LEARNING HOW PORTUGUESE LARGE ANIMAL VETS AND DAIRY FARMS WORK

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concludes his review of the World Buiatrics Congress, discussing predipping and cluster flush systems as well as herd analysis systems

JOS van Acht was participating in the round table discussion on future veterinary demands from farmers.

He described his dairy farm and his veterinary setup. He milks 600 cows and will expand further in the next year or two. He employs a full-time vet who carries out a wide range of tasks – artificial insemination, heat detection, disease prevention and treatment, surgery, vaccinations and post-partum management to ensure cows are clean, ready of service.

He has a reproduction vet visit every two weeks to carry out pregnancy checks from 35 to 50 days and this vet chooses the fertility treatment protocols. His milk quality vet visits the farm every month and identifies problem cows, collects milk samples, helps with decision making for treatments and culling, and assesses milking management. He also has a nutritionist to advise him. He values each member of his team and they all have key roles to play regarding performance of the dairy.

At the end of Jos' presentation, the delegates agreed that:

- one veterinarian is not able to give a broad kind of support to the modern dairy farmer – rather a team of vet specialists should be used;
- vets should be involved in the planning phase of expansion and new facilities; and
- farmers should put more demands on vets, as long as these are economically viable for both.

While using a number of vets might seem quite laborious, it actually fits in with what tends to happen in larger dairy practices in the UK. We all have our individual specialities and when there are problems, or where input is needed, we call on those with specialist skills from within or outside the practice. The key difference between the UK and Portugal is the economics of a 600-cow dairy having a full-time vet. Portuguese vets are not paid high salaries, so they often work on farms as a full-time employee. Using different vet specialities regularly shows farmers the value of different specialists.

Predipping and cluster flush systems

There were discussions about the use of predipping during other mastitis presentations. Predipping is banned in Finland, Germany and several other countries due to the risk of chemical residues entering the bulk milk. This risk was also present for other commonly used technologies, such as robotic milkers and cluster flush systems where, if there are any failings within the technologies, the risk of chemical residues entering the milk could cause significant food safety issues.

I spoke to a company exhibiting at the congress, where I enquired about cluster flush and automatic teat dipping systems, which all seem to be the rage with UK sales people. I was told these are not in the pipeline due to potential risks from contamination with disinfectant solutions. All farmers are looking for labour-saving solutions and these seem attractive. The concern is simple: if there are any hiccups with the timings or the mechanics, then bulk milk will be contaminated. Food safety has to take priority over everything else.

Those on the stand also commented that auto teat dipping systems do not apply the teat dip as well as a good milker and, as this is one of the cornerstones of effective control of contagious mastitis pathogens, this must not be compromised.

In robotic systems, auto teat dipping occurs, but a spray nozzle delivers this after unit detachment. Everyone agrees this cover is not as good as manual application, but there is always some compromise with robots. Robots also only flush out the cluster with water and not a disinfectant solution.

Advanced analysis

DeLaval has a new system that is commercially used in a number of dairy farms in Europe. It is an integrated system that works out when cows should be tested for beta-hydroxybutyrate, milk progesterone, lactate dehydrogenase for mastitis and urea. It automatically samples and tests the cows. The farmer can either buy the system (computer, sampling systems and the auto lab) and then the consumables, or can just pay per cow, per year for the whole package. The real benefit appears to be fertility from ensuring the cows are in the correct energy balance and then moving on to heat detection and picking up all negatives before the 21-day return.

Portuguese farm vets and dairy farming

The structure of farm vet practice in Portugal is very different to the UK. Portuguese vets are not allowed to dispense medicines – by law all medicines must come from a veterinary distributor. In theory, the attending vet of the farm writes a prescription for the medicines the farm needs, but in practice the farmer goes to the distributor, asks for what he thinks he needs and the distributor's vet then writes a prescription. This, of course, has quite a profound effect on which medicines are used on the farm and also on vets' income.

