

AUSTRALIAN VETERINARY HISTORY RECORD



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**AVA Annual Conference 2008
25 to 30 May 2008
Perth Convention Exhibition Centre, Perth, West Australia
ANNUAL MEETING SPECIAL INTEREST GROUP IN AUSTRALIAN
VETERINARY HISTORY.**

**Our next meeting will be held on Monday 26 May 2008
in Perth, Western Australia.**

**At the Annual Conference of the Australian Veterinary Association.
We are arranging a program of speakers on topics that will be of interest to
members. After an annual general meeting, we will hold our
traditional convivial dinner.**

Mark your diary now.

We look forward to seeing you there on May the 26th.

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PRESIDENT'S REPORT

Dear Members

This issue of the Australian Veterinary History Record marks the 50th printing of 'The Record'. The Record over the last 11 years has collected veterinary and allied science history that will prove to be a valuable asset for current and future generations of veterinarians and associated disciplines. It is the desire of the Committee that valuable insights into the development of the veterinary profession in Australia continue to be collected. The diligence and work of previous and current Editors and previous Presidents in maintaining an active involvement in veterinary history is gratefully acknowledged.

You will have noted that the Max Henry Memorial Library (MHML) has been placed in the Gilruth Library at the Veterinary School, University of Melbourne, Parkville, during the last Annual Meeting. The Library is being catalogued by Dr Nicki Mock, a veterinary graduate as a trainee librarian with the University of Melbourne. Dr Tom Hart, Honorary Librarian, is anxious to increase the library and is seeking donations of books and money to further the MHML. A separate bank line in the AVA account in the name of the Library has been arranged into which money donations will be placed and payments made from. If you want to donate books or money please contact Tom at tomhart@tpg.com.au. The report on the Library in this Record by Tom represents AVHS policy on Library acquisition and a policy framework for the future development of the MHML. The incorporation of MHML into the Gilruth Library represents years of persistent effort by former AVHS Committee members especially Dr Trevor Faragher.

I also write to invite you to the next Annual Meeting of the Australian Veterinary History Special Interest Group that will be held in Perth on Monday 26 May 2008. We have the development of a very good scientific program; if there were members who would wish to present a paper as part of the scientific program, would you please contact me as soon as possible at ajturner@bigpond.net.au or 61 3 9380 1652. As well as the scientific program and annual meeting there will be the Annual Dinner at a venue yet to be decided on the Monday evening.

I look forward to seeing you in Perth on 26 May 2008.

Andrew Turner
President

Report of Max Henry Memorial Library Honorary Librarian

I have visited the Max Henry Memorial Library at its new home in the Gilruth Library in the old VRI building in Parkville. Nicki Mock was present when I visited. She is a veterinary graduate who is now working for Melbourne University as a trainee librarian.

Nicki is in the process of checking the list of books nominated by Dick Roe for sale to ensure that all are represented by another copy in the library.

At the official opening of the MHML I spoke to the AVA CEO about the possibility of opening a bank account dedicated to the MHML and separate from the AVHS account. The CEO agreed.

My reason for having a separate account is that I intend to solicit donations for the purpose of purchasing books. (These donations will not be tax deductible)

The account would also be used for the proceeds of book sales.

I will use funds from the new account to purchase a display cabinet for the books of greatest historic value and age. These are currently held in the librarian's office and are not on view. Before this purchase I will determine whether there may be a suitable display cabinet available free of charge.

After canvassing the issue with committee members of the AVHS, the following guidelines have been devised for the holding or acquisition of books by the MHML:

1. Books written by an Australian veterinarian about a veterinary or related topic.
2. Books reviewed in the AVJ. I have asked the editor to suggest to reviewers that they donate books they review to the library rather than keep them. This was what was done in the past. The editor agreed to do this.
3. Veterinary books owned by notable members of the veterinary profession and signed by them or otherwise identified as owned by them. More than one copy of such books might be held or acquired. "Notable" will be interpreted at the discretion of the MHM Librarian at the time.
4. Old collectable books on Farriery, Veterinary Science or a related scientific topic. I mention this category because I believe there are others like myself who would donate or bequeath their book collection to the MHML now that it has a suitable home.

Down loading the book list from the web site at Sydney University has proved difficult and unreliable so I propose that when an up to date list is finished it will be included on the AVA website. The Gilruth Librarian, Tammie Goates, is working on the list with Nicki Mock.

David de Fredrick has donated a copy of the book he has written, "The Horse in Australia", to the library.

If any reader of this report would like to borrow books from the library or donate books, money or a display cabinet to the library, please contact me at the address below.

Tom Hart (MHM Librarian), P.O. Box 267, Gisborne 3437, Victoria.
Ph 0354283424, e-mail - tomhart@tpg.com.au

A meeting of members at the Max Henry Memorial Library Collection at the Gilruth Library, Parkville was held on Tuesday 15 May 2007 at 3 pm in the Melbourne Veterinary School to welcome the movement of the MHML collection from storage in Canberra to open display in its new home.

LESSONS FROM HISTORY – CONTROL OF ANIMAL DISEASES

Dr Andrew Turner, 25 Garton St. Princes Hill 3054 Victoria

Disease occurrences have generated fear in human populations from antiquity when they were looked upon as acts of the Gods against wavering subjects. A classical example of this was the events recounted in Exodus as Moses attempted to lead his people from Egypt back to their promised land. The Israelites recounted the stories as they saw themselves as beneficiaries from the terrible events when the Pharaoh agreed to release them from captivity.

Diseases have ever since been seen in the light of disasters to afflicted animal owners and communities. The British in 1865 suddenly learnt the impact that rinderpest could have on their cattle industry and the colonial Australians got much grief when contagious bovine pleuropneumonia (CBPP) spread across Australia from an infected cow imported into Victoria in 1858. These diseases had not previously occurred because of limited cross border trading. In continental Europe both diseases were basically unfettered to spread particularly at the time when wars broke down many barriers on the movement of cattle. Both outbreaks were handled badly by the authorities, rinderpest in Great Britain and CBPP in Victoria, not heeding advice about instituting control measures. Interestingly, the rinderpest outbreak followed on the heels of a new trade policy that removed customs duties on food imports and there was increased trading in agricultural products including cattle and inadvertently their diseases. I am sure that livestock owners in Australia at the time were being encouraged to import 'better or improved' livestock.

Professor John Gamgee in Great Britain advised the Government of his day that the necessary control measures needed to be based on mandatory slaughter of infected cattle, isolation of animals in contact with infected stock and compensation to owners who had cattle slaughtered to control rinderpest. Similar measures were recommended to Victorian authorities when CBPP was recognised in 1858 but procrastination in both countries in arriving at a sensible control program allowed the diseases to become more widespread.

