# Goat diseases: low level of reporting

**THE autumn meeting of the Goat Veterinary Society drew a mix of veterinary surgeons and goat keepers to Taunton Racecourse last month, with David Harwood in the chair.**

VETERINARY **Practice** reports on the latest meeting of the Goat Veterinary Society

Among the speakers were Emily Gascoigne of Synergy Farm Health who outlined the clinical issues with urinary tract disease in the goat; Karin Mueller of the Liverpool veterinary school who utilised photographs and diagrams to illustrate aspects of soft tissue surgery; and Roger Ayling of the AHPA who discussed mycoplasma, describing the 120 known species as "the simplest form of life capable of self replication".

*David Harwood (left) with Roger Ayling, Emily Gascoigne, Kat Bazeley, Emma Fishbourne and Karin Mueller.*

Advice from Karin Mueller included: "Don't dive in to dehorn an adult goat lightly as there will be massive bleeding."

Removal of the horn is major surgery done under general anaesthetic and the sinuses are opened up which will need to be cauterised. Local anaesthetic leads to a highly agitated animal.

If one horn is damaged do not remove both horns, she said. The scent glands may also be removed, which is a problem for future breeding.

Two presentations provided significant information about disease with an important message for veterinary surgeons and goat-keepers.

Goat disease has a low level of reporting, with the risk of silent spread. Everyone is urged to report more suspicions, which will give greater confidence to the government that disease is likely to be detected.

## Bluetongue still a risk in Europe

Emma Fishbourne from Pirbright indicated that bluetongue is still a risk in Europe and that new strains of foot-and-mouth virus are emerging with the expectation that vaccines will be less effective. There have been recent FMD outbreaks on the edge of Europe and the new strains have different clinical signs.

Goat plague, Peste des petits ruminants (PPR), is spreading throughout the world with the condition being more severe in goats than in sheep. The clinical signs are similar to pneumonia with nasal discharge, lesions and diarrhoea.

There is long-term immunosuppression. Caused by a morbillivirus (same family as rinderpest), a global eradication programme is in hand and a DEVA test is being developed to distinguish between natural infection and vaccinate. Further information is on www.pirbright.ac.

A round-table workshop on extra-mural studies yielded various suggestions with the goat-keepers indicating that they value having veterinary students, particularly at kidding time. There needs to be closer liaison between the universities and veterinary practices for the students to value clinical experience, recognising that farmers now do more themselves, including birthing, therapies and vaccinations.

## 'Feed goats as goats'

Tom Chamberlain said that the role of commercial goat nutrition is to "feed goats as goats". More herds are being milk recorded and there is great variation in yields from the same diet. Palatability is a major issue as goats are very picky and it is difficult to feed silage fast enough before it heats and spoils. Intake is vital and there are many ways on farm to stop animals eating.

Christianne Glossop, the CVO for Wales, explained the development of Cymorth TB: six cluster areas being targeted for control utilising an epidemiologist.

A dead badger survey has started and there are around 100 herds with persistent herd breakdowns that are being investigated and management options considered.

Badger vaccination in one area involves 24 fieldsmen and a cost of £22 per head of cattle or over £600 per badger.

No single activity is expected to control the disease and although the incidence of bTB in cattle has fallen (following the increase in reactor herds when annual testing for all herds was introduced) there is expected to be a plateau with current control options. Infection has to be kept out of clear herds.

There are no current plans to introduce active surveillance or pre-movement testing of goats, she said.

*Christianne Glossop with Tom Chamberlain.*

is that of companion animals such as dogs and cats as they tend to be predominantly meat eaters. In 2013 DEFRA estimated that UK agriculture and forestry were responsible for 7% of national GHG emissions.

It is not always taken into account that in some areas of the world grass production is the most efficient way of utilising some areas of land; also it does not always take fully into account the beneficial effects of land usage for carbon capture.

Some work is now being produced to show how some of the carbon and GHGs can be reduced in animal production but such work makes the assumption that the present calculations are correct and does not really acknowledge the benefits of food production in the wider context.

It appears probable that this is an area in which some farm and companion animal veterinarians will need to look carefully and deeply at the fundamental principles on which the calculations are made.

Calculations based on anthropogenic greenhouse gas production as food are shown in **Table 1**. However, calculations do not compare or include naturally occurring phenomena such as volcanic eruptions, geothermal areas, etc. Also, what is the price in terms of carbon or GHG footprints of natural flora and fauna?

It does seem probable that discussions need to take place and decisions will need to be made as to whether or not food from animals is acceptable and at what cost to the environment.

## Conclusion

The above lays down some of the fundamental problems and the resources needed for food and animal production. The answers to these will determine how well the world will be able to manage in 2050.

Unless there is considerably less obstruction and considerably more co-operation between different people on an individual, national and international basis, things look bleak. Even without tackling the increasing population problem, with a little ingenuity much can already be done to reach the needed food requirements and allow effective distribution.

There will need to be debate as to how food production, other than for vegetarians, will be allowable if the present system of greenhouse gas considerations continue to be used.

- An attempt will be made to look at how animal production can be continued in a future article.

### References


Andrews, A. H. (2012) Feed the world – the next agricultural revolution. Neo, retro or both? *Second Opinion* **1**: 107-113.

Food and Agricultural Organization (2006) *Livestock's Long Shadow*, pp1-390.


**Table 1. Livestock's percentage contribution to global anthropogenic greenhouse gas emissions. (Livestock's Long Shadow: Food and Agriculture Report, 2006)**

| Livestock's contribution to: | Percentage $CO_2$ equivalents* |
|---|---|
| Emissions from energy, industry, waste, land use change, forestry and agriculture | 18% |
| Land use change, forestry and agriculture | >50% |
| Agriculture | <80% |
| Carbon dioxide ($CO_2$) | 9% |
| Methane ($CH_4$) | 35-40% |
| Nitrous oxide ($N_2O$) | 65% |
| Ammonia ($NH_4$) | 64% |

* The direct 100-year global warming potential. Comparing with carbon dioxide ($CO_2$) as 1, methane ($CH_4$) is 23 and nitrous oxide ($N_20$) is 296.