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## AUSTRALIAN VETERINARY HISTORY RECORD



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***Australian Veterinary History Society,  
A Special Interest Group of the Australian Veterinary Association Ltd***

***NOTICE OF 20<sup>TH</sup> ANNUAL GENERAL MEETING  
Brisbane Convention & Exhibition Centre, 24 May 2010 at 5.00PM.***

1. Present
2. Apologies
3. Minutes of the 19<sup>th</sup> AGM of the AVHS (These minutes were published in the Australian Veterinary History Record, No. 52, July 2009)
4. Business arising from the Minutes.
5. Report of the President, Dr AJ Turner
6. Report of the Secretary/Treasurer, Dr JH Auty
7. Report of the Honorary Librarian, the Australian Veterinary History Library.
8. Report of the Honorary Editor, the Australian Veterinary History Record.
9. Election of Office Bearers
  - President
  - Secretary/Treasurer
  - Honorary Librarian
  - Honorary Editor
  - Committee
10. General Business
  - Report on Australian Veterinary History Collection
11. Next Meeting of the AVHS
12. Close.



# HISTORICAL ARTICLES

The article will be the basis for a presentation to the Annual and Scientific Meeting of the AVH SIG in Brisbane on Monday 24 May 2010.

## Antecedents to the Veterinary club system in New Zealand, c1900 to 1930s

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**Objective:** To describe rural veterinary clinical organisations in New Zealand c1900 to 1930s.

**Procedure:** Historical information from a variety of sources was assembled as part of a larger investigation of the New Zealand veterinary ‘club movement’ c1940- 1960s

**Results:** Nine early twentieth century rural veterinary groups have been identified and are briefly described here. These groups collectively constitute the ‘prequel’ to the post-World War II New Zealand veterinary ‘club movement’. This account identifies the presence of farmer efforts at organising veterinary groups, and the role of dairy companies in some instances. The difficulty of establishing viable ongoing rural veterinary clinical practice in this period is evident, although this began to change in the 1930s.

**Conclusion:** The sociological purpose of identifying an antecedent pattern of clinical work, beyond simply aggregating one-off instances of attempted veterinary organisation within the economic and social arrangements of the earlier twentieth century period, helps situate the rise of the later veterinary ‘clubs’ in New Zealand from the 1930s onward. Further research may identify other groups, or find greater detail and primary source evidence concerning the functioning of these groups. Parallel inquiry into the development of Australian rural veterinary clinical services (and indeed other settler societies) in the same period can then compare and contrast the New Zealand experience.

**Key words:** clubs, club system, New Zealand veterinary history, rural veterinary practice, veterinary clubs

## Introduction

The early decades of the twentieth century in New Zealand were very different in veterinary terms than the preceding century. A number of recognisable milestones in professionalisation history can be seen occurring during this time: the establishment of a government Veterinary Division in 1895 within the newly formed Department of Agriculture, 1892; the 1903-7 efforts - ultimately unsuccessful - to establish the county's first veterinary school;<sup>1</sup> the formation in 1923 of the New Zealand Veterinary Association;<sup>2</sup> and the 1926 Veterinary Surgeons Act setting up a Board and Register of qualified veterinarians. However, the fuller veterinary history of this time and national locality involves grass-roots developments that only occasionally appeared in the debates and developments involved in formal veterinary developments.

From the vantage point of the beginning of the twenty-first century the dominating feature of the preceding century in terms of veterinary numbers, and the expansion of the veterinary profession in New Zealand, can be seen to have centred around what came to be known as the veterinary club movement or club system. This was a farmer co-operative approach to collectively employ one or more veterinarians to provide veterinary care for dairy herds, and later other domestic farm animals. Early versions of this were established in the 1930s, it expanded rapidly in the 1940s and 1950s before levelling off in 1960s as conventional private practice, hybrid contract clubs emerged, and veterinary-led urban veterinary work expanded. The countervailing occupational pressures that existed between farmers and veterinarians which were nevertheless used in an ultimately productive way, have been described elsewhere.<sup>3</sup>

A New Zealand perspective most commonly sees the veterinary club movement, as it became known, as something nationally unique. However, some similar developments were occurring in Australia around this time, if not organised on the same national scale.<sup>4</sup> 1941 saw the first graduates of Sydney Veterinary School's new five-year course. Agriculture Department positions beyond solely disease control activities were developed, for example, 'At this time, the Tasmanian Department of Agriculture introduced an Animal Health Service, ... As a consequence, three new graduates from the 1941 year, namely Drs HO Cartwright, FR Coughlin and WH Southcott, were appointed and spent the next five years in various parts of Tasmania doing clinical practice'.

By the mid 1940s,

*An interest in rural practice followed with the commencement of a subsidised scheme in the Hunter Valley, based on Hexham. This was the first of such schemes in NSW. Meanwhile at Kiama, five dairy factories - Dapto, Albion Park, Jamberoo, Gerringong and Berry - decided to advertise for a salaried veterinarian to develop a veterinary service for their suppliers. This scheme was broadly based on the Tasmanian model. HO Cartwright was appointed and became the first graduate to practise in a wholly rural dairying area outside Wollongong. There were no veterinarians in practice in south east NSW. The area covered by the factories scheme measured approximately 10 km by 48 km (480 sq km) and consisted of a coastal area east of the Illawarra escarpment. HO Cartwright pioneered this service solo for two years travelling 48,000 km per year and treating 220 cases of bovine dystocia and 153 cases of milk fever as well as all of the other work.<sup>5</sup>*

Australian accounts like this of rural clinical practice sound remarkably similar to stories from the New Zealand veterinary club movement. In this respect, then, commonalities as well as variation between antipodean and other settler countries can be observed rather than privileging any single national account.

The present article considers an earlier part of that story, a series of apparently individual local events across the New Zealand colony, but which when viewed together can be seen as antecedents to that later rural veterinary explosion.<sup>6</sup>

It was characteristic of this second period of New Zealand's veterinary history that, generally speaking, a stable producer-consumer relationship for veterinary service was very difficult to establish and sustain. The demand for veterinarians was at best intermittent: it ceased to exist when prices for farm produce dropped, and even when things went well economically, demand was very strongly seasonal. Again points of similarity with Australian veterinary history can be found. William Kendall's veterinary school, established in 1884, eventually morphed into the Melbourne School in 1908. Although New Zealand was not successful, by a small margin, in setting set up an Otago University Veterinary School in the first decade of the twentieth century,<sup>7</sup> Melbourne did establish a university school in 1908 and Sydney likewise established a school in 1910. Both of these schools, however, struggled to get enrolments.

*There was only one graduate, Ian Clunies Ross, from Sydney in 1914, while numbers at the Melbourne Veterinary Faculty fell to the point that it was closed in 1928. Although graduates found some employment in State livestock services, there was little or no demand for private practice until after World War II.*<sup>8</sup>

The story that follows documents examples of efforts to establish clinical practice in rural New Zealand in the first four decades of the twentieth century. These efforts, too, struggled financially and at times failed, before being restarted or started in another town or district.

Although farmers might agree in the abstract that it was in their interests to have veterinary attention available, the practical economics of agriculture meant that except in a few more intensively farmed districts or horse-breeding areas veterinary practitioners could not sustain a viable income. A unique feature of this situation that has not been documented in any detail comprises a succession of attempts by farmer groups to overcome the financial obstacles in order to employ veterinarians. From our contemporary perspective these early efforts can be seen as antecedents to the development of the veterinary club system. Minor reference to these clubs can be seen in the discussions of ‘Veterinary Practitioners’ operating in New Zealand at the time the 1926 Veterinary Surgeons Act was passed and formally distinguished from qualified veterinary surgeons under the Act.<sup>9</sup> A few of these ‘Practitioners’ were involved in the farmer community veterinary clubs or associations in the period under discussion, even as qualified veterinarians were beginning to become available.