During the 20th and 21st centuries, there were a series of disastrous outbreaks of foot-and-mouth disease in the United Kingdom and the most frequently mentioned outbreaks were in 1922, 1967 and 2001. The outbreaks were the subject of enquiries and all concluded that the lessons from dealing with previous outbreaks of foot-and-mouth disease had not been put into practice in the control programs mounted in 1967 and 2001.

Bovine spongiform encephalopathy (BSE) spread from Britain to many cattle rearing countries and one could wonder how it could have happened in some of these countries.

In the 20th century, Australia took over 100 years to get controls in order to deal with the cattle diseases CBPP, tuberculosis and brucellosis but all were eradicated in the last half of the 21st Century. The success has been stunning when compared with what has been achieved in the United Kingdom, New Zealand and United States of America for tuberculosis and brucellosis. If Australia was faced with an outbreak of foot-and-mouth disease or a case of BSE do we have the procedures and plans in place to effectively deal with these and future outbreaks of disease? Do we have the procedures in place to prevent significant diseases getting to Australia and our livestock populations?

What tricks do disease agents have in order to overcome our control programs? HIV, SARS, and recently identified primate retroviruses have entered human populations and spread around the world in what seems a short period of time and health authorities have threatened pandemic influenza. Avian influenza has taken on new features in bringing great grief to the countries of eastern Asia. Are there new lessons for animal disease control authorities from these events?

What lessons were learned from past experiences, what questions remain to the present day and have we advanced all that much? Have we avoided the traps identified in the past? Are there old and new lessons for us in relation to free trade agreements? It is intended that the questions on these subjects will flesh out some answers and make some comments that will likely require further answers.

Building the principles of disease control

A lot of our understanding of how to apply disease control procedures for Anglo-Saxon communities emanate from John Gamgee. Gamgee promoted the pillars of disease control. The setting for John Gamgee starts in 1865, when disaster descended on Britain with the outbreak of rinderpest from the Continent. The context for the outbreak was a new trade policy that removed customs duty on food imports to increase trade in agricultural products between Great Britain and the Continent. The source of the infection was a shifty deal in animal purchases with the Russian sellers putting pressure on a British importer to buy diseased cattle. Although not bought or shipped, the diseased cattle co-mingled with clean cattle with the transfer of infection. The shipment of contaminated cattle went to Hull, a port with known lax inspection rigour. From Hull rinderpest spread rapidly throughout the country from the London market. John Gamgee provided advice to the government about a plan to control rinderpest and prevent further spread. Gamgee's ideas for controlling rinderpest were derived from Prussian veterinary colleagues.

Gamgee's principles for rinderpest control proposed four pillars that were:-
Mandatory slaughter of infected cattle,
Restrictions on cattle movements including quarantine of cattle in contact with infected stock, Disinfection of infected premises
Payment of compensation to owners for cattle slaughtered to control the disease.

Although a relatively simple system, it was rejected by the disease control authorities, including those in agricultural industries. The continental countries embargoed British cattle and the disease spread further. After months of no effective control of the disease, the Archbishop of Canterbury proposed a national day of humiliation to implore divine aid. This threat of a national day of humiliation got government action and rinderpest was controlled and eradicated from Britain using Gamgee's four pillars of disease control.

Gamgee's measures for controlling diseases became known as the aggressive containment strategy that became accepted by Great Britain and most continental countries. As a point in history, the 4 principles of disease control were proven effective and became etched into Anglo-Saxon veterinary science. After the discovery of how to induce immunity without virulent infection, vaccination was added to the principles of disease control to limit disease transmission. The 5 principles were used in the control of CBPP in Victoria with CBPP being brought close to eradication in Victoria in 1914 when the First World War commenced and many Australian

veterinarians went to Europe and the Middle East. After the Armistice in 1918, it took until 1929 to restore the control over CBPP in Victoria that was present in 1914.

At the turn of the 20th century, diagnostic testing was added as a disease control procedure and it became the 6th pillar of the disease control principles. The tuberculin test provided a means of objectively assessing the infection status of a living animal before it developed severe infection and initiated major release of infection into the environment. For CBPP, blood testing was added as a diagnostic tool for the control program in 1928. Serological testing became available for many diseases.

By 1940, there were 6 tools for the control/eradication of many animal diseases. Veterinary Science has really only honed some of these pillars since the early 20th century. Quality assurance schemes on laboratory test performance since 1980s have enhanced greatly the accuracy of serological tests.

Despite the 6 principles, CBPP TB and Bovine Brucellosis took a long time to reach control status in Australia and TB eradication is only now near finality. The 6 principles of disease control are

- restriction on exposed animal movements and quarantine;
- slaughter of infected/in-contact animals;
- disinfection of infected premises;
- compensation for slaughtered animals;
- testing animals to determine infection status; and
- vaccination of flocks and herds to increase immunity and slow infection transmission.

In the 20th century advances in technology have reduced the time for conduct of diagnostic tests, widened the types of diagnostic tests, increased the accuracy of diagnostic tests, increased vaccine efficacy, increased our knowledge of the epidemiology of diseases and made compensation payments more equitable. Further advances are being made in the 21st century but the same 6 planks for launching disease control and eradication operations are still relied on.

Lessons from disease control imperfections

In order to see whether lessons are learnt from previous events, there needs to be enough time, over which the events have occurred, to enable assessments to be made. Foot-and-mouth disease (FMD) provides the ideal study as records exist for

over a century and there have been regular reviews of eradication efforts. The ideal study country is Great Britain because of its regular intermittent occurrence of outbreaks, its accessible records and relevance of its cultural background to Australia. The first recorded outbreak of FMD in Great Britain was in 1839. In looking back across the 19th and 20th centuries records there were many outbreaks of FMD in Great Britain. Some of the outbreaks demonstrate important points.

In 1871 there was an outbreak involving about 3 million animals. The importance of this outbreak was that from this time FMD was treated as for rinderpest using Gamgee's pillars of disease control. In the following years there were outbreaks yearly 1877-86, then 1892-4, 1900-02, 1908, 1910-16, then 1918 intermittently to 1962, 1965-68, 1981 and 2001. The "big outbreaks" were in 1871, 1883, 1922-24, 1967 and 2001. The rinderpest outbreak of 1865 accounted for about 400,000 cattle. FMD in 1883 involved 461,113 animals, in 1922-24 involved 273,100 animals, in 1967, 407,324 animals and in 2001, 4,046,000 animals. The outbreaks of 1873, 1923, 1967, and 2001 stand out for their impact on thinking as all had Parliamentary Committees of Inquiry investigating the reasons for the outbreaks and an assessment of the eradication efforts.

