COMMONWEALTH VETERINARY ASSOCIATION

Patron

His Excellency, Sir Dawda Jawara,
President, Republic of The Gambia

L.P.E. Choquette
29, Elgin Avenue, Aylmer, P.Q. J9H 1C9
Canada

Hon. President for Life

Dr. J.T. Blackburn,
C/o. British Veterinary Association,
7 Mansfield Street,
London, W1M OAT, ENGLAND
Off : (01) 6366541 Home : (0223) 841158
Cable : BRIVETAS Phone - London W1 Fax - 014362970

President

Dr. B.N. Touray,
C/o. International Trypanotolerance Centre,
Private Mail Bag 14 Banjul,
THE GAMBIA (WEST AFRICA)
Off : 92925/92926/92929 Home : 95752
Cable : ITC, Banjul The Gambia Telex - 2301. GV Fax - 92924

Vice President

Prof. J. Archibald,
35, Lynwood Place, Guelph,
Ontario, CANADA N1G 2V9
Off : 519-823-8800 ext 4303 Home : 519-824-1304
Telex : 069-56645 U of G INAT GLPH Fax: 5197671101

Secretary Treasurer

Regional Representatives

ASIA
Dr. D.D. Wanasinghe,
Veterinary Research Institute,
Gannoruwa, Peradeniya,
SRI LANKA
Off : (08) 88311-88312

AUSTRALIA
Dr. W.J. Pryor,
Galwiji, Pryor's Road,
Scotsburn, RMBN 141,
Victoria, AUSTRALIA 3352
Off : (53) 413997
Fax : 053412273

CANADA
Dr. J.L. Robinson,
Chief Veterinary Officer,
Ministry of Agriculture,
Fisheries & Land,
P.O. Box 1282, St. Johns,
Antigua, WEST INDIES.
Off : 809-462-1081
Home : 809-462-1121

EAST/CENTRAL/SOUTHERN AFRICA
Dr. Lebohang Khomari
Principle Veterinary Officer
Min. of Agr, P. Bag A82
Maseru 100
LESOTHO

WEST AFRICA
Dr. B.N. Touray,
C/o. International Trypanotolerance Centre,
Private Mail Bag 14,
Banjul, THE GAMBIA
(WEST AFRICA)

U.K.
Dr. Alastair Mews,
C/o. British Veterinary Association,
7, Mansfield Street,
London
ENGLAND W1M OAT
Off : (01) 6366541

MEDITERRANEAN

Dr. S. Abdul Rahman
Editor
COMMONWEALTH VETERINARY ASSOCIATION NEWS
123, 7th B Main Road, IV Block (West), Jayanagar, Bangalore 560 011 INDIA Tel 0812 641200

Published twice a year by the Commonwealth Veterinary Association
CONTENTS

Editorial .................................................. Page 2

President's Column ....................................... 3

Commonwealth Veterinary Association News ... 4
- Pan Commonwealth Conference

Commonwealth News .................................... 19

Regional News
- Asia ......................................................... 21
- Australasia ............................................... 23
- Canada Caribbean ...................................... 27
- East, Central & Southern Africa .................. 30
- West Africa ............................................. 34
- UK Mediterranean ..................................... 36

General Article .......................................... 38

Abstracts & Correspondence ......................... 40
The year 1990 will go down in the annals of the Commonwealth Veterinary Association as a landmark when the first ever Pan Commonwealth Veterinary Conference, was hosted.

Details of the conference are printed elsewhere in this issue of CVA News, suffice to say here that the foresight CVA Executive had, in planning the conglomeration of Veterinarians from the six continents of the world, was handsomely rewarded, judging from ecstatic reports of participants at the end of the conference. Even before the euphoria had subsided the question on everyone’s lips is when the next commonwealth veterinary conference is to be held? It is too early to contemplate. The recommendations and resolutions of the conference need to be implemented, otherwise the long trek to Harare in pursuit of better Animal Health and Production will fizzle out as a ‘safari’.

Representatives of Commonwealth countries who attended the conference carry home with them pleasant memories of their sojourn in Southern Africa. People from diverse cultures and traditions were united by knowledge of a common language which overcame all barriers of communication.

The CVA News is still bogged with problems of distribution. Printing and distributing the July 1990 issue from London has not been very helpful in overcoming the delays. (India has still not received the packet sent by surface mail in July.) The cost of printing also has been very high. Printing in other countries such as Singapore was also explored but was not feasible. This issue is once again printed and distributed from Bangalore, India. It would help us very much if you could kindly let us know when you received this issue of CVA News.

Response to my request for news from the regions is very encouraging but still not enough. I once again request you to send news items of interest from national associations for publication.

Let us rededicate ourselves to the cause of the Veterinary Profession. Wish you a very Happy and Prosperous New Year.

S. Abdul Rahman
EDITOR
We shall be into 1991 by the time you read this and I therefore take this opportunity of wishing all of you a Happy and Prosperous New Year.

You will be aware from the July 1990 issue of the News that the first ever Pan Commonwealth Conference was planned to take place in Harare, Zimbabwe, 10-14 September 1990. It is with great pleasure that I report that this Conference did take place and was a tremendous success.

We had many problems of course, as always happens at any Conference, but from the moment the Conference was opened by His Excellency President Robert Mugabe in the presence of our Patron, His Excellency Sir Dawda Jawara, one could sense a tremendous spirit of goodwill and fellowship which lasted throughout the Conference.

The presence of two Heads of State ensured that we received maximum publicity for the Conference, His Excellency President Robert Mugabe's Opening Address was widely reported in the national press and on television as was His Excellency Sir Dawda Jawara's Keynote Address.

There were almost 300 registrants which together with accompanying persons brought the total to almost 400 people from all parts of the Commonwealth.

According to all reports received the Scientific Programme was considered to be excellent and with a generally high standard of speakers. Personally I was most impressed at the number of delegates present at each session, which was larger than I have seen at any other more well known conferences!

The various social events attracted good gatherings which helped to cement bonds of friendship among the various delegates.

All this was made possible by the very hard work of a relatively small band of people. It would be difficult to thank all of them by name but I would like to make special mention of Jim Archibald our Secretary/Treasurer, who was unfortunately unable to be present due to ill health, but who had spent the previous 18 months hard at work on administrative details; Bill Pryor and his group who had worked so hard to make such a successful Scientific Programme; Colin Skinner and David Batchelor and their colleagues in the Zimbabwe Veterinary Association for their outstanding work on the ground making sure that everything was ready for us when we arrived in Harare; and also to all organisations and commercial companies who assisted us and made this Conference possible.

It was a most exhilarating experience while it lasted, but what now? Elsewhere in this News you will see a list of resolutions and recommendations drawn up and approved at the final session attended by the majority of delegates. It is now the responsibility of members of the Commonwealth Veterinary Association to implement those resolutions and recommendations which we can deal with ourselves and to ensure that the other resolutions and recommendations are passed on to the correct quarters. The Executive Committee is considering this at the moment, to ensure that a plan is drawn up to deal with all these resolutions with built in periodic reviews of the situation.

During the course of the week we tried to hold as many "business meetings" as possible, dealing with Executive, Council and Regional matters, although these meetings were somewhat rushed because of the very full programme which had been drawn up (future conference organisers please note to arrange these matters more efficiently). However, one very important point which came out of the meetings I had with various Presidents and Council Members was that not all National Associations are being kept fully informed of what the CVA is doing. Several Association Presidents were of the opinion that CVA Councillors should be closely linked to the National Association Executive if not actually part of it. It is for the National Associations to organise their own affairs but it is essential that Council Members keep their National Associations informed of what is happening at CVA but even more important keep CVA informed of the views of their National Association.

The holding of the Conference was a tremendous step forward for this Association. Let us all now build on our experience gained in order to implement the declared aim of the Conference namely, "A Conference to consider ways of improving the quality of life at village level in the least privileged areas of the Commonwealth".

