# **CONFERENCE REPORT:**

## **VETERINARY DEER SOCIETY**

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## 1. INTRODUCTION

The British Veterinary Deer Society is the British Veterinary Association equivalent of the Deer Branch, New Zealand Veterinary Association. It was established in the early 1980's. The functions of the VDS are similar to those of the Deer Branch, NZVA. The Society produces a quarterly newsletter to members entitled "Publication of the Veterinary Deer Society" which has as its prime function a role in providing up to date information about veterinary issues to its membership. An annual conference is held and this is of a technical and social nature. Recently the VDS published an excellent book summarising the important diseases of farmed deer relevant to the UK situation, although it has been of relevance to other countries worldwide. Recently the VDS has been involved in considerable consultation and activity with MAFF in relation to tuberculosis control in farmed deer. The VDS has been involved with the establishment of a set of rules for a voluntary Tb control programme and is actively involved in training of veterinarians for certification to enable them to perform the tuberculosis testing of deer herds.

## 2. CONFERENCE CONTENT

## 2.1 <u>Veterinary Medicine's Directorate</u>

Presentation was made by the Director of this organisation which is the equivalent of our Animal Remedies Board. Surprisingly there are no drugs licensed for general use in deer in Britain. Only one product "Terramycin LA" is licensed for use in deer but that is only specifically for use for yersiniosis. It was pointed out to veterinarians that the use of any animal remedy which may be prescribed by a veterinarian is at the responsibility of the prescribing veterinarian.

Veterinarians present were advised that the efficacy of drugs in deer should be considered to be similar to that in sheep and cattle i.e. to use products licensed for like species. Secondly, if an animal product is not available, veterinarians were advised to use a human form of that drug because of the stringent formulation requirements. Thirdly, a standard withholding time of 28 days was advised for all products until data is available to allow products to be licensed.

Veterinarians were also advised strongly to record in writing the advice given to the farmer, particularly in relation to withholding times. This is to



protect the veterinarian from possible litigation should drugs fail to be effective or cause adverse reactions. The veterinarian should also advise the farmer to keep a register of all drugs used and include records of animal identification.

However, a word of warning was given that not all drugs effective in sheep and cattle are effective in deer e.g. levamisole and that some drugs appear to be metabolised more rapidly in deer than they are in sheep and cattle e.g. oxfendazole and oxytetracycline.

## 2.2 Tuberculosis Control

There was a summary of the MAFF Health Scheme for deer. The scheme was established under 1989 legislation which made Tb in deer a notifiable disease, required all farmed deer to be permanently marked and identified, and required that deer must be identified if they are moved from a property which is not a farm e.g. park deer going to a farm or to another park. It also required that deer movements be recorded and provided for compulsory slaughter of Tb reactors with a compensation of up to £600 (approximately NZ\$1,800).

The Deer Farmers Association wanted compulsory testing, testing to be done at no cost to the farmer and full market compensation (a similar situation prevailed in New Zealand in the early 1980's!). It is notable that the title of the British deer Tb control programme ("Health Scheme for Deer") does not include the word tuberculosis. Tb is a politically sensitive disease and attempts are made to avoid adverse publicity.

The major elements of the control scheme are voluntary testing, closure of infected herds, use of the CCT as a primary test, use of ELISA on all tested deer, restriction of movement, monitoring and herd records.

There is a belief that it may be impossible to eradicate Tb from infected herds. Decisions have therefore been taken on occasion to depopulate infected herds.

While this is a voluntary scheme, farmers joining the scheme are required to pay a joining fee. MAFF approve the applicant and premises for security, management and stock records. The MAFF approves a veterinary surgeon to perform the test only after adequate recognized training in both testing procedure and necropsy. Private veterinarians therefore perform the tests and the MAFF supervises the outcome. Currently only 15 farmers (5% of farmers) have joined the scheme. Nine have completed a first test, three of those were not clear. Currently there are 28 premises under restrictive movement and some of these premises are well known deer parks. Note it is possible under this health scheme for MAFF to place movement restriction on herds of origin of reactors even without herd testing. There have been 15 confirmed outbreaks of Tb recently including 6 since the middle of 1989. Three thousand deer have been tested voluntarily (of an estimated total 20-30,000).