Findings from early FMD Inquiries

In 1873, the Parliamentary Inquiry unearthed conflicting evidence on how FMD should be handled – stridently as for rinderpest or with less stringency to ensure "public support" was maintained for the control program. The Inquiry established slaughter for infected and in-contact animals and despite some wavering in subsequent years, the slaughter policy remained unchanged from 1892 to 2001 despite Pirbright becoming a major centre for research and development of FMD vaccines.

In 1926 the British Medical Journal in an editorial wrote 'Britain is no longer an island, and it seems that the pole-axe method cannot be indefinitely used to stamp out the disease. It has been fairly successful in the United States – but that country is a much more effective "island" than this country, and there is less danger of reintroduction there.' The FMD response in Great Britain was being driven by the desire to prevent endemicity. Pirbright was established as a result of the 1922-24 outbreaks to prove vaccination could be a valuable tool in combating FMD and to reduce the numbers of slaughtered animals.

Inquiries into FMD outbreaks in the 1950s

After outbreaks in 1952-53, the Inquiry by Sir Ernest Gowers recommended the

necessity for energetic and rigorous measures to prevent FMD becoming endemic in GB and causing a 'national calamity'. He further exhorted that 'In spite of all the well-meaning precautions – of the implementation of devastating slaughter policies and of advice from expert committees and the Ministry concerned – the two later major epidemics, although not causing lasting endemicity, have fallen not far short of becoming calamities'. Between 1954 and 1966, there were 179 primary outbreaks; over half never produced infection on second premises. Of the 179 outbreaks, 97 were due to imported meat and 74 of known origin were from South America. This seemed to justify the slaughter policy.

The 1967 Oswestry Outbreak and Inquiry

In 1967, the outbreak that started at Oswestry was enhanced by at least 19 possibly 40 initial foci. All foci were believed to have come from one consignment of 770 Argentine lamb carcasses imported from establishment 1408. The consignment of meat from Argentina was proposed for city not rural release. All initially infected properties had pigs with lamb bones being fed to dogs and pigs subsequently gaining access to the bones. The significant epidemiological features of the outbreak were very high levels of virus excretion in the exhaled air of swine and the milk of cattle before they showed clinical signs of FMD and variable clinical signs in sheep. Many sheep infections did not seem to spread. The outbreak caused such impact that an inquiry resulted.

The 1967 Northumberland Inquiry made many recommendations. The thrust of the Inquiry was setting a rational policy for the import of meat into Great Britain. The key policy decision to make was to base meat imports on a clearly enunciated risk policy. Imports could be based on a high-risk policy if no controls were placed on meat imports from countries with endemic FMD or a least risk policy if imports were only to be taken from FMD-free countries. Countries with low sporadic occurrence would impose less risk for Great Britain than endemically affected countries. In making the recommendations about risk, it was seen as a government policy decision. It appeared that there was to be no input from the National Farmers Federation or the British Veterinary Association about import policy apparently because Argentina was a diplomatic problem. As an alternative to banning imports from FMD affected countries, the Inquiry recommended exclusion of the dangerous components of carcasses containing FMD virus such as bones, lymph nodes and offal. This exclusion would give a substantial reduction in the risk of importation of meat from FMD countries. It was recommended that, if for social, political or economic reasons, meat is not banned from FMD endemic countries, only boneless beef, no fresh mutton, lamb, pig meat or offal should be imported. It was concluded

that while slaughter was the best means for eradicating FMD in the Oswestry outbreak, contingency plans should be made to apply ring vaccination and preparations kept in readiness to use vaccine in a future outbreak.

In assessing the response by the British Ministry, the Inquiry recommended that veterinarians should be in charge of control centres and adequate facilities for cleaning and disinfection of stock vehicles and persons needed to be provided at entry points to Great Britain. The inevitable recommendation was made for an expansion of research into FMD and in particular vaccination.

Implementation of the Northumberland review

Meat imports were limited to boneless beef from FMD infected countries; carcase sheep and pig meat was only imported from FMD-free countries or regions. However, swill feeding to pigs was still allowed; there were 6,300 registered premises in 1973 and 4,500 in 1975. With ongoing pressure to upgrade swill-feeding facilities, there were still 90 swill-feeding premises in 2001, the year of the next major outbreak. Detailed plans were made for applying vaccination policy early in a future outbreak. A FMD vaccine bank was established post- Northumberland and it became the International Vaccine Bank in 1985 of which Australia was a member. The vaccine bank at Pirbright had ongoing financing difficulties.

Events 1967 to 2001 and impacts on disease control capabilities

There was only one outbreak of FMD between 1967 and 2001. The outbreak was in 1981 when there was infection in cattle of one herd on the Isle of Wight. The source of infection was traced to an aerosol plume dispersed from an infected piggery in Normandy. In 1993-94, Andy Lebrecht, the Principal Private Secretary to the Minister of Agriculture, Mr Michael Soames, undertook a review of the MAFF ANIMAL HEALTH GROUP. The review further weakened the Group whose resources had been whittled away since 1967. The bans and requirements on importing from FMD-affected countries were lessened from 1995 when EU numbers in the Veterinary Committee increased and lower standards applied to all EU countries. At the same time, those favouring a slaughter policy for FMD control in the EU Veterinary Committee were no longer in the majority.

In 1999, a review was undertaken into Great Britain's contingency plan for FMD. The review, conducted by Drummond, found MAFF only had the capacity to deal with 10 infected premises when diagnosed. No other disease control scenarios were explored and notably the 1967 outbreak scenario was not explored. There were no preparations for ring or mass vaccination initiated at that time. The report

concluded a rapid spread of FMD would quickly overwhelm resources but no remedial action was taken. The 2001 outbreak inevitably occurred in a swill-feeding establishment and from this index focus the number of infected properties when diagnosed was about 57. Great Britain's disease control resources were overwhelmed faced with the largest FMD outbreak of all time. This level of infection at detection was far more than the Drummond Review had suggested as the review estimated the service could only cope with ten premises. There were the inevitable Inquiries following the outbreak.

Findings of the 2001 Inquiries

Not only was infected bone-in meat imported, it also contained the Pan Asian strain of FMD virus that infected pigs and sheep as well as infecting and being transmitted by cattle. The infected meat went to a deficient swill feeding premises near Hadrian's Wall in northern England. The Animal Health Staff did not have the hard practical experience of those in charge in 1967 because all the key staff members had retired. The control centres established to manage the outbreaks were too large and were unable to cope with the numbers of workers and to manage the work to be undertaken. Veterinarians did not run the Control Centres.