Because of the British imperial networks among what are today called settler societies, veterinarians from the United Kingdom veterinary schools, particularly from London and Edinburgh, provided personnel to New Zealand and other settler colonies. The sole route to formal qualifications in Britain was by accreditation through the Royal College of Veterinary surgeons (RCVS), established in 1844, after which date only accepted veterinarians were entitled to designate themselves Members of the College (MRCVS).<sup>10</sup>

These different early twentieth century New Zealand farmer groups were not uniform in their organization or degree of success, and like the later club system, existing organized groups in the agricultural community provided natural foci for arranging some kind of veterinary service.

Both the Farmers' Union and the Agricultural and Pastoral Associations served as forums for rural opinion and both were active in farming affairs generally. Also growing in significance in the early decades of the century were local dairy factories, which like other farmer organizations had the potential, in some cases realised, to mobilise members and resources to employ a veterinarian.

### **Methodological notes on research process**

The historical data presented here was collected as part of developing an historical account of veterinary professionalisation in New Zealand.

Theoretically, the starting point for this paper is a sociological interest in professions, of which historical development is one key part. This academic literature is not, however, explored here. The material is a mixture of primary and secondary sources, and the collection process itself has an interesting history:

Primary references from various local accounts often rely on first-hand knowledge of these events, not directly recorded. Many primary sources have been destroyed or lost, the obvious example of this being the successive amalgamation of dairy companies decade by decade into larger businesses, which often saw older records cleared out or archived and subsequently gotten rid of (Refer endnote 31). Bissett and Smart note in the centenary for the Clutha Veterinary Association that 'no minute books are in existence prior to 1958'.<sup>11</sup> The collection of historical veterinary groups discussed here was secondary to research about the main New Zealand veterinary club movement in the period of the late 1930s to the 1960s. Extending investigation to any information available, these examples were located based on the sources cited here, but were clearly outside the time-period of the main research project's focus.

While accounts of the main veterinary club story have been published,<sup>12</sup> this material viewed in the longer timeframe seems important in showing the precursors to that rapid expansion of veterinary work. The antipodean connection can be seen in a couple of references to groups, in the introduction to the present article, to Australian similarities to New Zealand's account. This is regarded as a preliminary research document in that it is likely that (1) more examples of such clubs could be identified with a fuller historical research program, and (2) greater detail on any one clinical service/group could be found, providing more nuanced accounts of the contingencies of each particular practice.

The recent addition of information on Clutha's centenary – the second example discussed below – is an illustration of how historical research such work can be progressed.

However, the purpose is to make the specific argument that the large-scale national veterinary club system in New Zealand from World War II onwards did not emerge out of nothing, but had specific historical, economic and practical roots in the preceding decades. The partially successful, but partly unsuccessful, results of these ventures, is to the historian or sociologist a useful test of the provisional or contingent nature of the resources and factual circumstances available and necessary for the establishment of ongoing veterinary services/clubs or clinics in the rural landscape of New Zealand.

Social theory today uses the idea of discourse to better explain influences that are not as specific as legislation, new pharmaceuticals or other 'facts' that cause or lead to professional developments. An example of this is can be seen in the discussion of the first group, the Southland Farmers Union, when veterinarian Paterson left for Australia. The strongly voiced opinion of the government Chief Veterinarian at that time, JA Gilruth, while having no direct control in the situation, nevertheless reflects thinking at the time. Such thinking – public, farming, and professional discourses, for example, are vitally important in forming the range of possibilities, the 'repertoires of action', as well as specific moves, that individuals take to further what they consider are desirable goals. Gilruth, in that circumstance, articulated the desirability of local farmers' groups each having a veterinary officer, but even better in his view was the possibility of government Agriculture Department veterinarians being seconded to such local groups – and paid for by the groups – but remaining under department direction.

The Australian comparison can be seen in this New Zealand account in the national scale of the later veterinary club movement and the involvement of farmers within it. Both sides of the Tasman found that pre-existing organisational forms, such as the case of farmer dairy companies, provided a basis to organise and extend the farming interests of their associated suppliers to veterinary care as well. There were several parallel developments. The present article charts the prequel to post-World War II veterinary expansion. Here again, however, there are analogues in how veterinary development occurred. At this point I have not investigated evidence of dairy factories sponsoring veterinary work or clubs in the pre-World War II period, but this

would be a good avenue to pursue. On Cartwright’s account, this mostly occurred after World War II, but again there may well have been a trial-and error process of attempts, more and less successful/unsuccessful, that would help document the gradual change in economic and technical possibilities. This is a topic for future research, possibly best done from the Australian side of the Tasman, and extended over whichever decades of investigation to which researchers’ interest leads them.

**Findings: description of the groups**

In the growth of the club system later on in the 1930s-40s the dairy companies exerted the greatest influence of any group upon the movement. But there is a small literature that makes reference to groups prior to this, although these are often fairly general references to the existence of early farmer veterinary groups. The following statements illustrate these: ‘In one or two instances groups of farmers had established clubs for the purpose of ensuring a service in their district,’<sup>13</sup> or, ‘For many years before 1946 some farmer groups (usually the suppliers of a dairy factory) had retained salaried veterinarians.’<sup>14</sup> The first minimises the number or significance of such groups while the second focuses on the role of dairy factories in this period.<sup>15</sup> The following discussion mentions nine of these club-type groups that have been identified. Probably about two-thirds were promoted by suppliers of dairy companies, although not all of these were specifically organized through the local dairy company. Table One gives a summary of the nine early club-type veterinary groups known to this writer, although others were probably also in existence.

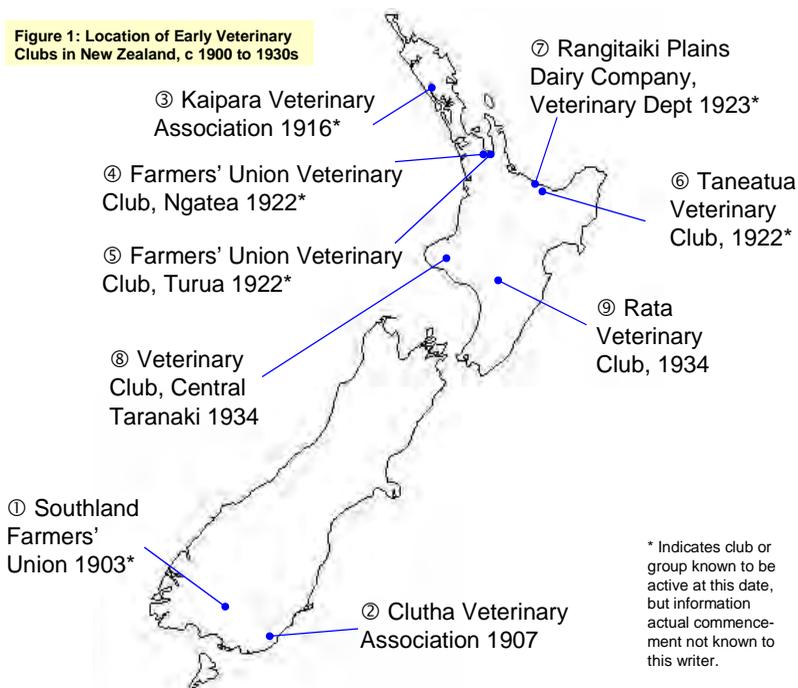
**Table 1: Early Twentieth Century Examples of New Zealand Rural Veterinary Groups**

	<b>Group or Club</b>	<b>Year Formed</b>
1.	Southland Farmers’ Union	1903
2.	Clutha Veterinary Association	1907
3.	Kaipara Veterinary Association	1916*
4	Farmers’ Union Veterinary Club, Ngatea	1922

5.	Farmers' Union Veterinary Club, Turua	1922*
6.	Taneatua Veterinary Club	1922*
7.	Rangitaiki Plains Dairy Company, Veterinary Department	1923
8.	Veterinary Club, Central Taranaki	1931
9.	Rata Veterinary Club	1934

\* Indicates club or group known to have been active at this date, but information on actual commencement not known to this writer.