Case Report: Tb in Roe Deer Tuberculosis has been observed in farmed red and fallow deer in Britain and in free-living roe, sika, red and fallow deer, and in axis deer in a zoo. Recently a case of tuberculosis was diagnosed in a roe deer in Scotland with splenic lesions of a granular

nature typical of tuberculosis. It was proposed that Tb in this species of deer is not likely to spread rapidly because they are solitary deer males are territorial, they have only one mate and they feed a considerable amount of browse and trees. Roe deer therefore may be an indicator host.

An intriguing observation in the present case was that it occurred in Scotland and there is speculation as to how it got there, whether it was transported illegally from the south of Britain, or whether Tb is endemic in wildlife populations in that area of Scotland, but at a low level which has precluded diagnosis earlier.

The New Zealand Situation: The author of this presentation provided a discussion of the current Tb control programme in deer and the status of our national herd. Up to date figures presented elsewhere in this proceedings were presented.

## 2.3 Deer Feeding and Nutrition

Feedstuffs: A representative of a major stock feed manufacturer presented a summary of legislation covering feed preparation, which include the requirement for suitability for use, for full information about contents and additives, product specifications and limits of variation, and limitations on the level of undesirable content e.g. mercury, aflatoxin etc. It was noted that panacure was licensed as an additive for "small ruminants" and that prepared feeds with that product in are quite popular amongst deer farmers.

The nutritional requirements of deer of different classes and at different times of the year were discussed. It was clear that no properly conducted research had been done to identify the most appropriate concentrate feed stuffs for deer, but that the industry was still at such a small scale that feed companies were reluctant to invest money in such research. The inwintering of deer in Great Britain and the amount of supplementary feed therefore given, has attracted the interest of feed manufacturers. Research work being conducted currently at Rosemaund Research Centre at Hereford may provide data which will assist the appropriate formulation of deer concentrate feed stuffs.

Reindeer Nutrition: A paper outlining difficulties in nutrition of reindeer in zoological parks and also potential deer farms was presented. Reindeer have evolved in an environment distinctly differently from the normal British deer farm. The reindeer has an enormous ability to lay down fat during summer and to metabolise that fat during winter when only lichens, which are nutritionally inadequate as a total diet, are available. The study reported and examined rations which contained protein 8-18%, fibre 7-21% and oil 1-5.7%. The conclusion was that a diet of approximately 12% crude protein, 9-10% fibre and 5.7% oil was the most appropriate for reindeer.

Rape Seed Oil: There is considerable interest in Britain and Europe in producing rape seed for vegetable oil for human consumption and the byproducts are used in animal feed stuffs. There are glucosinolates in rape seed which cause anaemia as a result of haemolytic disease. Because of the number of feral deer in Europe and Britain and the attractiveness of rape seed as a feed stuff, there have been a considerable number of

reports of anaemia and death of feral deer associated with eating these crops.

Pathology is consistent with that of a haemolytic anaemia including a haemosiderosis. Brain lesions occur and these affect the behaviour of the deer. Mortality of affected animals is approximately 85%. Conditions such as this achieve considerable significance because of the value which European communities place upon their wildlife and in particular upon deer. At this stage no preventive programmes have been suggested but the situation is being monitored closely.

New Zealand Nutrition: The author of this presentation presented a paper describing production and management of farmed deer in New Zealand.

### 2.4 Miscellaneous

A paper was presented on the ecology and behaviour of park fallow deer in Italy and there was a case report presented on the occurrence of cataracts in farmed deer. The author of this summary presented a paper entitled "Does the Deer Industry Need Veterinarians" which looked at the type of work which veterinarians in New Zealand were performing on deer farms, the relevance of certain procedures, the use of new technology including AI, ET, ultrasonography, velvet harvesting, preventive medicine programmes and some predictions about where the deer industry and the veterinary profession which services it, is heading in the next 10 years.

### 3. CONCLUSIONS

The Veterinary Deer Society has an important function in the deer industry in Britain and there are many similarities with the Deer Branch, NZVA. At the Conference there were a number of MAFF veterinarians and also a significant number of veterinarians from Europe, including Scandinavia, France, Italy and Germany. Only a small number of British practitioners attended and I believe this was due in part to a programme which was relatively short and fairly light on technical detail of relevance to the practitioner.