Difficulties for the control program included; slaughtered animals had to be moved from premises and burned and not buried in situ as in 1967 because of bovine spongiform encephalopathy (BSE). No brain or spinal cord material could be deposited below ground for fear of contaminating water tables with prions. There was no serious preparedness to use the vaccination policy agreed to in 1967. It was reported that there was an aversion to vaccination because 'carriers' were seen as a problem. The isolation of virus from the pharynx of vaccinated, challenged and recovered animals using probang samples was seen as a problem to the use of vaccination. However, although this carrier status was demonstrated in experimental situations, it has not been shown in field situations where there has been no transmission of infection to uninfected contact animals. Carriers were not real threats.

One conclusion that can be made about the British situation is that there will be deficiencies in memory, procedure and practice in the future. One has to ask why there were 90 swill feeders still left in the UK, particularly one that was acknowledged well below standard. If this swill feeder had been closed down there would probably not have been a FMD outbreak in 2001. It can be predicted that there will be blind spots in all countries that will allow memory, procedure and practice to fail in the future. One such event has already occurred, the failure to use

vaccination against highly pathogenic avian influenza in eastern Asia from the outset of the outbreak in 2003.

The staff differences between 1967 and 2001 need some explanation. The Drummond Report recorded there were reduced numbers of Regional Veterinary Officers which led to increased district sizes with the control centres being too large for effective management. A layer of Deputy Regional Veterinary Officers had been removed and there were reduced numbers of Veterinary Officers in the State Veterinary Service with less management responsibilities. MAFF had a “narrow outlook and a lack of contextual awareness” the National Audit Report concluded. The ‘establishment’ led by the Chief Scientist and persons in the Royal Society hijacked control of the outbreak. The role that the media played was not helpful. The ‘establishment’ of the Royal Society ‘took over’ so that those who could orchestrate the outcomes ensured that it would not throw a spotlight on their actions by hijacking the resulting Inquiry. “Spin doctors” worked within and outside the control program and the outbreak spawned a plethora of armchair critics and those who thought they knew something about disease control moved into disease management, developing their trade into an art form.

What did a century of FMD outbreaks prove?

It is believed that the following conclusions can be made about a century of involvement in FMD control in Great Britain.

- Frequent events don't necessarily equate to preparedness or competence in control activity;

Economic circumstances will drive the services that animal health services will be given to run disease control programs;

Politicians have little ability to evaluate disease risk if it is not current and arbitrarily increase and reduce resources expediently rather than strategically;

- A parliamentary term is little more than most politicians provide for unless severely pressed by the need to cover immediate ongoing eventualities.

What are the lessons for Australia? What is the status of Australian preparedness? Australia established a first class veterinary service to eradicate bovine tuberculosis and bovine brucellosis 1970 to 1984. Eradication of brucellosis particularly was achieved so easily, compared with the efforts in most overseas countries, with industry support and adequate money. As the various parts of the country achieved eradication, veterinary services were cut and monies withdrawn for animal health programs.

While eradication was progressing, AUSVETPLAN was developed as a reference point for the control of the diseases for which control and/or eradication would be undertaken. In the immediate past, Australia went into review mode in 2001; the review focussed on FMD & BSE, two more politically unforgiving diseases it would be hard to find. Exercise Minotaur in 2003 focussed on intra- and inter-government agency relationships – the whole of government (WOG) response. The report found deficiencies in a number of key areas including the following. There is a need:-

- to integrate national response arrangements;
- to identify a national leader for the eradication program;
- for ongoing training and exercising to take account of:
 - politicians change regularly so there is a need for a 5 year plan for exercising WOG responses;
 - response agencies need adequate numbers of trained personnel;
 - a plan is needed for how laboratories will operate in outbreaks; and
 - many more recommendations for training and exercising;
- for the logistics of getting things done to be upgraded; and
- for communications capability to be better resourced.

What did Minotaur achieve?

In the four years following, there has been a significant claw back of outbreak response resources that can be largely seen as a result of the Minotaur review. New young persons have been injected into the services of some jurisdictions. However, some jurisdictions have not responded as would be expected from the findings of a national review.

A very exciting initiative was trialled in 2003 as the Rapid Response Team (RRT) concept. The RRT is a mobile Local Disease Control Centre that can assemble anywhere in the Commonwealth in 24 hours. The RRT has a national team membership and 2005 had undertaken 2 exercises with another in train. This initiative has the potential to change Commonwealth, State and Territory relationships in animal health and finally produce a national operational mode. The initiative was devised with the principle aim to provide the small jurisdictions with the opportunity to quickly assess its disease status although the RRT is likely to be used in any jurisdiction.

Australia has made the livestock industries relevant by making them part of the action in the eradication process in both policy and operations through Animal Health Australia (AHA) and the Emergency Animal Disease Response Plan.

In addition, AHA has provided a forum for keeping current issues in front of all member agencies, jurisdictions and livestock industries, and mechanisms for assessment of agency performance that will hopefully be able to maintain a standard. AHA has ensured annual money is set aside for preparedness activities. Another WOG exercise was planned for 2005 with Avian Influenza being the focus as a disease with public health implications. Hopefully the exercise will reinforce the lessons from Minotaur.

Preparedness for Future Events

Preparedness and effectiveness are functions of the resources available and the quality of staff training that will contribute to an effective response. It now appears there is a will to make preparedness work but whether the necessary resources can withstand the barrage of who should pay/who could pay arguments is to be seen. A great deal can be achieved with current arrangements if all parties contribute to the preparedness program.

The issues of competent people in the right places with the knowledge of how the response works are essential ingredients and need to be nurtured. Rivalries between and within AHA partners and inertia for training remain the single biggest barriers to achieving/retaining an effective response capability for animal disease responses. Errors and corporate memory losses will occur but the biggest test might come from a new disease agent appearing or a disease presenting a new control conundrum. BSE, Nipah, HPAI might just provide the conundrums. National exercises testing WOG and RRT responses represent the best ways of ensuring preparedness is kept at the forefront of the policy and reaction levels of the response.

Australia is in a period of relative prosperity but what will happen when an economic downturn/slowdown occurs and the razor gangs re-establish is anyone's guess. Logic suggests that rationality will go out the window when money comes into the equation. The WOG approach is the best way to keep animal health consequences/priorities before governments. How bilateral and multilateral free trade agreements (FTA) might change the current situation and the balance of Australian quarantine perspectives remains to be seen. The USA FTA has a clause about parties meeting and negotiating access issues; it is not yet known where this might lead and the pressures that will be placed on Australia's conservative quarantine policies.

In conclusion, it is believed Australia is as well prepared for an animal disease outbreak as it has been in the last 20 years.