Figure 1 shows the data from Table 1 mapped geographically. This allows a visual inspection of historical aspects of this development, such as the fact that the first two clubs identified here were in the most southern region of the country where European farming communities had first expanded.



The significance of some historically important dairying districts can also be seen in the names of the more northerly regions of the country. But cross-over between the earlier terminology of ‘Farmers’ Unions’ (Refer endnote 18) and the developing dairy industry – only one explicitly in its name here mentioning a dairy company (‘Rangitaiki Plains Dairy Company, Veterinary Department’) – is reflected in the dairying basis of several clubs membership and organization. Three of these nine early clubs can be seen to be inland, although in New Zealand that is still never far from the sea.

## **1. Southland Farmers’ Union**

One of the first things that the not long formed Southland Farmers’ Union did was to employ AM Paterson, MRCVS, who had come to New Zealand with fourteen others in 1901 to join the new expanding government Veterinary Division that had been established in 1895 within the Department of Agriculture formed three years earlier.<sup>16</sup> In January 1903 he left government service to be veterinarian to the Southland Farmers’ Union at a salary £150 higher than what he had been receiving.<sup>17</sup> Low government salaries caused the loss of a number of veterinarians to other countries from the Veterinary Division. It also appears that several other Farmers’ Unions were operating on the same pattern in this period.<sup>18</sup> Paterson continued with the Southland Farmers’ Union for about two or three years, acting as organizer, secretary and canvasser for the Union and not simply as veterinarian, although this was not altogether to his liking. Whether they gained another person, perhaps unqualified, or let the position lapse is not known.

When Paterson left the government service the Chief Government Veterinarian, JA Gilruth, had this to say in his Annual Report:

*The loss of Mr Paterson to the Department is distinctly to be deplored, even though there is some satisfaction in the knowledge that his skill is still available for a section of the agricultural community, and that he has expressed himself as desirous of aiding the Department in its work as far as possible. Yet it should be remembered that now the first duty of Mr Paterson and those holding similar appointments, is not to the general public, but to that section of which he is a special advisor, and circumstances might arise which compel his ability and skill being directed in the interests of the few even to the detriment of the many. That Farmers’ Associations should have their own officers, so far as possible, seems wise, and a policy to be commended. But it is equally certain that a better*

*scheme for the colony than the one adopted would be for the Department to detach an officer for the special duty of attending to the members of such associations who cared to pay a stipulated annual sum, the general control of that officer, particularly in matters relating to contagious disease, remaining with the Department. As it is not every individual who is fitted to undertake these duties, better remuneration would require to be offered than at present given by the State.*<sup>19</sup>

Gilruth's comments throw considerable light on contemporary thinking about possible arrangements whereby a veterinarian might be employed by a group of stock-owners.<sup>20</sup> Paterson published a book in 1906, *The Colonial Horse Doctor*, copies of which still circulate in Australia and New Zealand. In this slim volume he describes himself as 'During the past 15 years the author has spent much time in lecturing to audiences of stockowners on veterinary topics.'<sup>21</sup> It appears Paterson may have subsequently moved to Australia, and if so this would throw an interesting light on the inter-colonial traffic of ideas and personnel around this period in these developing antipodean societies.

## **2. Clutha Veterinary Association**

Attempts by groups of farmers to obtain the services of a veterinarian, however, were not always successful. The Milton Branch of the Farmers' Union was set up in 1901 (as part of this new nation-wide farming movement). Having in 1903 formed the Otago Farmers' Union Mutual Fire Investigation Association, 'the next important step was to secure the services of a veterinary surgeon for the district. The initiative in this activity came from the Farmers' Clubs in the surrounding districts. These attempts were abortive until 1907 when the Clutha Veterinary Association extended its district to include Tokomairiro.'<sup>22</sup>

What eventuated at Balclutha may well be able to lay claim to being the first veterinary club in New Zealand, or at least the first rural practice to have continuously existed in some form for over a hundred years. On January 15, 1907 the formation of the Clutha Veterinary Association was announced with a committee of thirteen and all interested farmers were invited to apply for membership. Subscriptions were set at one shilling in the £100 capital value of a member's property.<sup>23</sup> Plans were made to bring a veterinarian out from Scotland. In April 1907 the Milton Farmers' Union applied to the government to provide a veterinarian for their area, but this application was refused.

However, at the request of the Minister of Agriculture and the Clutha Veterinary Association, JA Gilruth selected John Danskin, MRCVS, when he was in Scotland (1905-1907), to work for the Association; Danskin left for New Zealand on 28 November 1907, arriving in New Zealand in 1908.<sup>24</sup>

Between 1908 and 1915 Danskin worked for the Clutha Veterinary Association. On 2 February 1915 he took over the affairs of the Association which was then wound up. Danskin moved south to Invercargill to practice as a veterinarian there, while David Marshall, MRCVS, took over his practice. Interestingly, he was a local person from Warepa (a little further inland – Warepa School had opened in 1858) who had trained in Edinburgh and returned to the locality. This is significant for two reasons. First, in light of early twenty-first century difficulties cross-nationally, not just in New Zealand - of recruiting veterinarians for rural work, it is significant that here is an example of a rural person training and returning to rural practice.<sup>25</sup> Second, the example of David Marshall raises the question of who was the first New Zealand to obtain an MRCVS or other qualification? On limited current evidence, further detail about Marshall would help document this.

It appears that Danskin was involved in training others in veterinary work: Allen Seymour, one of two remaining 'Veterinary Practitioners' still alive in the late 1970s, (who had registered under the 1926 Act), recalls that he gained his early training from Danskin.<sup>26</sup> The RCVS Register shows that Danskin joined the Department of Agriculture at Dunedin after he took over the business in 1915. Marshall in turn also joined the Department of Agriculture, moving up to Hamilton in the North Island. Again the departmental positions suggested the alternative roles of rural clinicians were not entirely satisfactory for the veterinarians concerned.<sup>27</sup>

The Association was revived in 1929. On 10 June a meeting of all farmers was called at which it was decided to re-form the club; arrangements were made to bring a veterinarian from Wales. A committee of seven was formed and the club was incorporated. Soon 134 members had joined although there was no response to the proposals from several districts; by August membership was 200. The salary of veterinarian, TJ Lewis, MRCVS, was set at £650 per annum. The scale of fees to be charged was as follows: members 15/- a visit and 7/6 for a re-visit and no mileage charge; non-members' visit fee was £2, the re-visit fee was £1, and a mileage charge was payable. At the AGM held on 26 July 1930 only twelve members attended although the total membership was 250.