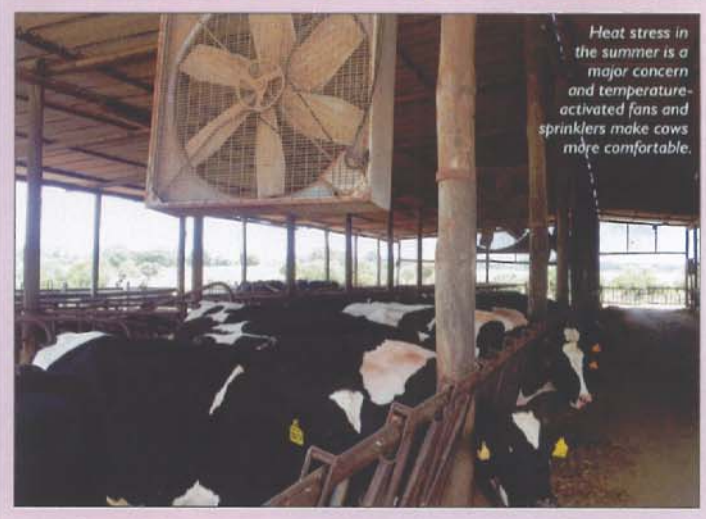
I spent a day with a farm vet near Lisbon. He works with an assistant and looks after nine dairies, the largest of which has 400 cows, but he also does work with sheep and milking goats. His farms are up to 100 miles from his home. Few emergency visits are carried out and these would only be caesarean sections and displaced abomasum operations. The farm staff are well trained and can even deal with uterine prolapses. This is due to simple logistics – it might take up to three or four hours to get to a farm, so emergencies like this are just impractical.

All the medicines the vet needs are on farm with the exception of tranquilisers and euthanasia medicines, which the vet can stock and use. Some of the bigger farms have purchased an ultrasound scanner for use on their own farm – many vets just can't justify this expense. This particular vet visits a 400-cow dairy every Monday and Thursday afternoon and will spend the rest of the day there. Monday is fertility day and Thursday is when everything else is done.

Many farmers pay a flat rate for their vet service every month. The vet works out what time he will be spending on the farm, travel time and then comes to an arrangement with his farmers. Some farmers pay a flat rate and emergency calls on top. Practices are very small, so the on-call (even though they are not called out often) is restrictive. One of the key tasks for the vet is to train staff in diagnosis and treatment. There are standard operating procedures for everything, so it's clear what has to be done.

Cows and calves are vaccinated against most diseases and preventive medicine is very important. The farm I visited had two parlours – a new one for milking the main herd and then a separate one for the mastitis and freshly calved cows. This was very poorly maintained: poor vacuum stability, worn liners and ➲

Many farms have a pharmacy that is as well stocked as some vet practices in the UK.



Heat stress in the summer is a major concern and temperature-activated fans and sprinklers make cows more comfortable.

filthy – just a disaster waiting to happen. However, as milk quality is the responsibility of a separate vet, my friend did not get involved in this area and was quite surprised to see just how bad it was. I used this for training 10 vets on milking machine function and tests. Despite this, the cell counts had been running at less than 200,000 and clinical mastitis was not such a major problem.

In the summer, heat stress is a major issue. Fans and sprinklers are commonly used. If it's just hot, then fans automatically turn on and off. If it's humid, then cows are sprinkled with water on their backs. This is then turned off and the fans come off about five minutes later. These measures can reduce temperatures by 6°C or more and help keep the cows comfortable, which maintains appetite and milk production.

When it gets really hot, water is trickled down the outside of the roof to use the energy of the sun to evaporate the water and keep the roof cool, which works well.

The next buiatrics congress will be held in Cairns, Australia, in July 2014. There are plans for a wide-ranging scientific programme, short courses before the congress and an enthusiastic social programme. Visit www.wbc2014.com ■

Top: herds rely on a wide range of standard operating procedures (SOPs) to ensure agreed management practices and treatments are carried out no matter who is working. Above: poor medicine storage in the parlour for mastitis and other treatments despite having excellent treatment SOPs. If storage is poor, what will hygiene at administration be like?

PETER EDMONDSON is one of seven dairy vets at the Shepton Vet Group in Somerset that looks after more than 24,000 cows on 150 dairy herds. His main interests are mastitis, milk quality and the interaction of the milking machine and cow. He provides consultancy services and tailor-made training for vets, farmers and the pharmaceutical and agriculture industry.