The factors that can change the current situation of preparedness are:

- Rivalries between AHA partners about costs and who pays leading to inertia;
- Whose responsibility it is to maintain and enhance preparedness for disease control;
- A downturn in Australia's economic circumstances;
- The regular changes occurring in governments and staff with loss of memory, lack of understanding giving personnel reductions/incapacity and lack of training opportunities; government memory will be short term for politicians with regular changes in personnel; department memory will be longer term as long as attractive careers are offered to retain staff; and FTA's and their impact on the quarantine barrier have to be tested.

This is where I started this paper in 1865 about changes to Great Britain's quarantine policy for the purposes of fostering trade and an ability to side step rigorous quarantine controls.

**VICTORIA'S FIRST CHIEF INSPECTOR OF STOCK
EDWARD MICKELTHWAITE CURR**
Ian Parsonson 2/1 Coape St. Cheltenham 3192 Victoria.

Edward Mickelthwaite Curr was born on 25 December 1820 in Hobart Town, Van Diemen's Land, to Elizabeth and Edward Curr. Edward Curr was the eldest of fifteen children, 9 sons and 6 daughters. The Curr family originated in the north of England where EM Curr's grandfather, John, was steward to the Duke of Norfolk, managing the Duke's estates and coal mines. John Curr was interested in writing and published *The Coal Viewer and Engineer's Companion*, in Sheffield in 1797. His eldest son John junior was a tobacco importer who immigrated to Australia with the intention of growing tobacco. However, he ended up in reduced circumstances on a farm near Wollongong, New South Wales where he died. The second son became a priest and wrote extensively on religious subjects. The third son Edward, the father of EM Curr, was born on 1 July 1798. At the end of his school education he entered a merchant's office. After two years in this work Edward Curr decided to go to South America and while in Brazil he made several long inland trips. Upon his return to England in June 1819 he married Elizabeth Micklethwaite. Edward Curr entered into a business partnership with John Raine and in October 1819 they took a cargo of merchandise to Hobart Town. Because he brought merchandise into the

Van Diemen's Land Colony Curr was given a land grant of 1500 acres. When his partnership with Raine was dissolved he sold the property for 12 shillings an acre. Edward Curr returned to England in June 1823. During the voyage he wrote *An Account of the Colony of Van Diemen's Land*, which was published in London in 1824.¹ In London, at this time, a group of gentlemen were forming the Van Diemen's Land Company to invest in properties in the new colony and were being advised by the former Lieutenant-Governor of the Colony, Colonel Sorell. Sorrell suggested Edward Curr could be of assistance to the group during the planning. Curr became the agent of the Van Diemen's Land Company and in 1826 returned to Van Diemen's Land and established the company headquarters at Circular Head in the north western region of the island.

The Van Diemen's Land Company's Charter of Appointment passed through the British Parliament, with its proposed capital of £500,000 almost fully subscribed and with an initial grant of 250,000 acres. During Curr's stewardship, sales of English Merinos, Saxon and Leicester rams did much to improve the Island flocks. He also accumulated additional properties, eventually increasing the land holding to 350,000 acres.

The Curr children were sent to England in 1828 for their education at Stonyhurst College Lancashire, in the care of Jim Scully, Edward Curr's butler. Edward junior was eight and his brothers, William and Richard, were seven and six. After Stonyhurst, the boys went to St. Edmunds College in northern France where they spent one year learning French. Edward Curr junior returned to London and in January 1839 sailed back to Van Diemen's Land.

In December 1840, his father Edward bought a sheep run at Heathcote, in the Port Phillip District near Major Mitchell's line of exploration and installed his son Edward junior (aged 19) as manager. Curr junior from 1841 to 1851 managed his father's sheep properties, *Wolfscrag*, *Tongala*, *Lower Moira*, *Colbinabbin* and *Coragoragin* and in partnership with his brother William conducted the Corop run. These properties were in the Goulburn and Murray River areas and were the tribal lands of the *Bangerang*, *Ngooraialum* and *Pinpandoor* Aborigines who were numerous at the time. During his stay in the area he formed good relationships with the local Aborigines and studied them in great detail that was unusual for settlers at that time.

Later Curr wrote very detailed accounts of the Aboriginal people and the languages of the tribes with which he was in contact using information that he had accumulated by acute observation of the local people. By drawing on his own experiences and knowledge and from extensive correspondence and discussions carried out with other people with similar interests in Aboriginal language and culture from around Australia. Curr with the assistance of the Victorian

Government published a work of four volumes in 1886, *The Australian Race: its origins, languages, customs* Four Volumes, Melbourne, Victorian Government 1886.²

He also published *Recollections of Squatting in Victoria* in 1883 that was an account of his experiences in Victoria before the gold rushes and describes the first occupancy of the country around the Echuca-Shepparton area by white settlers.

Melbourne University Press republished the original account in a second edition in 1965 because of the historical importance of Curr's experience in the development of original settlements in what is now one of Victoria's richest rural areas.³

EM Curr was a 'currency lad' despite his education in Europe. His love of the Australian bush and the pleasures he derived from his experiences show throughout his writing. While he was managing the properties with the help of his younger brother William, his father, Edward Curr senior was in Melbourne working assiduously for the separation of the Port Phillip District from New South Wales. Edward Curr senior saw that there was a need to keep the money raised in Port Phillip for the benefit of the Colony and not for the finances of New South Wales. As a result of his efforts he became known as "the Father of Separation".

Unfortunately, he never lived to hear of his success as the news of separation from New South Wales reached Port Phillip on the day he died, 18 November 1850.

After his father's death Edward Curr and two of his brothers sailed for England in February 1851. They undertook an extended tour of Europe and the Middle East, spending time in Spain, France, Switzerland, Italy and Greece, continuing through the Middle East. Much of the tour was conducted on horseback. Part of the tour provided details for a book published by EM Curr in 1863, *Pure Saddle Horses for Australian Conditions*.⁴ The book describes the importance of producing horses suited to the environment in which the horses had to work. Curr saw Australian horses as a mixture of Arab and pony with a dash of thoroughbred bloodlines, the type of horse that has become the Australian Stock Horse.

During the time Curr was overseas the Victorian and New South Wales gold rushes occurred. Because of the difficulties engendered by the acute shortage of labour during the gold rush Curr's brother Richard and his mother sold all their sheep properties.

Edward Curr married an Irish girl, Margaret Vaughan, in January 1854 and returned to Victoria in August of the same year. On his return Curr was not impressed with what had happened to the structures of Victoria's society following the gold rushes and in particular with the types of migrants who had arrived seeking the gold. He left Australia in September 1854 for Auckland, and began importing horses into New Zealand from New South Wales. He remained in New Zealand until January 1856 then moved to Queensland. In March 1856 he took up two blocks of land in the Burdett district on which there were 3200 head of cattle.