Following Lewis' arrival in mid-January, turnover to 30 June was £250 for subscriptions and £2 for visits. Lewis continued until his death in 1937. He was replaced by George McDonald who was appointed to start 14 September 1937. In 1938 the membership of the club had grown to 508.<sup>28</sup>

### 3. Kaipara Veterinary Association

At the other end of New Zealand there were also early attempts to pioneer veterinary services. The Northern Wairoa Dairy Company commenced in 1902 and there was considerable competition in the area between the several dairy milk factories. One historian speaks of veterinary work:

*There were veterinary services around 1916 when the Kaipara Veterinary Association was formed, and it appears that a private company was operating. However, the Company was improved with the service and approaches were made in 1920 for a Government subsidy which did not meet with success. The matter was again considered in 1936, but it was not until 1944 that the Northern Wairoa Veterinary Club was formed under the Company Committee.*<sup>29</sup>

Another historian, however, provides greater detail, although acknowledging that the successive amalgamations of dairy companies over the years has meant records tend to be destroyed.

*As long as 1906 the Northern Wairoa Dairy Company invited a Mr Lyon who was a government veterinarian to address a meeting at Arapohue Hall; the topic was 'Mastitis'. In 1909 the Maungaturoto Dairy Company wrote to its counterpart in Northern Wairoa suggesting the appointment of a veterinarian. The concept of a dairy company organizing veterinary service was thus on the agenda although it was to be nearly fifty years before it eventuated. It is interesting to note that proposals early in the century visualised a levy of about six pence per cow to support a service; and idea not unlike the levy system of the forties and fifties. In 1914 the Waipu Dairy Company proposed a veterinarian be employed to service Whangarei, Hobson and Otamatea counties at a cost of £400 per annum of which the government had apparently agreed to contribute £150 (again shades of the later club system). The proposal apparently lapsed because of disagreement as to where the proposed veterinarian should be stationed. In the days of smaller dairy companies outlook was often fairly parochial, in some cases limiting progress.*<sup>30</sup>

In this region of multiple dairy companies and local communities, eventually the Kaipara Veterinary Association was formed in 1916, as note above. Twenty years later, as the club movement began to get under way, the 1936 Annual Meeting of the Northern Wairoa Dairy Company again tried to secure a veterinarian, but this only happened in 1945.

#### **4. Farmers' Union Veterinary Club, Ngatea**

In this early period it was not always possible to get qualified veterinarians to service a group. In 1922 the Farmers' Veterinary Club was formed in Ngatea with a membership of seventy-four stock-owners. James Costello, one of the 'veterinary practitioners' subsequently registered under the 1926 Act, left his practice in Pukekohe to take up land in the area and continue in veterinary work for the club. Because of the difficulty in travelling, the club was incorporated in September 1923 with a committee of seven, to purchase a home for Costello's use. A horse and trap were also purchased to convey Costello on his calls and in 1925 this was replaced by the Club's first car (£115). Costello continued as the club's veterinarian until 1929, and was followed by T Aris from 1930-39.<sup>31</sup>

#### **5. Farmers' Union Veterinary Club, Turua**

At about the same time as the Ngatea club was getting under way, other groups were also involved in arranging veterinary service for their districts. For example, the Turua Farmers' union was also active in 1922. A Dr Jensen acted as chief veterinary surgeon and a captain Simpson also provided veterinary assistance to farmers in the Turua district. The Rangitaiki Plains Dairy Company (RPDC) was also early in providing a veterinary service for its suppliers.<sup>32</sup>

#### **6. Taneatua Veterinary Club**

However, it appears that it was preceded in the same area by the Taneatua Veterinary Club which was in existence in July 1922 but about which very little information is available. A veterinarian was employed but it was not known if he was a qualified practitioner or not and it appears that the club must have wound up in 1923 as a Mr Hardy of Taneatua is recorded as having offered the drugs held by the club to the RPDC when their veterinarian was engaged. How much earlier the Taneatua club was operating is not known.<sup>33</sup>

## **7. Rangitaiki Plains Dairy Company, Veterinary Department**

In late 1920 several RPDC suppliers had dairy orders in force, payable to the Taneatua Veterinary Club.<sup>34</sup> It was probably the difficulty in obtaining services from Taneatua owing to poor communications that prompted RPDC to engage their own veterinarian for their suppliers. In April 1923 an advertisement for a veterinarian at a salary of £600 per annum, plus travel expenses, brought twenty-eight applications and from these Stanley Fletcher was appointed to start from July 1<sup>st</sup>. The veterinarian's salary contrasted to the £450 of the Manager and £350 of the Company Secretary. Drugs were sold to give the Veterinary Department a 25% profit and visit charges were 2/6 per visit. Initially the service was for supplying shareholders of RPDC and Tarawera Dairy Companies, and if non-shareholders wished to use the services of the veterinarian they were required to take out twenty shares in the Company. However, this was later modified to cater for non-shareholders in the scale of fees. Spaying a cow cost 2/6 plus an extra 2/6 for non-shareholders. For castrating colts the fee was again 2/6, plus either 2/- for shareholders or 10/- for non-shareholders. It seems that the major activities of the veterinarian were spaying cattle and mastitis vaccinations. HC Taylor followed Fletcher as veterinarian from 1925 to 1930; and after him JA Barker until 1932, and T McGrath until 1933, established the operation of the RPDC's Veterinary Department on a permanent basis.

## **8. Veterinary Club, Central Taranaki**

In early 1932 members of the Farmers' Union in Central Taranaki formed a veterinary club after a general meeting addressed by WC Ring, VMD, (Pennsylvania).<sup>35</sup> The annual subscription was fixed at £1, of which 16/- was to go to Ring and the remainder to the club. In return, Ring was to provide the club members with the services of his organization which was based on Stratford and remedies were to be made available at a 20% discount. For attendance a mileage charge of 3d per mile with a minimum of 2/6 was set. Initially club membership was fifty, and by the end of the first financial year had increased to eighty-four. In 1932 the club commenced its year with 102 members, and on the executive's recommendation became incorporated. Ring was not resident in the district but undertook to act in an advisory capacity; during the first year he visited the district four times, treating eighty cows on the last trip.<sup>36</sup> How the club progressed thereafter is not clear, although it appears Ring was in Australia from about 1933 or 1934.

## 9. Rata Veterinary Group

In 1934 the Rata Dairy Company north of Palmerston North established a veterinary service for its suppliers and employed its first veterinarian, WC Maitland, MRCVS, on a similar basis to that which the Rangitaiki Plains Dairy Company had done a decade earlier. Maitland filled this position until 1937 when he left for England. He was followed by J Hill-Motion, MRCVS, who set up private practice in Palmerston North in 1939 while Dr GF Finlay became the company veterinarian.<sup>37</sup>

### From antecedents to the start of change

Comments by JA. Gilruth in 1903 at the start of this period, cited above, were relevant to the overall course of veterinary development in New Zealand, and the place of veterinary clubs within this. CJ Reakes was Gilruth's successor as Chief Government Veterinarian and subsequently risen to Director-General of the Department of Agriculture in 1930 when he made the following comments about veterinary organization in New Zealand. New machinery and other technologies aided farm growth especially in the dairy industry. Reakes' views can be seen to follow on and extend his earlier Annual Report of 1919 which had drawn attention to the desirability of subsidising veterinary practice in rural areas.