J.T. Blackburn
PRESIDENT - CVA, November 1990
COMMONWEALTH VETERINARY ASSOCIATION NEWS

Pan Commonwealth Veterinary Conference Harare, Zimbabwe Sept 10th - 14th 1990

OPENING CEREMONY

The official opening ceremony was held at 3:30 p.m. at the Harare International Conference Centre on Monday 10th September, 1990. It was a fiesta of colour, pomp and pagentry as the military band heralded the entrance of the two presidents, His Excellency the President of the Republic of Zimbabwe, Comrade Robert Gabriel Mugabe and His Excellency Sir Dawda Jawara, President of the Republic of The Gambia. They were followed by the first ladies, Comrade Sally Mugabe and Madame Jawara and Dr. Blackburn, President of CVA and Dr. Batchelor, President of Zimbabwe Veterinary Association.

Dr. Batchelor welcomed the distinguished guests and the participants.

Dr. Blackburn in his presidential address said that, there were many detractors and critics of the commonwealth but this association of countries which are independent but yet united was a unique voluntary organisation representing nearly one quarter of the world's population amounting to one billion people united by a common language and recognising the Queen as head of the Commonwealth. Because of the close association between developed and developing countries it is a readymade mechanism for north-south dialogue.

Dr. Blackburn outlined the history of the CVA and its functions. He said that this was the first time that representatives from all countries in the commonwealth had come together. He said that with nearly 50,000 Veterinarians as members of the association it is a vast untapped resource for improving the animal health in the world. He hoped that the conference would adopt resolutions which people at the village level could implement instead of the usual demands that "Government should do something".

MESSAGE FROM THE QUEEN

J.T. Blackburn, Esq., President, Commonwealth Veterinary Association.

I am commanded by The Queen to thank you and all Members of the Commonwealth Veterinary Association for your kind message of loyal greetings sent on the occasion of the Pan Commonwealth Veterinary Conference.

Her Majesty much appreciated this message and sends her warm good wishes to you all for a happy and successful event.

Private Secretary.
10th September, 1990
Buckingham Palace
INAUGURAL ADDRESS BY PRESIDENT MUGABE

Opening the first Pan-Commonwealth Veterinary conference Cde Mugabe said that animal health played a vital role in his country’s economy. During an outbreak of Foot & Mouth disease last year, Zimbabwe lost about $100 million in foreign currency.

The Government is finalising new tough legislations to deal with violators of animal health regulations because the existing ones are not a sufficient deterrent. “One of the bitter lessons of the experience was the sudden realisation that the existing penalties for offenders of animal health regulations were no longer a sufficient deterrent”. “We are now in the process of finalising new and sterner legislative measures in this regard,” he said.

Cde Mugabe hoped the impact of protecting the environment and life would be discussed during the conference as it was a topical issue in Zimbabwe and that as the need for animal health programmes increased, new approaches had to be worked out to address the lack of private veterinary practice in rural areas. “It is necessary that new approaches are worked out to make the stock owner bear part of the burden of the services he needs, since private veterinary practice in the communal sector is not yet attractive or viable,” he said.

Although the Government had established a revolving fund for buying and reselling drugs at animal health centres, a number of developing countries were still failing to provide enough financial and material resources to support such services. Zimbabwe’s veterinary fraternity had made remarkable achievements in controlling or eliminating rinderpest, east-coast fever, trypanosomiasis and foot-and-mouth.

“Cde. Mugabe said” that due to good control of animal diseases, this country has been able to export beef to the most lucrative markets of Europe since 1985.

Before independence, veterinary services were only extensive in large commercial farming areas and the communal areas were limited to dipping and vaccination against diseases like anthrax and rables.

But, through Government policy of decentralisation, after independence, more than 240 animal health centres adequately supplied with drugs and dosing remedies, were established throughout the country’s communal and resettlement areas.

A RELIEF FOR CATTLE BREEDERS

For the first time the Government has allocated foreign currency to the Zimbabwe cattle breeders for the importation of embryos which they used in the artificial insemination to improve their herd.

A commercial embryo transfer company, Nova Embryos, has been granted an allocation through American aid to import 1500 embryos. To be imported Nova will have to pay. $840,000 as one embryo costs U.S.$560.

“Local breeders will be able to purchase the embryos locally without using any foreign exchange. There is tremendous demand for these embryos so we hope that this allocation will continue yearly in order to enable us to provide regular supply of embryos to cattle breeders,” said the managing director of Nova Embryos, Mrs Linda Sharp.

In the past individual farmers used their own foreign exchange to import the embryos which were implanted by foreign experts. But now Nova is able to thaw out these imported embryos and inseminate them.

Since the introduction of embryo transfer in Zimbabwe, Nova has had 1000 calves born through artificial insemination.

Unlike in the olden days in which breeders had to buy a live animal, say from US, and arrange for airfares which would cost a lot of money, the embryo transfer exercise is much cheaper. Frozen embryos stored in liquid nitrogen can be transported worldwide at a fraction of the cost of transporting live animals.
SIR DAWDA URGES FOR NEW EFFORTS TO IMPROVE ANIMAL HEALTH

The Commonwealth and the international community must support efforts by poor states to improve animal health and production by 2001, The Gambian President, Sir Dawda Jawara said.

In a keynote address at the Pan Commonwealth Veterinary Association conference, he said "owing to unfavourable economic conditions a number of developing countries failed to adequately fund agricultural and livestock projects."

“Our world population is growing at an alarming rate. But what is more disturbing is that the rate of growth is highest in the countries where the levels of production are not commensurate with the rate of expansion of population.

“It is therefore obvious that we must increase agricultural productivity in order to feed the population and generate employment.”

While livestock had improved the welfare of many people in the industrialised and some developing countries, its production was still predominantly traditional in several Commonwealth countries.

Livestock production in developing countries was characterised by inadequate infrastructure, feed resource bases, high disease rates, credit facilities, and market information channels.

President Jawara said to increase production and trade, substantial investment in research, development, training and support services was imperative.

“Training should be integrated into the lives and working patterns of the rural population. Our extension services need to be strengthened and broadened to ensure that farmers have access to the latest research results.”

“Our means of production must be made effective and efficient enough to match the demands of our production needs. It is the application of such relevant technology that would bring about increased rural income and facilitate complementarity between animal and plant agriculture.”

Economic loss through new diseases and pests like encephalopathy and screw-worm fly, could be minimised through collaborative and interdisciplinary approaches among member states.

President Jawara hoped that the conference would come out with recommendations that would help fight hunger as “the effects of the drought in some of our countries have introduced a major new uncertainty into the future of world agriculture.”

“Research should be given much higher priority and the wide dissemination of its results to farmers in the livestock industry.

“We must strengthen the links between the work of international research institutes like the International Trypanotolerance Centre in Gambia, International Laboratory for Research on Animal Diseases in Kenya and International Livestock Centre for Africa in Ethiopia."
SIR DAWDA URGES WORLD TO HELP END LIBERIAN CRISIS

The Gambian President, Sir Dawda Kairaba Jawara, appealed to the international community to increase its efforts in resolving the Liberian crisis.

Speaking at a State banquet hosted by President Mugabe in his honour President Jawara thanked Zimbabwe for its support of the Economic Community of West African States (ECOWAS) initiative in resolving the conflict. President Jawara is the current chairman of the Ecowas.

Ecowas sent a five-nation West African task force, known as Ecomog to Monrovia to try to end the Liberian civil war.

On the Gulf crisis, President Jawara condemned Iraq’s “naked aggression” in invading Kuwait. Gambia subscribed to the United Nations resolution to end the crisis and it hoped that Iraq would abide by that resolution, he said.

Thanking President Mugabe’s invitation to him to attend the commonwealth Veterinary conference in Harare, President Jawara praised Cde Mugabe’s leadership and said Zimbabwe had made tremendous growth, change and progress since independence.

President Mugabe’s efforts in nation building, his efforts to promote food production and the lowering of infant mortality, and his provision of clinics and hospitals and the remarkable agricultural achievements of the country, were all noteworthy achievements which belied his leadership.

Despite these achievements, Zimbabwe had a hostile neighbour, South Africa, with its apartheid system of government. President Jawara expressed concern at the prevailing situation in that country and hoped that apartheid would be eradicated soon.

Zimbabwe was greatly encouraged by the highly commendable efforts of President Jawara to find a peaceful solution to the fratricidal conflict in Liberia, said Cde Mugabe. The wanton destruction of life and property in that country has aroused deep anguish and revulsion in our people as it has done in the entire world community.