Curr gradually shipped the stock to Melbourne for sale and sold the properties without cattle. With his brothers, Richard and Julius, he then bought *Uabba Station* on the Lachlan River in New South Wales and stocked it with 1000 cattle. Unfortunately, due to drought the venture was unsuccessful and Curr left the property with £340. He spent £300 of this amount buying horses, which he took to New Zealand and cleared a further £300 on the deal.

Curr returned to Victoria and on 3 November 1862 took up a position as one of seven Inspectors of Sheep with the Victorian Government and was appointed to the Melbourne district. On 17 May 1864 under the Diseases of Animals Act he was appointed Chief Inspector of Sheep for Victoria. Curr was well fitted for the task of Chief Inspector of Sheep because of his background as a pioneering sheep farmer and squatter in Central and Northern Victoria.

The Victorian Government in July 1864 announced that prizes of £150 would be awarded for the best essays on pleuropneumonia in cattle and scab in sheep. Curr won the prize for his essay on scab. Pullar⁵ has described Curr's essay as accurate and very informative. Many of Curr's recommendations, such as the creation of clean, doubtful and infected districts; strict control of stock movements; increased fines for non-compliance; and increasing the cost of 'licences to treat'; proved to be successful administrative steps in the eradication of scab.⁶

The control and eradication of sheep scab was one of the important tasks undertaken by EM Curr during his tenure as Chief Inspector of Sheep. Control of sheep scab from the early days of the colony in New South Wales was under the authority of Acts and Regulations of the British Parliament with additional orders by the Governor of the Colony.

The first Bill introduced into the New South Wales Legislative Council in 1831 was opposed by some pastoralists. Eventually, in 1832 the Bill was passed as the Scab Act (3 William IV. No. 5). Additional controls were enacted in subsequent Acts in 1834 (5 William IV. No. 19) in 1835 (6 William IV No. 10) and from 1836 onwards the Acts applied also to the Port Phillip District. The Port Phillip District was separated from New South Wales in 1851 and became the State of Victoria. A Legislative Council and Legislative Assembly were established and a number of Acts were passed to control sheep scab. In addition to the defined methods to control scab using movement restrictions and inspections of sheep and properties there were several other diseases of stock included in the Acts among which were catarrh of sheep, pleuropneumonia of cattle and later, foot-and-mouth disease. These latter diseases obscured the provisions for scab and over a period of 25 years, 10 more Acts were to be introduced before scab was finally eradicated from Victoria in 1876 but the provisions for its control remained in the various Diseases Stock Acts until 1959.⁷ Curr in his essay on sheep scab estimated the annual losses to be in the

vicinity of £502,000. Curr was appointed Chief Inspector of Stock for Victoria in 1871.

One of the main reasons for the success of scab eradication in New South Wales and Victoria was the calibre of the Chief Inspectors of Stock. Both Alexander Bruce in New South Wales and Edward M Curr in Victoria were well-educated men with practical experience of scab and strong backgrounds in sheep husbandry. Both men had the administrative knowledge and the length of tenure in their jobs to ensure that eradication of scab was successfully completed. The Australian Colonies were fortunate to have such men leading the eradication of sheep scab programs.

During the time that sheep scab was being controlled and eventually eradicated in the Eastern colonies of Australia, university trained veterinarians in Britain were undergoing the early transitional period of a professional organization and development at the same time competing against people that were not university trained. Migrants that had been trained and completed veterinary degrees at university did not arrive in Australia until the early 1840s and from then on only in small numbers.

Scab was eradicated from Australian sheep as a result of a number of factors. Foremost was the fact that influential stockowners, politicians, government employees and newspapers were supportive. The Scab Acts ensured heavy penalties for transgressors and were supported by the judiciary and legal professions in all States. Most important was the cooperation of the majority of farmers who knew the disastrous effects of scab and maintained enthusiasm for eradication. Treatments for sheep scab had been used from early times with mixed success. The nature of the disease and the identity and life cycle of the mite and its ability to survive away from the host, were known from 1810. (Youatt). A satisfactory treatment did not become available until the 1850s. Previously most treatments had been applied as hand dressings over the scab areas, although sometimes dipping in limewater had been used to soften the scabs. Unfortunately a number of harsh treatments had been advocated such as mercuric chloride solution, arsenical dips, crude sulphuric acid diluted 1:80 and many proprietary remedies of doubtful value.

The Chief Inspectors for Victoria and New South Wales, EM Curr and A Bruce, recommended the use of tobacco infusion and sulphur dips. John Rutherford of Hopkins Hill, Victoria, had developed the tobacco and sulphur mixture and the method of its preparation. The action of the dipping mixture relied on the tobacco killing the mites on contact and the sulphur retained in the wool, killing the larvae as they emerged, preventing reinfection.

Dr JP Rowe of Campaspe, in Victoria, developed a lime and sulphur mixture of two ounces of lime and 4 ounces of sulphur to each gallon of water. The ingredients

were inexpensive, preparation was simple and the efficacy of the mixture was as good as the tobacco-sulphur dip. The disadvantage was that the dip had to be prepared immediately before use and used while hot, similar to the tobacco-sulphur mixture. Sheep Scab eradication was almost completed when Dr Rowe's new dip mixture became available and it ensured the final success of the eradication schemes in the other States.

Bruce in his book on scab in sheep, showed plans of a variety of dipping systems as well as holding yards and pens. The dip mixture containing tobacco was expensive and difficult to prepare, so as much as possible, was collected and recirculated through pumps to be reheated. Sheep were totally immersed and held in the dips for 30 to 60 seconds. Initially the recommendations were that the sheep be re-treated within 10 to 20 days, later changed to 7 to 14 days.

William Lockhart Morton developed the 'Plunge Dip' for treating sheep and described his invention in the *Geelong Advertiser*ⁱ on 23 August 1849. Years later Rolf Boldrewood writing in the *Australian Graziers Guide* stated “ *From one of the fertile intellects which have been associated with stock in some parts of Australia in this emergency was evolved 'the dip', one of the most beneficent inventions ever provided for the suffering stockholder in his hour of need. Instead of a tub, a large watertight tank, made something after the fashion of a soak-pen in a sheep-wash was put up. By its side huge boilers kept the water at a correct temperature, and from time to time renewed the infusion with which the tank was filled. A succession of small yards guided the sheep to the 'race'—another Australian invention by which the sheep followed one another rapidly through a passage too narrow to permit of their turning round; and finally they slide down a slope that terminated the race and plunged head over ears into the steaming and sulphurous pool, to emerge saturated and staggering upon the battens of the draining yard. No handling, no catching, no delay was necessary in this rapid and efficient mode of treatment and several thousands a day could be treated thus even more thoroughly than by the old manual system.*”

There is no doubt that the Australian pioneer inventions of the plunge dip and the drafting race have revolutionised the manual handling of stock in Australia and in the World. The convenience of reducing sheep numbers of unwanted stock by 'boiling down' led to better management combined with the elimination of intractable sheep scab cases.

