parliamentary time, and an amendment to the VSA. Media interest during the summer of 2012 stimulated a multiorganisational discussion of the problems and confusion related to disbudding kids, and an RCVS statement was produced, which stated that “in summary, only a veterinary surgeon may undertake the disbudding of goats and due to the nature of the procedure; veterinary surgeons disbudding goats should administer anaesthetic”.


The next speaker was Kathy Anzuino, an RCVS welfare certificate holder, who discussed the science of pain management associated with the procedure. She began by asking whether goat kids felt pain during the procedure, and what was the severity and duration of any pain, with a view to addressing a fairly common misconception that anaesthetic administration and the necessary restraint are worse for the kid than the disbudding itself.

The speaker defined pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage”. A study in Mexico concluded disbudding kids by thermocautery with no anaesthetic resulted in cortisol levels and behaviour changes much greater than those when only local anaesthetic was injected or the animal was restrained.

Nick Perkins, a practitioner from Somerset, played the GVS’s DVD produced to show best practice when carrying out the procedure. The DVD received funding from the BVA Animal Welfare Foundation and copies are available from the GVS secretary.

The topic opened up for discussion by the audience of owners and veterinary surgeons. GVS was pleased to know the DVD was shown to students in their final year at the University of Edinburgh’s Royal (Dick) School of Veterinary Studies.