“We therefore give our full support to the efforts of the OAU through its sub-regional organisation, Ecowas, to restore peace and stability to that country. Accordingly, we applaud your initiative as current chairman of Ecowas in creating and dispatching an Ecowas monitoring group, Ecomog, to Liberia to monitor the ceasefire among the warring parties. We appeal to the parties concerned to give peace a chance and co-operate...
with the OAU and Ecowas in restoring stability to Liberia.

President Mugabe also called for an urgent peaceful solution to the Gulf crisis saying the invasion of Kuwait by Iraq was a flagrant violation of international behaviour.

Cde Mugabe said Zimbabwe fully supported United Nations efforts to restore peace as the Iraq invasion had created "a very dangerous situation in the Middle East".

President Mugabe was speaking at the dinner he hosted for President Jawara.

Zimbabwe, he said, disapproved any intervention in the affairs of other states.

"We urge Iraq to withdraw its forces from Kuwait unconditionally and to respect the country's territorial integrity, independence and sovereignty. The need to find an urgent peaceful solution to the problem cannot be over-emphasised if a further escalation of the conflict is to be avoided," he said.

Developments in South Africa gave rise to hope that the end of the oppressive system of apartheid might be drawing near and the long awaited peace might be within grasp. "We are encouraged by the progress made thus far in talks about talks between the de Klerk government and the African National Congress."

Zimbabwe similarly hoped that the current efforts aimed at finding a durable peace in Mozambique and Angola would soon bear fruit. "We commend the governments of Angola and Mozambique for going out of their way to accommodate the demands of other parties."

Sir Dawda tours Nyava Animal health and Management Centre

Sir Dawda Jawara, during his stay in Harare, visited the Nyava Animal health and Management Centre and the Gwanda dip-tank in the Musona communal lands.

He was shown around by the Director of Veterinary Services, Mr. Stuart Hargreaves, and the veterinary extension officer, Dr. Josphe Nyika.

The Nyava Animal health and Management Centre is one of the 19 operational centres in Mashonaland West that offer veterinary extension services to the rural community. The aim of such centres is to improve the productivity of livestock. They also offer advice on dehorning, castration, vaccination and disease investigation and treatment.

The Gwanda dip-tank caters for about 800 cattle. In summer, when the tick challenge is high, cattle are dipped once weekly, but once fortnightly in winter when the challenge is low.

Sir Dawda’s impression of Zimbabwe

President Jawara, who was accompanied by his wife Lady Jawara and the Deputy Minister of Lands, Agriculture and Rural Resettlement, Dr. Joel Kutandura, said he was impressed by the economic, social and political progress of Zimbabwe.

"Because of my own background as a veterinarian, I have seen more of the agricultural aspects of this country than other areas. I am very impressed by what is being done in the agricultural and commercial fields."

He said Sans Souci Estates in Ruwa, which he visited, were as good as any in the United States and Europe.
SIR DAWDA JAWARA TOURS VETERINARY RESEARCH LABORATORY AND RUWA ESTATES, CHIBERO COLLEGE

Sir Dawda Jawara, the Gambian leader, was welcomed by the Vice-Chancellor, Professor Walter Kamba, the Dean of the Faculty of Veterinary Studies, Professor Graham Hill, and senior officials of the university.

Sir Dawda, was accompanied by his wife Lady Jawara. He was welcomed at the Veterinary Research Laboratory by the Director of the Department of Veterinary Services, Dr Stuart Hargreaves, the Minister of Lands, Agriculture and Rural Resettlement, Cde Witness Mangwende, and the deputy director in charge of tsetse control, Cde Vitalis Chadenga.

He was taken on a tour of the laboratory which was built in 1987 with funds from the Danish aid agency, Danida.

At the University of Zimbabwe, the Gambian leader was welcomed by the Vice-Chancellor, Professor Walter Kamba, the Dean of the Faculty of Veterinary Studies, Professor Graham Hill, and senior officials of the university.

In a brief address to students in the faculty, Sir Dawda said the visit to the faculty was the highlight of his trip to Zimbabwe because he had been able to "see your famous faculty." He urged the students to work hard because they had an important role to play in national development.

Later in the day, President Mugabe paid a courtesy call on his Gambian counterpart at the Harare Sheraton where Sir Dawda briefed him on his impressions of the Victoria Falls where he toured the crocodile ranch farm and, where he was shown large numbers of crocodiles, as well as wild cats and birds.

The managing director of the crocodile farm, Mr Rob Gee, said the crocodile industry was expanding, with demand increasing for crocodile hides and meat on both local and foreign markets.

President Jawara first visited the estate which is owned by Mr Doug Brown, a former chairman of the national Association of Dairy Farmers. The estate is mainly a dairy farm although it diversifies into sheeprearing, embryo transfer, beef and ostriches.

During his tour of both estate and the college, President Jawara was accompanied by the Deputy minister of Lands, Agriculture and Rural Resettlement, Cde Joel Kufandada, and Lady Jawara.

The Gambian President was taken on a tour of the sheep, dairy and beef sections of the estate. The estate has 350 milking cows of the American Holstein breed. Crops are grown only to support livestock.

At Chibero, President Jawara was also taken on a tour of the college which included visits to the dairy, livestock and a new $500 000 dairy built with money from the US aid.

At the end of his tour at the college, he was presented with a goat.

The Tall and Short of it

Dr. Blackburn President and Mr Peter Hangartner a V year BVSC Student of University of Zimbabwe. Mr. Hangartner is 7 ft. or 2:13 mtrs. He plans to work & do Post -Graduation in Wild-Life Medicine. Giraffes Watch Out!

Every bigot was once a child free of prejudice
- Sister Mary de Lourdes
SOCIAL EVENTS AT THE CONFERENCE

Zimbabwean Hospitality was at its peak during the weeklong Conference. Dr. Batchelor, President of ZVA Hosted a Barbeque at his farm located on the outskirts of Harare.

A Barbeque was Hosted by the Staff of Veterinary Research Laboratory

Zimbabwean Vets with their Director
Dr. G.G. Bawuti, is the first Black South African Veterinarian to Graduate out from the University of Medunsa South Africa.

Dr. Swanston (Monstral) with Dr. Bert Stevenson (Canada)

Dr. Bert Stevenson who was Acting as Secretary Treasurer for the Conference with Dr. Blackburn. Financial Problems?
COMMONWEALTH VETERINARY ASSOCIATION COUNCIL MEETING

The first ever Council Meeting of the CVA was held on Friday 14th September at the Harare International Conference Centre, Harare Regional Representatives and Council Members from 20 countries attended.

Dr. J.T. Blackburn presided over the meeting. The following were present:

Dr. Abdur Rahman, India
Dr. David Banks, Fiji
Dr. Barnor, Ghana
Dr. D. Batchelor, Zimbabwe
Dr. A. Benjamin, Caymen Islands
Dr. Ian Crothers, Solomon Islands
Dr. J. Duve Swaziland
Dr. R. Duckworth, New Zealand
Dr. Lebohang Khomari, Lesotho
Dr. R. Kibble, Australia
Dr. K. Lameta, Western Samoa
Dr. Peter Msolla, Tanzania,
Dr. I.D. Odur, Uganda
Dr. S Pryor, Australia, Reg. Rep.
Dr. H.C. Raminger, St. Vincent
Dr. B. Stevenson, Canada
Dr. Umo, G. Nigeria,
Dr. D.D. Wanasinghe, Sri Lanka,
Dr. A.A. Ramzee, Pakistan

Dr. Blackburn welcomed the members and stressed the historic importance of this meeting. Among the various topics discussed at the meeting was the importance of communication between member countries, and the CVA. Members expressed their desire to revive the CVA exchange programme. Dr. Blackburn & Dr. Bert Stevenson informed the members of the financial constraints the CVA is facing and asked members to augment the finances of the CVA. The decision of East, Central & Southern Africa’s Regional Council to raise a Regional Fund for inter regional travel was applauded.

Members also praised the efforts of Dr. Stevenson in making the Book & Journal programme very effective. The Council recorded its appreciation of the efforts of Dr. Blackburn, Dr. Archibald & Dr. Pryor in making the

Conference possible and the Commonwealth Foundation in general.

Dr. Inoke Faletau, the Director of the Commonwealth Foundation in particular, for their constant encouragement and assistance and to the Veterinarians of Zimbabwe, and the ZVA for their hospitality.