By 1880 when most Australian States had eradicated sheep scab, there were still fewer than 50 graduate veterinarians in Australasia and only twelve were registered in Victoria.

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VETERINARY SCIENCE OVER THE PAST FIFTY YEARS

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I wanted to be a vet since I was 9 years old, when my pet dog was euthanased by the local vet following a car accident. In 1952 my family migrated from England to Australia and in 1958 I got my chance and commenced first year veterinary science at the University of Melbourne at the age of 17. Unfortunately, along with 20 of the other 25 first year veterinary science students, I failed and had to repeat a year. At the second try I passed and, because there was no veterinary science school at Melbourne University in 1960, I went to the University of Queensland, primarily because it was cheaper than Sydney and finances were a major concern. Most students in my year had either a Commonwealth Scholarship or were bonded to Government Departments of Agriculture. We graduated free of major debt and the Dept of Agriculture had access to the services of their new graduates for three years and many stayed or moved into areas of agricultural research. This is in major contrast to the situation today.

Queensland

In 1960 when I commenced second year, the veterinary school had recently moved to the main University Campus at St. Lucia. The buildings and facilities were relatively new and we were able to participate in University life to the full, mixing with students from many other faculties. I believe that this was very good for our personal development and it is in stark contrast to the isolation of most of the veterinary schools today.

The recent move by Melbourne University to accept veterinary science applicants only after they have completed an undergraduate degree and to regard Veterinary Science as a post-graduate degree may go some way to solving the problem. Other Universities may or may not follow this lead.

At that time (1960s) many of our lecturers had recently moved to the University from private practice or government service and I received a very practical veterinary education with a strong emphasis on farm practice. We had two years Anatomy with 'big' Jim Watson, Pathology with Hans Winter, Parasitology with Prof Sprent, Microbiology and the History of Veterinary Science with Prof John Francis, Cattle Medicine with Joe Berriman and Animal Husbandry with Prof Bill Pryor and John Auty. Animal husbandry was taught at Queensland over 4 years and, among many other useful things, they taught you how to throw a horse, drench a cow, strain a farm fence and shear a sheep. Speaking to the students today, most of these aspects of veterinary education have been dropped, but I have subsequently found a use for most of the things we were taught.

The Science of Veterinary Science

The science behind veterinary science has come a long way in fifty years. We have evolved from the 'James Herriott' era and post war veterinary medicine where most of the remedies were compiled and dispensed in the practice pharmacy, to an age when we have all of the miracles of modern pharmaceutical and immunological progress at our disposal.

Much of the preventative medicine that we now use was developed and refined during my career in veterinary science. Antibiotics were first developed in the 1930's and 40's and in my childhood first became available to humans. I owe my life to penicillin which cured me of a bout of childhood pneumonia. The use of antibiotics rapidly spread to veterinary practice, with the use of sulphonamides in the late 1930's and penicillin after the second world war in 1945 and the 1950's. In 76 years we have come from a time of no antibiotics to a time where we have to worry about antibiotic over usage and bacterial resistance.

Bill Thompson started the practice at Korumburra in South Gippsland, Victoria where I first worked. Bill was one of the pioneers of the use of penicillin in dairy practice in Australia and this drug revolutionized mastitis control; now penicillin resistance is common.

Vaccines

Before distemper vaccine was developed, it was common to use the 'serum simultaneous method' of immunising dogs. The poor dog was infected with virulent distemper virus and then simultaneously treated by administering canine hyper immune anti-distemper serum.

The work of Laidlaw and Duncan led to the development of the first commercially available distemper vaccine produced by the famous company of Burroughs Wellcome in the UK. Some of the early-attenuated distemper vaccines had adverse side effects such as encephalitis and we have come a long way to the very safe distemper vaccines that we use today. In the 1950's vaccination against infectious disease was becoming common and more effective in both man and animals.

Virologists Patrick Laidlaw and others had noted that ferrets and dogs could both be infected with distemper. While working on a distemper vaccine, a chance sneeze from a worker infected with human flue virus infected a ferret and led to Laidlaw and his co-workers discovering the virus of human influenza and its infectivity to ferrets. The ferret is still the test animal used to identify new strains of human flue virus. Influenza viruses infect many species; horses, pigs, birds, seals as well as humans. Today we face new threats with Hendra Virus, Nipah Virus, Avian Flu Virus and this illustrates the importance of collaboration between medical and veterinary research workers. The importance of collaborative virological research is

one aspect of veterinary education that requires much more emphasis.

The late 20th century was an exciting time for virologists, however, in veterinary science, research goes in sharp spurts and then we tend to rest on our laurels and currently research into infectious diseases of dogs is at an all time low. According to Leland Carmichael of the Baker Institute of Animal Health, Cornell University in the USA, “the research interests cited by members of the American College of Veterinary Microbiologists indicated that, of the nearly 300 diplomates, less than 15 engage in some form of canine infectious disease investigation. No individuals listed dog diseases as their primary interest – most are veterinary diagnosticians, who are the first line of disease recognition.” There is a world-wide trend away from scientific research in all veterinary schools in all disciplines and this drift away from research needs to be addressed.

Farm Practice

I graduated from Queensland University in 1964, the year the Beatles made their first and only visit to Australia. I was offered the job of House Surgeon at the Queensland University but, in deference to the pro-agricultural propaganda of my lecturers, who despised small animal practice, I turned it down for a job in dairy cattle practice in Korumburra, Victoria.

I stayed in Korumburra/Poowong branch under the tutelage of the late Charlie Watson and John Hamilton for two years and learned to apply my new knowledge in a very practical sense. Much of my time was spent TB testing and vaccinating cows against Brucellosis with Strain 19 vaccine. Both diseases have now been eradicated from Australia. We also wormed and vaccinated hers of calves for the farmers who often

did not perform these routine tasks themselves. In the breeding season we became obstetricians and, at the height of the milking season, we specialised in mastitis control. I enjoyed this work but it did little to stimulate my brain. I believe that farm practice needs to be a lot more science oriented if it is to keep today's young graduates satisfied. 'Fire Brigade work' was usually the only stimulus that made the farmer call the vet, but the need for preventative medicine was ever present. The economies of farming in Australia mean that the value of individual cattle and sheep remains low compared to overseas. Perhaps we need to copy the Netherlands where a level of trained veterinary technicians has been developed to take much of the daily obstetric work out of the hands of the rural vets, releasing them to concentrate more on herd health and disease control.