His suggestions give us some idea of how, as the potential for employing veterinarians changed, the club idea gained greater currency some years before the movement actually became widespread under Leslie and others' influence. Reakes said that in the context of the continuing development of the dairy industry, the need for and shortage of veterinary services was becoming more serious. Government veterinarians were comparatively few and dispersed and could help the situation very little. Reakes stated that,

*What is needed is an organized veterinary service under which skilled qualified men would be engaged to give their whole time to practice among dairy farmers in a definite area and at the same time act as advisors generally upon all questions bearing upon the health and productivity of dairy stock. The experience of veterinary surgeons who have attempted independent private practice in dairy districts has been that the earnings they are able to collect do not provide a reasonably sufficient income, hence some other system has to be adopted, but it is considered that a properly organized service on a self-supporting basis could be established and maintained through the medium of dairy factories.*<sup>38</sup>

Reakes then went on to outline possible ways of organizing such a system. The quite specific and detailed plans and amounts in his proposals indicate how far the experimental efforts by farming groups, and the governmental interest in promoting farming veterinary care in an economic ways, had progressed. When veterinarian Alan Leslie and farmer Andrew Linton in the late 1930s energetically championed the new examples of veterinary club organizations which were based on arrangements such as those set out by Reakes, the scene was set for a new era to be ushered in.

*Thus, in the case of a large factory whose suppliers own 8,000 cows or upwards, if the whole of the suppliers would combine in forming a veterinary association and each provide a small sum - say at the rate of 2/6 per cow - the amount derived from 8,000 cows would be sufficient to pay the salary and travelling expenses of a good veterinarian, whose whole-time services would be available without extra charge. Or, alternatively, the payment could be made on a per pound of butterfat basis.*

*Arrangements could also be made for medicine to be supplied on the veterinarian's prescription at cost price, plus expenses of preparation, handling, etc. A scheme such as this, properly organized and managed would be a great benefit to dairy farmers and of great economic value to the Dominion. The government could well assist in bringing about the establishment of a scheme by selecting veterinary surgeons of the right type, and in other ways which would be helpful in placing it upon working lines.<sup>39</sup>*

The organizational options outlined here were very close to what actually did develop. It became evident, however, that veterinary services could not be successfully established until a certain level of intensiveness in farming had been achieved in a given locality, and that in fact the dairying districts, with high stock replacement values, and with local farmers already grouped around a dairy factory, reached this level first.

## **Conclusion**

In New Zealand's case these dispersed attempts at veterinary rural organisation can be seen as antecedent to the veterinary club movement. In a cross-national perspective, however, it is possible to observe other developmental trajectories – whether this in terms of farming and veterinary care, or from the occupational perspective of veterinary professionalisation.

Only a few trained veterinarians practised in this second period of veterinary development in New Zealand but the occupational pattern steadily crystallised around the work role of qualified veterinarians. The profession was closed in 1926 by legislation to other than those academically qualified. Personnel from the government's Veterinary Division were influential and persistent in the formation and early development of the New Zealand Veterinary Association. The emergent importance of the farming community in using veterinary services can be seen in the number of attempts made to establish clinical practices in rural areas. It was not, however, until an expansion in scientific knowledge (increasing the ability of the profession to produce effective veterinary service) and changes in the economic situation (increasing animal costs and management skills in farming) increasing the demand for such service, that the situation became sufficiently different for a shift in the institutionalised pattern of veterinary employment to give rise to a new pattern in the 1930s and 1940s.

The present account segues between the beginning of the veterinary profession as part of the arrival of modern education and occupational patterns, on the one hand, and the characteristic aspects of farmer-veterinary relations that was a later feature of mid-twentieth century New Zealand veterinary history. It contributes to the gap in historiography of organizational and national-farmer ideas that lead up to the club movement, showing that these did not arise out of nowhere, but were preceded by an economic and cultural climate that experimented with – both successfully and unsuccessfully – the provision of animal care to rural stock in economic circumstances that were not initially favourable to the employment of veterinarians.

This history reveals that rather than an inevitable professionalisation sequence, veterinary development was significantly contingent, depending on historical events and features of government, rural economics and social organization, the imperial network providing veterinary manpower, and other factors. The dual involvement of veterinarians and farmers in the provision of veterinary clubs of one sort or another extended beyond solely organizational matters. It included a sense of ownership by farmers of ideas and material resources, and a desire on the part of some farmers to learn and be educated about animal health matters. This created both opportunities and some difficulties, and was partly born of necessary self-sufficiency in a colonial environment.

The full narrative of this antecedent period to the veterinary club period in New Zealand is clouded by lack of greater detail. Further research into the known clubs, or increased knowledge of additional veterinary groups, would widen this information base, confirming or modifying various details in the account. By the 1930s these early efforts to organize rural veterinary services were poised to take off nationally. In the space of little more than a decade, as this period transitioned to the full development of the club system, the proportion of two-thirds of all New Zealand veterinarians being employed in government service, especially in hygiene inspectorate functions, was reversed, and the majority of the much expanded veterinary workforce was employed in rural clubs or club-type clinical situations.

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MR. W. H. BOSTON'S VETERINARY SHOPPING FORGE.

# **TEA AND SYMPATHY WITH TICKS IN SRI LANKA**

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## **Background to work in Sri Lanka**

Sri Lanka was Ceylon in 1963 the first time I visited. Returning to Australia, my wife Barbara and I were briefly at the Colombo airport which then was little more than flat ground and a shed. The second time, I entered the country through an impressive international airport – modern palaces at the point of entry were appearing in some new nations. Arriving at 2.35am on 24 January 1974 after 24 hours of travel from Brisbane, I was met by friendliness and helpfulness which I always encountered in Sri Lanka. This saw me quickly in bed in the Intercontinental Hotel in Colombo – a reassuring start to my first foreign aid mission.

My project was the idea of the Director of the Veterinary Research Institute (VRI) at Peradeniya near Kandy. In 1969, Dr S.B. (Ian) Dhanapala had been to the Tick Fever Research Centre, Wacol near Brisbane where I worked. He came to see if the then novel vaccination procedures for controlling tick borne diseases in Australia, recently developed by the Queensland Department of Primary Industries (QDPI), could be applied to reducing cattle losses in Sri Lanka. My task was to observe the existing system for protecting valuable, exotic cattle against babesiosis and anaplasmosis in that country and advise if improvements could be made. Dr Dhanapala wanted vaccination extended to private farms – up until then it was only being used for cattle on Government farms. My month long visit was supported by the Australian Development Aid Agency (ADAA now called AusAID).

## **Getting established in Sri Lanka**

I had not been expected until noon, but staff of the Australian High Commission (AHC) quickly alerted Ian Dhanapala that I had arrived. I had with me a large esky containing tick fever vaccine both frozen and chilled, other inocula and certain reagents for serology, and was keen to get this into cold storage.

Meeting Ian, it soon appeared that hospitality and kindness could get in the way of work. Instead of heading for the hill country (my base, Kandy) immediately, we went to the Hotel Mt Lavinia for a pleasant lunch sitting in a cool dining room while my box rested in the sun. Next it was the drive to the laboratory – 130 km of terror interspersed with interesting diversions. This introduction to driving in a developing country (the main worries being throngs of walkers and the uncertainty of all drivers as to which was the correct side of the road), took my inherent fatalism to a new level. A detour to view a 900 year old historical site offered respite from the road adventure. On arrival at the VRI at 6.30pm, my frozen materials were found to be still in good condition (thanks to the AHC Secretary who had obtained dry ice and topped up the esky in Colombo). During my time in Sri Lanka I did mix business with pleasure, thanks to efforts of Ian Dhanapala, his superiors (one of whom was Dr Banderanaike (famous political name)) and field and laboratory staff who were always interested and willing to help. At the end of a long first day, I arrived at the old fashioned Queens Hotel in the centre of Kandy where I was to find Marsh Edwards, a well known Australian compatriot engaged to advise on reproductive problems in dairy cattle. A happy meeting, at least as far as I was concerned. Another new friend was Michael, my room ‘boy’, who had been at the Queens since 1946.