PLENARY SESSION

The plenary session of the Conference was held on 14th September. Dr. Faletau, Director, Commonwealth Foundation, formally closed the Conference. In his address, Dr. Faletau said that it is the efforts of such associations that gives the Commonwealth what it is today and there is a need to strengthen regional network within the Commonwealth. Dr. Faletau stressed that the problems within the Commonwealth are common and need to be tackled collectively. The isolation of the professionals in remote areas should be overcome by drawing up programmes to overcome this and strengthening association activities.

He assured the CVA of the continuous support from the Commonwealth Foundation in future programmes of the CVA.

A Barbeque was held at Chipungu village on 12th evening. All the participants thoroughly enjoyed the barbeque in the picturesque surroundings. It was hosted by Mr. Rhone-Poulenc.

A Conference Banquet was organised on 13th night at Sheraton Hotel. Dr. Inoke Faletau, Director, Commonwealth Foundation, speaking at the dinner praised the Commonwealth Vety. Association in keeping the concepts of the Commonwealth and said that the Pan Commonwealth Conference was a worthwhile and great event. He said that the member countries of the Commonwealth had inherited from the Empire, a great language, democracy and the best of traditions, and that we are all equal members of a great fraternity.

BUTALEX LAUNCHED

Buparvaquone marketed as “Butalex” by Welcome group of companies was launched on 10th Sep. 1990 after the inauguration of the Pan Commonwealth Veterinary Conference. Zimbabwe is the first country to register Butalex. Butalex is an antitheilerial drug which is very effective against Theileria parva and T. annulata.

The Chairman and Directors of the Welcome Group of Companies in Zimbabwe held a welcome reception on 10th Sept. at the Port Deck of Harare Sheraton at 5-30 immediately after the inauguration of the Conference.
Veterinary Services in Transkei

Transkei, was formerly a part of S Africa and now forms part of one of the 4 homelands. It has a population of 3 million. There are 12 veterinarians in Transkei from Uganda, Ghana, Portugal and Germany. There is only one Transkei veterinarian, a graduate from Medunsa, S Africa. There are 6 students from Transkei studying at the Veterinary faculty in Medunsa, S Africa. Transkei being a pastoral country, sheep, goats and cattle form the bulk of the animal population. Sheep scab and Tick borne diseases are important. Animal Health Assistant Courses are conducted on a regular basis. The head of the training and extension decision is Dr. Ivan Lvanga Lga.

Mozambique Veterinarians Attend Conference

Four veterinarians from Mozambique Drs. Milage Mohate, Joao Rafael, Rosa Costa and Mohammed Harun were sponsored by the Commonwealth Foundation to attend the Pan Commonwealth Veterinary Conference at Harare. Talking to CVA news, they informed that they were very pleased to be in Harare and participate in the conference.

The Mozambique Veterinary school situated in the capital city of Maputo has 110 students on roll. The degree course is of 5 years duration and the medium of instruction is Portuguese.

In Mozambique there are a total of 130 veterinarians. The Veterinary services programme aims at eradicating disease. Under the control of 10 provincial directors. Foot and Mouth disease has been eradicated in the country. Bovine trypanosomiasis is a major disease in cattle. The cross breeding programmes include crossing friesian cattle with the local breed “LADIM” They are disease resistant.

Resolutions of Pan Commonwealth Veterinary Conference 10 -14 September, 1990

Veterinary Education

1. African Veterinary schools should be encouraged to take the initiative to establish an accreditation scheme among veterinary schools in Africa (not necessarily limited to Africa)

2. The Commonwealth should be encouraged to provide scholarships and fellowships for both undergraduate and post-graduate training for personnel from developing countries.

Training Animal Health Assistants

3. Relevant courses should be modular, job- rather than syllabus-oriented, include both production/ husbandry and health facets, have a uniform core curriculum with appropriate regional modifications, be conducted in English (where appropriate) for two years with 50% practical training, include the organisation and provision of farmer training and emphasise the inseparability of animal health and welfare.

4. Developed countries should be encouraged to provide grants with an emphasis on courses rather than individuals, and on ensuring that delivery centres are adequately equipped to provide their service effectively.

5. Adequate consideration should be given to the involvement of village communities in personnel selection, the potential role of demonstrably effective traditional healing procedures, and the benefits of close collaboration with NGO’s and centralised government services for effective delivery of Community-based animal health care.

Post-Graduate Training And Continuing Professional Development

6. Encouragement should be given to expansion of the new technologies for distance learning (eg satellite broadcasting, down-time television etc) to developing countries, and the reciprocal production of educational programmes for use within the Commonwealth.

7. The CVA should encourage the development of regional centres for post-graduate and technical training workshops and seminars, and also encourage the flow of visitors from developed countries to undertake research at these centres while contributing to their teaching and training programmes.

Vector Borne Diseases

CVA should seek to implement the following:

8. Encouragement of information exchange between aid agencies and countries to develop an overall strategy towards integrated control of vector-borne diseases, especially involving genetically resistant animals, concentrating on improved diagnostic ability and vaccine delivery while considering the socio-economic impact of the methodologies.

9. Choice of both control strategy and research target involves consideration of both financial and human resources, primary concerns being environmental impact, women’s role and targeting the poorer strata of society while encouraging the active involvement of industry at an early stage of research and development.

10. The importance of education and training as key aspects of the approach to vector-borne disease control, directed at all levels, technical, administrative, policy making as well as the farmers themselves, leading ultimately to the fundamental question of population control.

Helminthiasis

11. National and regional definition of the helminthiasis problem should be
encouraged in terms of mortality and impaired productivity, to facilitate decisions on the necessity for the institution of control measures which should be based on integrated parasitic control principles, including the exploitation of genetic resistance to infestation, development of vaccines, stimulation of innate immunity, and where feasible, a therapeutic use of chemotherapy and modification of management such as stocking rate, mixed grazing systems, intermediate host control and supplementary feeding. All such approaches should be subjected to rigorous cost-effectiveness analysis and monitoring of efficacy, and be supported by thorough education and training programmes.

Panzootics and their Control

12. Governments should be encouraged to define and implement those services perceived to be of national importance and ensure the privatization of aspects not included in this category.

13. The initiation of cost recovery for services tendered, and introduction of animal-related import/export levies, should be examined to provide funding for the support of government livestock services, which should be staffed at levels commensurate with the actual requirements of the livestock sector.

Village Education Programmes on Livestock Production and Fertility

14. Village education programmes should be instituted via consultation with communal decision makers, based on producers’ animal production goals, and include women, children through the inclusion of animal husbandry in school curricula, and on-farm demonstration of the benefits of relevant interventions.

15a. Improvement of fertility should be fostered through increased herd control with fencing, etc., nutritional intervention involving supplementation with crop residues and high protein agro-industrial by-products, especially of lactating cows, and the use of artificial insemination where appropriate, probably excluding oestrous synchronisation but including improved oestrous detection procedures.

15b. There is a need for research on ruminant fertility in small village herds. CVA should explore whether it could obtain support for discrete studies to closely define the present situation with village farming systems.

16. The CVA should encourage governments to review urgently their land tenure, stock ownership and primary produce marketing policies so as to reverse the alarming degree of land degradation and soil erosion caused by overstocking, and to foster the development of sustainable integrated crop and livestock production systems.

Draught Animal Power

17. The CVA encourages the expansion and development of draught animal power technologies, especially in relation to the interactions between work, nutrition and reproduction/lactation to foster the use of cows for traction, and the development of improved, simple and cheap harnessing methods.

18. Village traction requirements for village and transport should be closely defined to aid decisions on appropriate species utilisation (eg Cattle, Donkeys) and their numbers for particular purposes.

Aquaculture

19. The integration of aquaculture into village animal and crop production systems is seen as having great potential for increasing human dietary protein supplies and the CVA supports research on the development of such integrated systems including studies of relevant fish diseases, and the wide dissemination of material to promote the adoption of aquaculture, which should be included in veterinary and animal production curricula.

Wild Life Management

20. The CVA encourages the increased involvement of veterinarians in wild life management and conservation. Recommends that government directors of veterinary and wildlife services foster the training and posting of veterinarians to wild life reserves etc. and that heads of veterinary faculties consider the incorporation of wild life studies in their curricula.