The Travel Bug

After two years of cow practice with 'green arms' and the stench of retained after birth still strong in my nostrils, the urge for travel took me to the UK.

I arrived in England on a freezing day in April 1967 and commenced work in mixed practice in the Midlands. The practice, near Leamington Spa, consisted of a small animal practice in Kenilworth and a prosperous farm and equine practice in a village called Cubbington. The British Royal Showgrounds and Equestrian Centre was in our practice area and we did the work for the North Warwickshire Hunt. I learnt much about horses and the practice had its own farrier who used to ride around the countryside on a motor bike with a sidecar full of blazing coke and a large steel anvil; heaven help anyone else on the narrow country lanes. The work done on dogs and cats was also far in advance of what we had done in rural practice in Gippsland and I learnt many lessons in orthopaedic surgery from my employer John Brazier. In 1969, due to the illness of my father, I returned to Australia and founded the practice where I still work today in Bundoora. When we commenced this practice it was 50-50 small and large animal but over the years, it has been overtaken by the urban sprawl and is now one hundred percent small animal.

Attitude of clients

As a Specialist, I receive many referrals, but Australian vets still have a long way to go before most would willingly accept referring patients as readily as their English or American counterparts. This will undoubtedly change as specialised practice becomes more common and as the opportunity to specialise becomes more simple. At present it is still expensive and involves a lot of overseas study where many of our best brains remain.

Practice ownership

When I graduated, non-veterinarians used the State Veterinary Acts to prevent ownership of a practice; I still think this was wise legislation, but, unfortunately, this has become a thing of the past. We now see persons such as accountants; lawyers and veterinarians who do not want to actively practice veterinary science, participating in veterinary practice ownership purely for profit. I believe this is a retrograde and dangerous trend. The trend towards corporate ownership of practice in many metropolitan areas may lead to a lifetime as an employee for a veterinarian.

Succession

In my early practice life, a partnership was an obvious expectation in a job and provided a stimulus to succeed and excel in the daily work. Job adverts today rarely carry the words, 'partnership prospects after a suitable period'. The change in gender balance in the profession has an effect on practice ownership. Surveys have shown that practice ownership of practices is more common in males. When I graduated there were three girls in the year of sixty students, now there are usually greater than seventy percent female students. In my practice there are 15 vets and only 4 are male. This effect is obviously socio-economic and spread across all the professions and is not just oriented towards the veterinary profession. In Australia, female graduates in practice are paid the same rates as males, so money is not the key as is often claimed in the USA. Ownership of veterinary practice and raising a family are not exclusive and, in my opinion, ownership is an ideal way for female graduates to have a family and still retain an interest in a veterinary careers.

The Roundabouts of life

Most veterinary students enter veterinary science without a clear view of what they want to do with the qualification. At the University of Melbourne I sometimes give the students a lecture entitled 'the roundabouts of life'. In this lecture I discuss life after graduation and where it leads us. After approximately five years we all strike the first 'roundabout'. This has four exits – one leads straight ahead and you continue in your existing career path and one leads to the left and one to the right. The left hand exit takes you out of the veterinary profession to a new career; the right path takes you to another aspect of the veterinary profession to stimulate your interests. Bundoora was my first 'roundabout' and it was 50-50 large and small animals when I commenced the practice. However, the urbanization of the farms in the area took me further towards small animal practice and we now have a one hundred percent small animal practice. My second 'roundabout' occurred at the age of 44 when I decided to specialise in small animal surgery. I became a specialist at the age of fifty. For most vets the second roundabout occurs in their early thirties and the same three options present on the roundabout. For many female graduates, one option leads to a family and a temporary hiatus in their career. I hope to live long enough to see the interesting changes in veterinary practice over the next decade. I know they will be interesting. Women will undoubtedly dominate our profession and as the French say, "Cherche la femme".

The Australian Veterinary Association

When I first joined the AVA it was responsible for continuing education and social interaction between veterinarians. I think the corporate structure of the AVA has seen a progressive move away from a professional association concerned with members needs, to an organization that is more concerned with the legal aspects of 'corporate governance' than it is with the members it represents. There is a danger that the National AVA will become completely irrelevant to the practising veterinarian and many of my colleagues are not renewing their membership. Special Interest Groups, on the other hand, are still very relevant to most of their members and this places a real strain on the links between them and the National body.

The Rise of Witchcraft

Last, but not least, I want to mention the disturbing trend in veterinary medicine to embrace non-proven, non-evidence based and non-scientific methods of treatment, euphemistically called "Alternative and Complementary Treatments". In my opinion, this is surprising given the intelligence required to get into a veterinary school and the fact that it is a science based education. Public demand for alternate and complimentary therapies can be explained by the fact that we have eliminated most of the serious infectious diseases in the 20th century and most that remain are the diseases of old age and psychoses. A search of the internet shows chronic disease; Arthritis, Cancer, Depression and Menopause as the human conditions often treated by alternative and complimentary medicines. All of these conditions have good evidence based treatments available, but humans are able to make a choice. What choice do animals have? I know one thing, I never had an animal come to me and ask to be treated either with evidence based treatment or homeopathy. Obviously, the demand comes from the owners of the animals, many of who are ill informed. The vets that supply the treatments are not ill informed but have made a positive choice to fill the demand. Do they do this for money or do they believe in the therapies they provide? Do they really believe that what they are doing helps the animals or do they just do it for the money? I think many do believe – they probably have to pretend to themselves that the treatments they use have some benefits in order to be able to sleep well at night. I find this behaviour unacceptable and akin to charlatanism.

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(Member of the Royal College of Veterinary Surgeons, Fellow of the Royal College of Veterinary Surgeons; Fellow of the Royal Scottish Society of Arts, Edinburgh; Certificated Chemist; Veterinary Surgeon to the Prince of Wales V.V. Light Horse, The National, West Bourke, Ovens and Murray Agricultural Societies of Victoria, Zoological and Acclimatisation Society, Society for the Prevention of Cruelty to Animals, and late Veterinary Surgeon to the Government.

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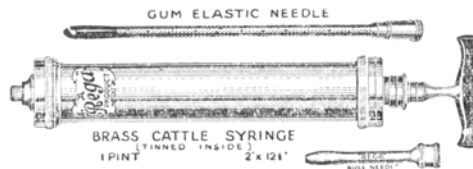


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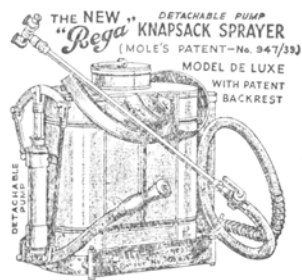
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