### **Objectives, tasks and some outcomes**

In the 1970s, efforts were being made to increase milk production in the country. Exotic dairy cattle (Jerseys mainly) were being obtained either as foreign aid gifts or purchased with funds from bodies such as the World Bank. Imported cattle were taken to Government farms, mated, and the progeny sold to small farmers particularly those in the hill country (1000 – 2000m) east of Colombo where mild climatic conditions prevailed. Some went to experimental farms for use in cross breeding with *Bos indicus* (e.g Sindhi) cattle with the objective of providing milkers for hotter drier areas. It was said there were 75,000 temperate breed cattle (each one valued at five times that of an indigenous animal) and an annual requirement of 2500 vaccinations (in Australia, in the early 1970s, over 1,000,000 head were being vaccinated annually). The carrier donor system of providing vaccine used in Australia between 1897 and 1964 had been used in Sri Lanka for 30 years since vaccine strains of *Babesia bigemina* and *Anaplasma centrale* had been imported from Kenya. Variable infectivity of blood of recovered animals, rendering the carrier donor (‘bleeder’) system unreliable (Callow and Tammemagi 1967), had led,

10 years earlier, to its replacement in Australia with vaccine prepared in splenectomised calves (Callow and Mellors 1966; Callow 1984). This contained sufficient parasites of reduced virulence to infect all recipients and immunize them.

From information provided by Sri Lankan colleagues, it appeared that three types of problems similar to those experienced in Australia pre - 1964 were being experienced:

- (1) some cattle were not immunized and later succumbed to natural infections;
- (2) some vaccinated cattle reacted severely to their blood inoculations;
- (3) troublesome cases of anaplasmosis (*A. marginale*) occurred in imported cattle inoculated from vaccine donors, (not so common in Australia where strict tick control of bleeders was practised at the laboratory).

Field work was conducted in the hill country near Nuwara Eliya, mainly on two Government farms called Ambewela and New Zealand Farm. Procedures included: cattle inoculations; preparing, staining and examining blood films; monitoring rectal temperatures and anaemias (PCV technique); observing clinical signs; and treating certain cattle with either acaprin (babesiosis) or terramycin (anaplasmosis). My partner was the able and willing Nihal Weilgama, a young Sri Lankan veterinarian. Giemsa staining of blood films was done in the gutter outside the residential building on Ambewela which also provided a room where we set up a borrowed microscope for examination of the blood films. Nihal and I successfully removed calf spleens on an old table in fading light in a dusty, wind swept yard at Ambewela farm.

During my stay in Sri Lanka, we encountered five clinical cases of tick fever – three on private farms investigated by the Veterinary School near Kandy and two in calves in a Government shed. All were positive for *B. bovis* with *Boophilus* ticks present on all cattle.

In Kandy, days were spent at the VRI or the Veterinary School (both at nearby Perideniya) refining Giemsa staining methods, fighting with the fluorescence microscope (see later) and cryopreserving parasitised blood (of both Australia and Sri Lankan origin) for storage in semen straws in a liquid nitrogen refrigerator. Towards the end of the stay, a seminar was prepared and given.

Main findings and conclusions from these activities include:

(1) the environment was heavily infested with *Boophilus* (probably *B.microplus* ). Even cattle kept in sheds away from infested pastures developed infections; ticks could be found on shedded cattle, larval ticks being brought in on feed during the 'cut and carry' grass feeding regime practised; ticks *per se* were having pathogenic effects;

(2) the importation of *B.bigemina* and *A.centrale* from Kenya 30 years earlier, in Colonial times, was ill-conceived. Animals used in the attempted serial passaging of these strains and used along the way as vaccine donors, even with precautions taken against ticks, could not have avoided being bitten by *Boophilus* ticks in the Sri Lankan environment; repeated infections with the local *B.bovis*, *B.bigemina* and *A.marginale* would have resulted over the preceding 30 years. There was no sign of *A.centrale* during my visit, and the *B.bigemina* seen would have been at best the Kenyan strain 'hybridized' with local strains. A benefit was the unintentional introduction of *B.bovis* into the vaccine system, which would have immunized some recipients against this, the more pathogenic of the two species of *Babesia*. The downside was that donors at some stage would have started to transmit *A.marginale*;

(3) a difficulty in differentiating between *B.bigemina* and *B.bovis* in Giemsa stained blood films, not unusual in developing countries lacking good microscopes, was evident. With the modern borrowed microscope (the VRI monocular instrument was an antique) it was easy to find and identify tick fever parasites in sick and even in some healthy cattle – the latter not surprising given the high prevalence of ticks in the environment;

(4) one donor used for 11 years, had given satisfactory results but, when replaced, blood from the next two in the passaging series did not regularly infect recipients. The current donor (3 years in use) was more efficient, but its blood sometimes produced adverse babesiosis reactions as well as transmitting pathogenic *A.marginale*;

(5) all four calves splenectomised during my stay relapsed to *A.marginale*, despite being housed since birth, suggesting that transmission of this organism to cattle in Sri Lanka occurred at an early age (non-clinical infections with *B.bovis* in one and *B.bigemina* in two calves were found). Direct transfer of ticks between animals is the usual mode of transmission of anaplasmosis in Australia, but in Sri Lanka other mechanisms, such as intrauterine infection or biting flies could not be excluded. This observation meant that, with

dependence on the availability of splenectomised calves free of all blood parasites, the Australian method of producing safe vaccines would be difficult to implement unless potential donors could be rigorously protected from ticks and checked for anaplasmosis before use.

Thus, the bad old days of the 1940s, 1950s and early 1960s in Australia when complaints about adverse vaccination outcomes were increasingly received from cattle owners were being repeated in Sri Lanka.

### **Is *B.bovis* the same everywhere?**

Other investigations were undertaken during my visit. We easily established that the babesia parasites of Australia and Sri Lanka were morphologically very similar. But in 1974 there was still confusion about the speciation of the cattle babesias. What we now know as *B. bovis* was '*B. argentina*' in many countries including Australia; and *B. divergens* (northern areas of Europe and Asia) was '*B. bovis*'; *B. bigemina* and '*B. argentina*' were the parasites recognised throughout Latin America, but again diagnostic capability was often insufficient to distinguish them. *B. major*, a fairly benign parasite occurring in Europe, looked like *B. bigemina*. Confusion and indecision persisted until Hoyte (1976), mainly on the basis of morphological studies, published his opinion that the smaller Australian parasite should be called *B. bovis*. Serological studies performed during my next consultancy (with FAO) a few months later in Bolivia supported the idea that *B. bovis* (= '*B. argentina*') had spread to many parts of the world including Australia (Callow, Quiroga Q and McCosker 1976). After 1976, we were pleased to rename '*B. argentina*' in Australia, *B. bovis*. But before and during my visit to Sri Lanka in 1974 we could not assume that the '*B. argentinas*' of Australia and Sri Lanka were the same in every respect even though the parasites looked to be identical.

At that time we took the position that using improved Australian vaccines for babesiosis in other countries could be considered if close immunological relationships between the parasites of different regions could be conclusively shown. I had taken vaccines for *B. bovis* and *B. bigemina*, and *A. centrale* for use against *A. marginale* and also a virulent *B. bovis* strain to use in cross immunity tests. The live parasites travelled well and were used promptly.