Veterinary Services

21. CVA notes the following needs to maximise veterinary effectiveness:

a. Veterinarians need the skills to be able to understand their farmers’ aims and objectives.

b. Veterinarians need more skills in extension and communication so that they can translate their knowledge into production via the farmer.

c. Veterinarians need better understanding of nutritional demands and how these can be met in all circumstances.

d. Veterinarians need to understand animal management techniques including integration of stock types so as to maximise available feed utilisation and minimise disease exposure while being environmentally sensitive.

e. Research and the application of research should continue to work towards the reduction and eradication of disease with animal reliance on environmentally damaging chemicals.

f. There should be a recognition that education is necessary at all levels including school in order that village farmers appreciate better the need for productivity.

---

DR. B. TOURAY, VICE PRESIDENT CVA HAS BEEN ELECTED AS THE VP FOR A FURTHER TERM OF 2 YEARS.
g. Systems need to be developed whereby village farmers and those looking after animals including women get direct reward for their efforts.

h. In the short term, increased production is more likely to come from commercial farms. These could be simultaneously used for training village farmers.

**General**

22. Recognising the importance of women in smallholder farming systems, the CVA supports the increased participation of female veterinarians in developing country programmes.

23. In view of the multidisciplinary nature of many of the topics considered, the CVA should liaise with the Commonwealth Agricultural and Medical Associations to enhance the implementation of its resolutions.

24. These resolutions should be widely disseminated to such organisations as FAD, UNDP, WHO, Commonwealth government bodies and veterinary journals within the Commonwealth.

25. The functions of relevant government regulatory services should be enhanced by increased focus on the management of information services related to disease and the quantification of the impact of disease incidence on productivity.

26. The CVA secretariat should be asked to publish and distribute an updated directory of animal health assistants.

27. The CVA is encouraged to seek funds to allow increased participation at Pan Commonwealth and regional meetings by personnel from developing countries.

**ACKNOWLEDGEMENTS**

The CVA wishes to place on record its profound appreciation of the work of:

a. The ZVA organising committee including Drs. Colin Skinner, David Batchelor, Emily Lane & Clare Savage

b. The Conference Programme Committee (Drs. Bill Pryor, Chris Foggin and Duncan Brown)


d. International aid agencies & all others who assisted in planning and conducting the first Pan Commonwealth Veterinary Conference in Harare, Zimbabwe in 1990.

The Conference attendees wish to place on record their appreciation to the President and Executive of the Commonwealth Veterinary Association for their initiative in conceiving and arranging the implementation of the Pan Commonwealth Conference.
There were three main themes to the conference: these were: animal health; animal production; and veterinary education and training. The sessions on animal health were extremely wide ranging and covered a variety of topics, including vector borne diseases, helminthiasis in ruminants and workshops on trypanosomiasis control and the control of nematodes in small ruminants and buffalo.

The animal production sessions were equally wide ranging with considerable emphasis on the improvement of health and production at the village level. Sessions on wildlife management attracted large audiences and the papers were of a uniformly high standard. The saving of the Black Rhino was discussed from a variety of viewpoints including a review of the drugs used in their capture and the care of and management from the capture to the post-release periods. One paper was devoted to the disease problems of farmed ostriches and crocodiles.

The first session on veterinary education was devoted to the discussion of the mutual recognition of veterinary degrees throughout the Commonwealth. The Registrar of RCVS, Alastair Porter, outlined the history of the subject of recognition of degrees of the veterinary schools in Australia, Canada, New Zealand and South Africa.

This had been achieved by a system of visitations similar to that utilised by the RCVS for the six UK schools. The situation was now changing and a system of internal assessment had been set up by the Australian Veterinary Board and also included New Zealand.

The interpretation of reciprocity was open to discussion. It really meant the same sort of training in the same language and the same sort of subjects. However, it could not be over emphasised how important the local disease and production scene was to a particular country. It was certainly not a question of the total hours of teaching as had now been recognised in Europe but the possession of adequate knowledge by the graduates.

Professor F.G.W. Hill, Dean of the Harare Veterinary School, outlined the current position in Zimbabwe. The present policy will require all overseas graduates to take a qualifying examination before they are able to practise in that country. The nature of the examination, which was basically clinical, was outlined by the speaker.

It would appear that at present the mutual recognition of veterinary degrees is not likely to be possible for some considerable time. There were, however, some representatives of African countries who felt that this should be explored on a similar basis to the Australian scheme.

Professor Soulsby, Cambridge, reviewed the subject of CPD in UK.

Dr. Dale Smith of Guelph discussed the new degrees which have been instituted in Canada at the post-graduate level to produce clinical specialists. The University of Guelph has also set up a new graduate diploma which is suitable for Canadians going to work in developing countries and for veterinary surgeons from these countries.

The subject of distance learning was also discussed. Considerable interest was aroused by the Dean of the Murdoch School who described the school's MSc. course in small animal medicine and surgery which has just begun. This is done wholly by distance learning techniques, including telephone tutorial sessions.

- Ron Jones,
Veterinary Times, November 1990

**TIT BITS OF CONFERENCE**

A group of wives was abandoned by their guide and left stranded in mid-tour.

Another party, enjoying a sunset cruise on the Zambesi river, found themselves drifting helplessly downstream into the night. Smoke billowed through the cabin as the crew struggled to extinguish the fire in the engine compartment; once they brought it under control, the boat was left powerless, drifting helplessly down the crocodile infested river in the gathering gloom towards the precipice and the 350-foot drop into the foaming torrents it was ultimately towed to safety.

A coach chartered for the same party broke down after dark, within foot of a herd of elephants. But there were no casualties, and everyone arrived safely back in the UK.

When Dr. Inoke Falctau, Director Commonwealth Foundation, landed at Harare he found that his luggage was missing. It arrived 2 days later.
Dr. G. Hamilton, Dean, Faculty of Veterinary Science, Univ. of Saskatchewan, Mrs. Hamilton, Dr. A. Ramzee (Pakistan) and Dr. Abdul Rahman visited the Veterinary Faculty of Univ. of Zimbabwe. They were shown around the campus and also met the faculty members.

L-R Dr. Hamilton & Mrs. Hamilton, Dr. Abdul Rahman, Dr. Ramzee at the Veterinary School with the administrator

L-R Dr. Ramzee, Dr. Rao, Dr. Mohan (Faculty members) & Dr. Hamilton at the Veterinary School

Students at Dissection in the Department of Anatomy
My journey to Zimbabwe was the first I have made to Southern Africa, and I had a limited knowledge of what I would find. The flight I chose seemed to be attempting a subtle, if inaccurate education in what to expect.

Burton and Speke's nineteenth-century explorations to the "Dark Continent" were the subject of the in-flight movie. A movie which is notable in that it was the only one I have ever managed to stay awake and enjoy. Pictures of painted tribes and marauding explorers reinforced the images of Africa in bygone days. The images persist today, added to by news broadcasts on African affairs centering around wars, famine and racism. By now my mind was full of pictures telling me that I should have gone on holiday to the Mediterranean, and attempted this expensive self-education by looking through a pictorial atlas of Africa and by reading some well-chosen texts on subjects like Trypanosomiasis and Human.<br><br>My fears deepened, as on arrival at Lusaka airport in dawn light at the start of a ten hour stop-over, I began to shiver in the cold of that August morning. Surely this couldn't be Africa? It was too cold and I couldn't see any elephants.<br><br>My previous trips to east and central Africa had thankfully taught me the falsehood of these misconceptions. However, old images die hard and persist in the thinking of many of those from "developed" countries. It was to come as a considerable shock to me to find some "Europeans" who had lived in Zimbabwe for most or all of their lives, still living and believing in images and a way of life which this enlightened age should have seen the back of.<br><br>By the time of my arrival in Harare on a Friday evening, the city had fallen into darkness at the start of a three day holiday to honour those killed in the war to achieve majority rule.<br><br>The drive in a country in the dark is terribly disconcerting. One is desperate to soak in the images of the nascent adventure through the headlights of oncoming cars and the illuminated roadside buildings. All else is cloaked, teasing one by withholding the essential information which one has travelled thousands of miles to experience.<br><br>That was all long ago. Now I am more knowledgeable but yet confused as to the nature of Zimbabwe. It may be that a foreigner can never get to grips with another's country; in the case of Zimbabwe, it is made somehow more difficult to understand by the persisting and essential Britishness of a country which is so very different from that "green and pleasant land".<br><br>I started my stay with an elderly retired tobacco farmer and his wife. I was feasted and treated well but I spent much time trying to determine just why they felt it necessary to treat their staff with such rudeness and contempt. I haven't discovered the answer, but then I haven't had the advantage of years of training in these sorry attitudes.<br><br>My stay in the hotel educated me in the advanced use of the shoe; that is apart from its mundane application as a means of assisting pain-free locomotion. As a result of my studies I recommend the use of slight weight. This is the way to strike the anticipated TV viewing schedules. My next was to use the same shot to kill a cockroach as it negotiates the floor looking for edible matter. A heavy boot is of limited value in the pursuit of cockroaches as the time taken to build up the momentum to achieve a suitably forceful impact is inconsistent with the speed at which cockroaches move. Furthermore, the repeated inaccurate blows upon the floor does little to improve relations with the resident in the room below.<br><br>One of the other exciting features of my room was the telephone. This refused resolutely to allow me to call anywhere. Nevertheless, it seemed to sense when I might be asleep or attempting this unreasonable act and that is the moment it would choose to divert the switchboard calls through to my room. I soon learnt that the only way to deal with the rampart receiver was to bury it beneath several layers of blankets in my uncurtained second bed.<br><br>Most of my work was based at the Veterinary Research Laboratories in Harare. These laboratories are the major diagnostic laboratories serving Zimbabwe and they are staffed by a dedicated collection of Zimbabwean and expatriate workers. The common feature of the laboratories was that they all had too much work to do in too little time. The facilities are generally satisfactory but one of the greatest problems is in keeping qualified technicians. The pay is very poor and there has been a regular flow of technical staff to the University and to private concerns where the pay is better.<br><br>The work of the laboratories covers many areas including the development of oral rabies vaccines for delivery to jackals; investigations into the prevalence of bacterial diseases such as leprosy and brucellosis; foot and mouth serology and epidemiological investigation related to the devastating outbreak of 1989. There is also a routine diagnostic pathology service backed up by virology, parasitology and bacteriology sections. The wildlife unit appears to be on call to the rapidly increasing number of game farmers for routine veterinary work as well as following research on ostriches, crocodiles and serological screening of wildlife populations.<br><br>The University of Zimbabwe also provided me with a great opportunity to learn about veterinary work in this par of the world. I found the standard of the students to be very high. I was surprised to find that the emphasis of the teaching seemed to be so similar to that which I had been accustomed to at the University of Bristol. The facilities for teaching were good as so much of the equipment is new. The problem the university faces seems to be how to attract academic staff and how to keep them there. At present there is a large expatriate contingent on the staff, including a talented regular supply of guest lecturers from the University of Utrecht.<br><br>The highlights of my trip was undoubtedly the food and in particular the steaks. The quality of the meat and the standard of its preparation was generally very high. One could even eat steaks at Harare's own Mexican restaurant with its sombrero clad African doorman.<br><br>My only attempt at tourism was to visit Victoria Falls. I decided to fly which would have been a good idea if the designer of the rather elderly plane had remembered to allow for legroom. One might have believed, rather unhappily, that the plane had been chartered for a group of amputees. The flight only lasted one hour. This was doubly fortunate as I had contracted the only enteric misadventure of my entire trip the previous evening. On my arrival in the hotel, a stone's throw away from the eighth wonder of the world, I immediately went to bed, believing myself to be following in the tradition of those maladroit adventurers whose images had been impressed upon me during the long flight to Africa. I awoke the following day after twelve hours sleep and dragged myself off to see the "smoke that thunders". The falls were indeed an interesting sight, but the combination of a fevered belly, overstated descriptions by every brochure and previous visitor, and it being the end of a long dry season so that there was not much water and less than in more spectacular times of the year, left me not as impressed as I felt I should have been, for which I felt very guilty. I tried to assuage my guilt by taking a large collection of pictures. Pictures which will never come close to capturing the feeling of the depth of the gorge the sound of the tumbling water and the fine spray of mist on the path in certain areas.

I left Zimbabwe two days later having learnt an incalculable amount about that land. A country I had come to like and one which I will visit again to see the beauty spots I missed and to renew the friendships I made.
M.N. Subhash, an Indian doctor, did not know there was a country called Tuvalu, let alone that it was also a member of the Commonwealth, until he came across someone from the Pacific island nation.

He met Mr. Pokia Tihala, a Tuvalu Senior civil servant, when the two joined a group of Commonwealth professionals for a study visit to Britain and the Caribbean.

The visit was arranged by the Commonwealth Foundation under its annual fellowship scheme designed to give selected Commonwealth professionals an opportunity to broaden their knowledge and understanding of the 50-member Commonwealth.

Dr. Subhash, 42, from Bangalore, South India, freely admitted his

Another was Miss Mary Anne Ciappara, a pharmacist from the Mediterranean island of Malta. She was, however, pleased to discover that all members of the group knew about her own country, even though both Tuvalu and Malta were small states.

She found Guyana to be an exciting part of the Commonwealth and was much taken by its greenery, something lacking in her own country, she said.

Miss Ciappara, Dr Subhash and Mr. Tihala were among professionals from 11 Commonwealth countries who made up the group.

The others were from Australia, Botswana, The Gambia, Nigeria, Singapore, St Vincent, Tonga and Western Samoa.

Guyana, the Caribbean Community Secretariat, Georgetown, and the Guyana Society Professional Centre where they took part in a discussion on "the role of the professional in society."

Among leaders to receive them were President Desmond Hoyte of Guyana and Miss Eugenia Charles, Prime Minister of Dominica, the Commonwealth's only other woman leader apart from Britain's Mrs Margaret Thatcher and Mrs Benazir Bhutto of Pakistan.

While in Guyana, they learnt about an offer by President Hoyte of nearly a million acres of his country's Amazonian forest for a Commonwealth project.

The aim of the project is to study utilisation of forest resources without damaging the environment and to
Commonwealth News

The grants represent a new initiative by Commonwealth leaders to encourage and facilitate better communications among Commonwealth NGOs through CLUs. The initiative was an acknowledgement by leaders of the role played by voluntary bodies in development.

Before travelling to the Caribbean the group spent a fortnight in Britain, a highlight of which was a meeting at Buckingham Palace with Queen Elizabeth II as Head of the Commonwealth.

They visited Marlborough House, headquarters of the Foundation and the Commonwealth Secretariat, the international organisation at the service of all Commonwealth governments, and the Commonwealth Institute as well as Commonwealth professional associations based in London.

They attended seminars on the evolution of the Commonwealth, its role in the international community, the major political, economic and social issues facing its members and the role of the professions in development.

The intensive programme arranged for them by the Foundation enabled the fellows to see the Commonwealth at work, both at official and unofficial levels.

One of the fellows, Mr Yakubu Mohammed, 40, managing editor of newswatch magazine of Nigeria, said it was his first contact with the Commonwealth, even though he had been reporting on Commonwealth affairs as a journalist.

“...This involvement has solidified my knowledge of the Commonwealth, the Commonwealth Secretariat and the Foundation. This has given me a lot of exposure to other parts of the Commonwealth, which will be useful in my work.”

All members of the group were agreed on the value of the fellowship, which enabled them to share knowledge and experience with people from different countries and from different walks of life. They pledged on their return home to work for a better understanding of the Commonwealth.

This was the sixth group to be assembled by the Foundation since it launched the scheme in 1985.

Previous groups visited India, Malaysia, Singapore, Kenya, Uganda and Tanzania, besides Britain. The next group in 1991 will tour the South Pacific. - Commonwealth Feature.

SECRETARY GENERAL OF CAMHADD IN BANGALORE, INDIA

Secretary General of Commonwealth Association for Mental Handicap and Developmental Disabilities, Dr. V.R. Pandurangi, was in Bangalore, India. Dr. Pandurangi called on Dr. S. Abdul Rahman, Editor, CVA News and Council Member of CVA, for India. A meeting with other Commonwealth Representatives stationed in Bangalore was organised. Two other representatives of Commonwealth professional association are stationed in Bangalore. They are Dr. C.P. B. Kurup, who represents India on the Commonwealth Nursing Association and Dr. M.N. Subhash who is the Indian Representative of CAMHADD. Various issues common to professional associations in the Commonwealth were discussed.