An intake from Denmark of 140 susceptible Jerseys requiring vaccination along with natural increase calves was available. Two groups were formed, one (110

Jersey heifers and 24 calves) receiving Sri Lankan carrier donor vaccine, the other (30 Jerseys and 23 calves) a mixture of the three splenectomised calf vaccines brought from Australia. Reactions occurred in both groups, indicating infectivity of the vaccines, but virulence was lower with the Australian mixture. Natural challenge of these and some calves left as unvaccinated controls would follow in the normal course of events after my departure from Sri Lanka. No report of vaccine failure was received.

In a second trial, the batch of virulent Australian *B. bovis* was injected into 80 cattle believed to be immune to Sri Lankan parasites and the cattle closely monitored for fever, parasitaemia and clinical affects. Responses were very mild suggesting a similarity between Australian and Sri Lankan *B. bovis* ('*B. argentina*'). The unavailability of known susceptible cattle for use as controls for this challenge lessened the stringency of this experiment and prevented a definite conclusion that high levels of cross immunity between the two strains existed. The above results were considered insufficient for Sri Lanka to start using Australian vaccine or Australian strains of *Babesia* for protection of at risk cattle.

Whereas the cases of *B. bovis* infection observed and others reported suggested vaccination might be beneficial on private farms, three factors dictated caution in recommending the introduction of this practice. First, the carrier donor vaccine was not sufficiently reliable to guarantee beneficial outcomes in all situations. Second, disease incidence data to indicate which cattle needed protection with vaccine against which of the three pathogens present in the environment was lacking. Third, the serological method (indirect fluorescent antibody test) I had planned to use for quantifying risk in the cattle populations (by determining infection rates) could not be applied because the Veterinary School's fluorescence microscope was out of order. No recommendation to provide vaccines to farmers was made.

## **Recommendations and aftermath**

A report (Callow 1974) submitted to ADAA for the Sri Lankan Government gives in greater detail information provided in the present article.

Suggestions ranged from advice for field veterinarians on drug treatment of cases of tick borne diseases, tick control, through to ideas on how the VRI could move towards the Australian system of vaccine production and use.

Given the chronic under-resourcing of operations of the VRI and the Veterinary School, I was not optimistic that beneficial changes would be made in the near future. A 'white knight' to inject capital and operating funds, and to provide expertise over periods longer than the duration of my mission, was badly needed. I urged that an Australian aid organisation might provide needed support.

Nothing much happened in Sri Lanka for about 10 years, but in the 1980s the Australian Centre for International Agricultural Research (ACIAR) approved a project (Chudleigh 1991) based on my recommendations. This led to the modernisation of tick fever vaccination in Sri Lanka and provided a model for improving systems of tick fever control in other developing countries.

I remained encouraged to pursue the goal of determining whether or not distinct races of *B. bovis* and *B. bigemina*, based on geographical location, existed and, as stated earlier, re-engaged with the problem during the consultancy in Bolivia. Without jumping ahead to another story, I will say here that the major proof was provided by our Australian colleague, Paul McCosker, employed by FAO. Before my arrival, he had almost literally 'seized the bull by the horns' when, confronted with severe tick borne disease following the unregulated importation of 'clean' cattle to ticky areas of Bolivia, he imported and used Australian vaccine. It worked, providing strong evidence for cross protection between strains of *B. bovis* separated by a great distance and intriguingly different histories. (Given the likelihood that it evolved in southern Asia, when and how did *B. bovis* get to South America?). Cross-protection between 'races' of *B. bovis* and also *B. bigemina* has since been observed in many situations including Sri Lanka, practical experience giving the ultimate justification for using Australian technology and/or the vaccines internationally.

### **Other Sri Lankan experiences**

Thanks to the needs of the project, based in Kandy, I enjoyed working in the picturesque tea growing high country in the centre of the island. For 2 days, Marsh and I were tourists, guests of Ian Dhanapala who showed us the fishing villages of the East Coast (lunch at a beachside restaurant in Kalkudah near Batticaloa was a seafood smorgasbord for \$1.00), took us to historic and religious sites near Polannaruwa (overnight in a rest house on a beautiful lake here), and persuaded us to climb Sigyriya (the rock fortress where a legendary ruler held off attackers) to view 1500 year old rock paintings featuring shapely

ladies. On another occasion Ian, having a brother-in-law who managed a tea factory at Talawakelle, had us there at 4am to witness a crucial stage of tea making. Kindnesses and hospitality continued to abound.

At Nuwara Eliya, a beautiful location once a hill station for the British during colonial times, I found vegetables now growing on the derelict racecourse. The town had its comfortable, old style hotels. One night, I was the only guest at the 300 room Grand Hotel – ate by myself in a dining room that was probably used as a ballroom as well, and was attended by five eager waiters who, bare feet slapping on the polished floor, dashed at me every time I seemed to need something. I would have been happy lodging in the Circuit Bungalow (modest accommodation for visiting technical staff) near one of the farms but did enjoy the hotel.

My visits to the VRI and the Veterinary School gave me my first insight into how difficult it often is for national scientists to be productive in a developing country. Whereas the Canadians had, several years earlier, provided the VRS with a fine building for veterinary research, the country's budget did not run to adequately providing operating costs. Laboratory equipment was not repaired or replaced when necessary, and well qualified staff languished. The elderly vehicles needed to take investigators to the field were subject to mechanical failure (two of the five were out of order for my entire visit). We drove around the hills in an ancient Land Rover with four bald tyres (more terror). As just stated, the fluorescence microscope was out of order so that work planned for my visit could not be performed.

Marsh Edward's program with his project was similar, but we were able to meet in the bar of the Queens to compare experiences. Marsh and I shared a common interest in sport. A cricket match was scheduled between Sri Lanka and India for a Saturday and we decided to go – Australian style. My large esky came in handy for the beer. We did keep our shirts on – we were conspicuous enough as it was at the oval in Kandy. We quickly made new friends with the result that the beer was all gone sooner rather than later. But in our new friends' favour, they stayed on with us after the beer was gone. It was a congenial day except for the plodding batting of the Indians – the only high point in the cricket match was Gavaskar's flat batted six which whistled over our heads. Unfortunately our team came second by a long way.

Equally enjoyable was an impromptu cricket match played on rough ground with rudimentary equipment. Marsh and I still did not reach double figures with our scores combined. This match concluded with a party during which our Sri Lankan team mates donned sarongs and performed a slow rhythmic dance.

Pleasant evenings were spent in Sri Lankan homes.

Our last evening in Sri Lanka was spent having dinner in the Colombo Intercontinental. Other participants included an AHC staff member with her Sri Lankan friend, two local tycoons – one Sri Lankan, the other Tamil and an inebriated UTA French air hostess, a friend of the Sri Lankan tycoon. Memories of this experience include the air hostess' whispering her room number to me (she had to be very drunk), the fondness displayed by the engaging young couple sitting opposite me and the private words of the Tamil tycoon to me about difficulties experienced by Tamils in the country and the likelihood of India doing something about it. Passionately expressed, the words were alarming and foreshadowed serious hostilities, started by Tamil Tigers in the 1980s, at first jeopardising the ACIAR project that ran from 1984 – 1990.

The ACIAR project which, early in its organisation, gave me excuses for four brief visits to Sri Lanka to see Ian Dhanapala, now a Director General, and Nihal Weilgama, was, however, successfully completed (as stated above). My friend since 1974, Nihal, recently advised that tick borne disease problems declined after the ACIAR innovations were implemented and that the Sri Lankan VRI regard the work as a major achievement in its 40 year history. You could say that I was 'hooked' by my Sri Lanka experiences and was encouraged to undertake other missions related to tick borne disease control over the next 16 years. Opportunities to see and be embraced in a variety of cultures have added an extra dimension to my life. Thankyou, Sri Lanka.