CAMHADD organised a two day seminar on ‘Safe Motherhood Initiative and Child survival at Bangalore on 3rd and 4th December, 1990.

Dr. Pandurangi, (second from left) with Dr. S. Abdul Rahman, Dr. Kurup (extreme left) and Dr. Subhash (extreme right).

Dr. S. Abdul Rahman, Council Member of CVA for India and Editor of CVA News has been awarded the Karnataka State Award for 1990 for his services to the Veterinary Profession. He is the first Veterinarian to receive the award.
The 43rd Annual General Conference and the Scientific Session of the Sri Lanka Veterinary Association was held in Colombo on 17th August 1990. The Minister of Agricultural Development and Research Hon. R.M. Dharmadasa Banda M.P. who was the chief guest declared open the session by lighting the traditional oil lamp. In his address to the Association the Minister stressed the urgent need for increasing the national milk production. He observed that only less than 25% of the milk consumed in Sri Lanka is produced locally. The Minister promised to give his support to help the Veterinarians to increase the country's milk production. He requested the Association to submit to him a plan to develop the Dairy Industry in Sri Lanka.

Dr. A. Bandaranayake, former Director Department of Animal Production and Health Consultant to the Ministry of Agriculture and Livestock, presently Consultant to Nestle Lanka Ltd. delivered the keynote address. In his address Dr. Bandaranayake expressed his concern about the slow growth of the dairy industry. He observed that the growth of the dairy industry was not proportional to the volume of funds injected into the industry. He discussed about the high cost of veterinary services, shortage of qualified Veterinarians, and the inadequacies of the Artificial Insemination Services.

Dr. M. Upali Jayasekara, the President of the Association traced the history of Veterinary practice in Sri Lanka and said that, even the ancient kings practiced and encouraged the practice and treatment of sick animals, of course on compassionate grounds. Dr. Jayasekara's theme was "The role of veterinary profession in increasing the nutritional standards of the nation". He elaborated on the contributions of the veterinary profession towards achieving this goal.

The Hon. Minister gave away the awards to the authors of the best scientific article published in the Sri Lanka Veterinary Journal and to the authors of the best clinical paper presented at the last annual scientific sessions.

At the Scientific Session 18 scientific papers were presented. There was also a poster presentation. Veterinary pharmaceutical and equipments were exhibited by a number of firms.

The Scientific Session was followed by the Business meeting of the Association. At the business meeting the following office bearers for the
SRI LANKAN VETERINARY STUDENT IN INDIA

How happy I am now as a veterinary graduate of the University of Agriculture science Bangalore! I never realized the years I spent here at the college to be over soon. I get a feeling that I landed in Bangalore at the airport, from Sri Lanka, just the other day. Luckily I have nothing but very sweet memories to carry with me back home.

Even as a kid, somehow I loved animals - never teased them! Somehow I would look upon animals as very lovely creatures to be cared for. That was the starting point for my love of animals. We had a pomeranian at home; some time or the other I had to go to the vet clinic with the dog. There I noticed how an animal was treated. I too, wanted to become a doctor to treat animals. Then I made up my mind.

In 1981 I secured a Gold Medal as one of the best all-round students in Sri Lanka. This was my second School Exam I was overjoyed getting this honour. As I finished my university entrance examination, I applied to Government of India for admission to Vet College. Fortunately I was selected on a Scholarship, enough to maintain oneself.

During the first few days, I didn’t find any friends and I was little homesick. Very soon I got over this feeling. Since I found Dev. Roger, Sharath to give me company and also a hundred cheers! To this day we have been very fast friends. The other students in the course were not less friendly. Because they too took a fancy to me and I also loved them. So long I have never felt out of home mainly on account of such a good group.

I have loved Kannada Language and the people of Karnataka. The people are very good. The language is sweet. I did not exert my self to learn Kannada. Some how I started acquiring a few words in Kannada to manage a conversation. Some Kannada songs, which I have sung fetched me prizes too. Of all the subjects, I found anatomy and physiology very tough. This is true of other students also. And yet the teachers were very helpful while guiding me. Funnily every year the newly admitted vet students are given a fair warning about the difficulty of these two subjects!!

The Vet College got first prize in cricket tournament and I scored 98 runs to a grand total 217 runs. I take pride in that besides, I was the captain of the Cricket Team.

One experience that stands was then out in a major way is my internship. I worked at Red Dome project, Frozen Semen bank and soon I acquired practical vet, clinical knowledge. I should say this period was the very best of my stay at the Veterinary College.

Chandrikaprasad (Fiji Island), Roger Bovell (Guyana) and I thought of forming a Foreign Student Association for the first time at the Veterinary College having office bearers and so on. It came into being successfully in which I was the treasurer for two years. Professor H.A. Ramakrishna, Department of English, has been Foreign Student Adviser at the University and his constant concern for the well being of foreign student will ever remain green in mind.

Finally, before I close, I should thank all the professors of the Vet College and teaching Staff for making me a veterinary Surgeon. I hope I shall make use of this knowledge, I have obtained here, to the best possible advantage in future.

Australasian Region to Help Western Samoa After Cyclone Damage

Early this year Western Samoa was devastated by one of the worst cyclones in its history. Dr. Bill Pryor, Regional Representative has established contact with Dr Ken Lameta the Western Samoan Regional councillor who has advised that the cattle plantations were almost completely destroyed, about 90% of stock fencing was lost though fortunately actual stock losses were not high.

All departments suffered great losses to buildings and other assets and Dr Lameta lost portion of his office as was also the case with the conference room and library. Most of the books and journals were destroyed by flood waters.

The Australasian region is mounting a program to solicit veterinary textbooks, journals and reports to be donated to Western Samoa.

If any member of CVA can assist could they notify Dr Pryor in Australia or write directly to Dr Lameta whose address is:

Dr. K Lameta,
Chief Livestock Officer,
Department of Agriculture,
Forests and Fisheries,
PO Box L1874,
APIA, Western Samoa

The Australian and New Zealand Veterinary Associations are joining together for the first time to present a Pan Pacific Conference on the theme of Veterinarians and the Environment in Sydney in May 1991.

The conference will begin with an “open house” welcoming reception for delegates and their families at Sydney’s famous Opera House on Sunday May 12, and scientific sessions will run at the prestigious Darling Harbour Convention Centre until May 17.

The conference is a chance for veterinarians to update themselves on the environmental issues which will increasingly affect the profession. It also offers top quality continuing education in many other areas.

A packed scientific program will include more than 200 sessions in veterinary research and the environment; practice management and marketing; small animal medicine and surgery; horses; cattle, sheep and deer; intensive animal production; veterinary projects in developing countries; companion animals and the human-animal bond; zoos, wildlife and conservation; and animal welfare.

More than 250 speakers from Australia, New Zealand, and the United States will be presenting papers.

The conference will bring together the many diverse groups interested in animal health and well-being within a soundly-managed environment.

The social program will make full use of Sydney’s attractions, including cruises on Sydney’s superb harbour, a tour of Taronga Zoo on the harbour foreshores, and tours to native fauna reserves.

Registration is $A500 or $US400 for five days of sessions in nine venues. Included in the registration fee is the Open House at the Opera House; lunches on three days of the conference; and coffee throughout the conference.

The AVA/NZVA conference gives visiting veterinarians a chance to explore the world’s most beautiful harbour city. Sydney is also the gateway to the whole Australian experience — Ayers Rock and the rugged outback; the glowing corals of the Great Barrier Reef; tropical rainforests; untouched wilderness; fantastic beaches; unique fauna; friendly cities.

The President of the AVA, Dr Bob Kibble, and of the NZVA, Dr Bob Duckworth, are extending an invitation to veterinarians from all countries to come to Darling Harbour in 1991 and sample Australian and NZ hospitality.

For registration form and more information on tours, contact Ingrid Schmidt, National Australia Travel Services, 105 Miller Street, North Sydney, Australia 2050, fax 61 2 959 5502.