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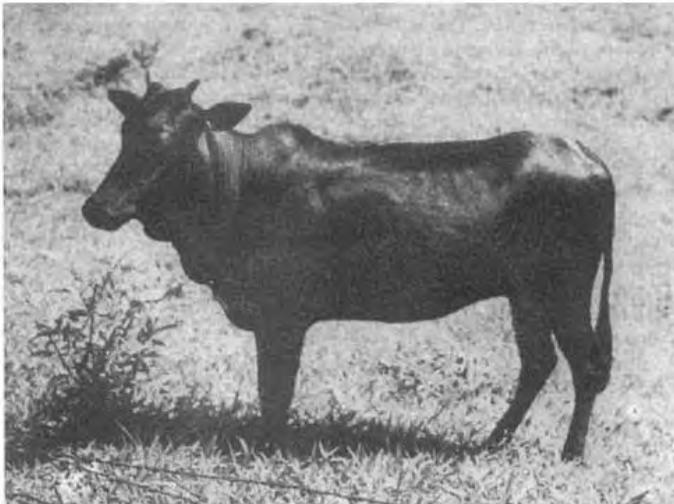
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## **REFLECTIONS FROM WORLD WAR II**

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The Second World War was declared on 3 September 1939. I was living with my parents in suburban Sydney and travelling daily to Glenfield to the Hurlstone Agricultural High School where I was in second year. About a year later I began boarding at that school until matriculating at the end of 1942.

The effect of the war at school was quite gradual. A few teachers left to join the forces and female teachers were appointed in gradually increasing numbers. As students we were directed to dig trenches for air raid shelters in the school lawns. These made a fair mess of the lawns and due to poor drainage they held much water after rain. The only time they may have been used was the night the Japanese submarines entered Sydney Harbour and we were in preparation mode for the order to head into these trenches.

School continued until matriculation after the Leaving Certificate examination. I had hoped for many years to enter the Veterinary School being quite rurally minded. I had not been a good pupil and my mother was in despair when the school principal was cautious in recommending that I follow that plan. However, having passed the Leaving Certificate Examination I, as did all others, received a letter from a government department requesting me to consider enrolling in a university science course listed “for the good of the country”.

I was accepted as a student in the Faculty of Veterinary Science as were 29 others who had matriculated. This was in early 1943 when the war was at about its worst stage for Australia. We settled into science subjects with the knowledge that Physics had been the biggest stumbling block for students of previous years. We also had Freddie Whitehouse lecturing in Zootechny 1 which was the introduction to Animal Husbandry-- Freddie's way! Wool Classing at the Sydney Technical College was included as part of his course to which we travelled by tram to Darlinghurst on Wednesday mornings.

At this stage of the war rationing was the norm. This meant we had coupons for sugar, tea and meat among the foodstuffs and petrol in addition. My parents

received coupons for a ration of 2.5 gallons of petrol per month which would cover 50 miles of travel if one was lucky. No new vehicles were available and the population battled on for years with deteriorating machinery. Trucks would travel past along Parramatta Road with gas producers supplying fuel or with a canopy carrying a huge bag like an extended mattress containing coal gas. Most cars had a gas producer at the rear to keep them mobile and the hill at the university was a fair test on their ability to produce fuel.

Commuting to lectures meant catching the train from home to Sydney Central followed by a tram ride to the University. Both trains and trams were usually jammed full of people.

At vacation time we were expected to join in extra-mural activities to “learn” how things were done on the farm. At the first vacation we all went to the University farm at Badgery’s Creek to be taught how to ride a horse. Riding horses had been hired for these lessons and Sergeant Chris Rames supervised the lessons. We did wonder what this education did for our knowledge.

Conscription was the order of the day so with all males achieving the age of 18 years we, as students lined up for consultation. My turn came late in 1943 by which time the prospects of winning the war were improving. Although willing to serve I was excluded from conscription due to being in a “protected” line of study and also not being medically fit enough for their demands. So, back to study.

At the end of the year came the examinations and the results were an absolute disaster-- only 12 of the 30 passed, followed by another 4 passing posts and into second year. Several were granted the chance to repeat first year but most fell by the wayside and we heard no more of them.

For the first long vacation I managed to get positions on pastoral properties in the northern parts of the Hunter Valley. The first was at Scone at which the greatest part of the area was an army camp and not much else but they grew armies of hungry mosquitoes! After a fortnight I moved to a property at Wingen which provided wonderful experience with cattle and the many associated complimentary duties including hay baling. I also scored an introduction to abattoir and stock inspector experience whilst here. The lack of available labour was evident in all situations.

When we started second year we had one student from Victoria and about 18 from New Zealand plus a couple repeating second year making the total 30. I have always wondered who decided to eliminate whom! There were too many good students to fail such a high proportion. If such numbers were failed to-day legal action would be introduced to examine the situation. In those days nobody spoke about legal action as it is discussed these days.

Second year was relatively uneventful although we were in the hands of the staff of the Medical School for Biochemistry, Physiology and Histology so created a track up and down the hill. At the end of this year a few more fell off the list but were able to repeat second year.

Into year three we gained a few to make up our number from returned servicemen and students repeating third year. By this time we were mainly lectured at the veterinary school having been weaned from the medical school except for Biochemistry. This was quite a tough year with very little leisure time and a big load of lectures. Freddie Whitehouse was still belting our ears but by now it was Genetics. He sensed that I was indifferent to his spiel on Genetics and taught me a lesson by failing me at the end of the year. Fortunately I managed to hang on by passing the post held in the New Year.

It was about this time that the Whitehouse family suffered great disaster. Their son Peter had passed the final examinations in Medicine and with several other graduands headed out to sea in a cruiser launch for a return trip to Newcastle. A storm developed which sank the boat and all of the passengers perished.

In our fourth year and fifth years a few more ex service personnel joined us. We were quite aware of the large numbers of students in lower years and figured the faculty was working hard to accommodate these and worrying less about us. These numbers have continued increasing ever since.

On graduation there were 37 of us. Six were from the original 30, two had repeated a year, one had joined us from Victoria, 15 were New Zealanders and 12 were ex-servicemen. This was in January 1948 and the war had finished since 15<sup>th</sup> August, 1945. However things were tough for quite a few years after the conflict including the rationing of petrol until after a change of Government at the end of 1949. This could quite well make another story. Seven of the original thirty matriculants graduated the following year bringing the odds to

13 out of thirty graduating which to my mind is excessive culling. None of the remaining 17 persevered with the course to completion.

Some students were determined to graduate despite opposition from the faculty. Jack Odbert was one name which comes to mind Another is Aubrey Juleff who must have been at the Veterinary School for about twelve years graduating in 1955. He spent his subsequent working life in successful veterinary practice at Fairfield in suburban Sydney.

Public transport suffered badly during the war. The reliability of the railways and tramways slowly declined due to losing personnel to the forces, inability to maintain rolling stock and the demand for trains for military purposes. The roads and tram tracks were in a state of gradual decline due to poor maintenance and the trams were developing square wheels which gave us a bumpy ride. This was all part of the experience of wartime! Maybe the run down state of the tramway system may have been the reason to eradicate the whole lot in the early fifties!

Many years later I was invited for appointment as an external examiner of final year students at the Melbourne Veterinary School. I was amazed at the different outlook at this school compared with my time as a student at the Sydney School. When I graduated there were no Honours students in comparison to the Melbourne School where about half of the graduates were listed as Honours graduates. Perhaps the later students were better trained than we were!!

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**Mount Noorat 1950**