For more information on scientific sessions contact Dr Bill Gee, AVA, Po Box 371 Artarmon, Australia 2064.
New Roles for Vets in Decade of Opportunity

Changing roles for veterinarians as Australia's livestock industry develops on-farm practices to cope with new market demands are one of the implications in a rural research report commissioned by the AVA.

Canberra-based rural researcher ACIL prepared the report on economic developments in the Australian livestock industries as the first of a regular series for the AVA.

ACIL predicts—
- An increased national cattle herd, reaching 26.5 million by 1995, with farm management having to change to meet specific market requirements and new developments in marketing and handling, processing and quality assurance, as well as product development.
- Pressures on sheepmeat processors to find new products and markets and cut costs, and on the livestock industry to ensure humane animal husbandry practices, especially with the real prospect of significant drought in the early 1990s.
- Pork and poultry per capita consumption expected to continue to rise.
- Falling wool returns forcing producers to focus on further productivity improvement, with a switch in emphasis from investment in pastures and genetics to management strategies.
- Dairy prices and production expected to fall after 1993, with the need for continuing productivity improvement paramount.

ACIL says the Australian Bureau of Agricultural and Resource Economics description of the 1990s as a decade of opportunity for the meat industries is supported by general consensus.

It says beef market developments will affect prices received by all livestock producers, and consequently will affect their management strategies.

ACIL says farm income changes this year in that broad acre industries will be dominated by the decline in wool income and sheep sale receipts, with farm cash operating surplus falling nearly 10 per cent (16 in real terms).

SEmen ANALYSIS SERVICE

Artificial insemination with frozen semen is widely used in the Australian livestock industries. However, until now there has been no method of accurately assessing the quality of frozen semen.

The Department of Agriculture, South Australia, has introduced a semen analysis service for livestock. Using advanced technology, the service produces accurate analysis of mammalian semen for sperm motility and concentration. This data will eliminate the disagreement, doubt and confusion often associated with the subjective assessment of semen.

The service uses a computerised image analysis system to give accurate information on semen samples. A test certificate is produced that presents this information together with recommendations on minimum semen quality standards. All analyses and information are confidential.

At present the semen analysis service supplies analysis of sperm motility and concentration of fresh and frozen-thawed semen from all mammalian species. In the near future the service will be expanded to incorporate analysis of sperm morphology. A research program is underway aimed at improving the service, and predicting the fertilising capacity of spermatozoa.

Australian Veterinary Journal, 11 April,

Some wool producers will be able to switch to cattle and grains, creating more demand for technical and management advice, ACIL says:
- On pigmeat and poultry, ACIL's finding that rising beef prices should flow through to higher pork and poultry prices is backed up by forecasts made to the national Agricultural and Resources Outlook Conference held in Canberra in February. These showed sow numbers increasing this year by 3 per cent, with Canadian meat imports likely to be insignificant in the short and medium terms.

The conference's forecast for poultry was for a steady production rise to 477 kL in 1995 and for continued improvements in productivity expected to sustain profitability in the face of falling real prices.

The President of the AVA special interest group the Australian Association of Cattle Veterinarians, Dr. Chris Hibbert, said the ACIL research report reinforced that veterinarians must maintain a constant effort to update and extend their knowledge beyond the traditional fields of veterinary science. This will include awareness of welfare and environmental factors affecting the livestock industry, he said. "The concept that the economic outlook for the meat, dairy and wool industries may indicate turbulent times has been with us for a long time," he said. "The veterinary profession has not suddenly been confronted with the prospect of a rapidly changing industry to service. Attitudes of many veterinarians to these industry changes have already resulted in new approaches to services being offered."
HUMANE DISPOSAL OF AGED SHEEP 'MUST BE ADDRESSED'

The Australian Sheep Veterinary Society, a special interest group of the AVA, is to evaluate the potential problem of the humane disposal of aged sheep, given the huge build-up in Australia's sheep population.

The AVA's representative on the National Consultative Committee on Animal Welfare, Dr John Smith, has asked for the group's views because of concerns expressed by some committee members.

Dr. Smith said the build-up of old sheep numbers had occurred because of high wool prices, the absence of significant drought over the past seven years, and the (now declining) market for older sheep in the Middle East.

"Sudden drought and/or a serious drop in international wool prices could result in the problem of the humane disposal of millions of aged sheep of no commercial value," he said.

The president-elect of the sheep group, Dr. Bruce Farquharson of the University of Sydney, says the problem is a real one and should be addressed now.

He said with the Australian sheep population probably more than 20 million higher over the past five or six years, the onset of a drought would see very large numbers of aged sheep suddenly coming onto the market for disposal.

With prices already extremely low for this sheep—a pen of 42 sheep at Yass had recently sold for a total $1, and a mob of ewes brought only $1 each—farmers would not bother sending sheep in for slaughter, but would cut their throats or shoot them.

"With the increase of sheep numbers there are fewer animals being slaughtered so a lot of abattoirs have closed down, which means we have fewer abattoirs and less skilled labour available for slaughter," he said.

Dr. Farquharson said another potential source of large numbers of sheep suddenly coming onto the market was the possible government control of stock prices in the leasehold of the Western lands of NSW, in an effort to halt soil degradation.

Dr. Farquharson said the farming community should be made aware that in the event of drought they could not just let animals starve, but must follow certain procedures of disposal.

He said he believed Victoria was the only state which had legislation requiring farmers and graziers to make proper provision for either feeding sheep in drought, or humanely destroying them. "It is a real problem which we have to address—and we must be proactive about it," he said. "You are going to have to enforce that these animals are destroyed, or kept from starving. "It is important that people aware that the problem is there, to address the problem of what is humane disposal, and make the farming community aware there are certain procedures they should take.

Dr. Farquharson said cutting the throat was quick and effective if done properly, but with very large numbers of sheep shooting was quicker. Carcasses then had to be properly disposed of either by burial or burning.

World-first Vaccine 'Spay' for Cows Launched in Queensland

A vaccine against pregnancy in cows launched by Arthur Webster P.F. Ltd and the Sydney-based Peptide Technology Ltd in June is being claimed as a world first for Australia.

The GNRF peptide-based vaccine, Vaxstrate, has been provisionally registered for use in Queensland and the Northern Territory.

The companies say it could replace the need to surgically spay the animal's immune system to block normal ovulation. It is said to leave no residue, and have no ill effect on already-pregnant cows or their calves.

Cost is $11 per head. Vaxstrate will be sold through veterinary practitioners and some rural merchants.

The companies say a complete program of two doses between four and 16 weeks apart will give up to nine months control over reproduction. Cows can become pregnant between the first and second vaccination, leaving a management problem between doses.

In field trials in north Queensland up to 80 per cent of cows were non-pregnant after running with bulls following their two-dose vaccination schedule. This compares with high pregnancy rates of hull cows in the north, where 80 per cent pregnancy is not uncommon, according to Websters.

The vaccine came out of initial work by CSIRO's division of animal production and tropical animal production.

Dr. Tim Trigg of Peptide Technology said the peptide GNRF, on which the vaccine is based, was isolated in 1971.

Discovery of its effect on superstimulation and secretion of pituitary hormones led to CSIRO development of an adjuvant suitable for use in the commercial vaccine. Peptide Technology was then able to produce the peptide in bulk.

Footnote: Sydney University has awarded the founder and chairman of Websters, Arthur Webster, a Doctorate of Veterinary Science for his services to veterinary science.

AVA News - N265
MONKEY TESTS RAISE HOPES FOR AN AIDS VACCINE

An experimental vaccine against a form of AIDS in primates has proven unusually effective in protecting the animals against infection. The vaccine marks a “leap forward” in the quest for a human vaccine, according to the chief of the US Government’s unit on AIDS.

“Vaccine researchers have reason to be optimistic,” says Wayne Koff, who oversees vaccine research at the AIDS unit of the National Institute of Allergy and Infectious Diseases in Bethesda, Maryland. “It shows that you can protect against a lentivirus [a slow virus].”

Like HIV, the simian AIDS virus (SIV) causes disease and death by infecting and suppressing the immune system. Researchers have been using SIV as a model for HIV, especially in tests of potential vaccines.

Michael Murphey-Corb at the Delta Regional Primate Research Centre in Covington, Louisiana, immunised 12 rhesus macaque monkeys with whole SIV killed with formalin (Science, December 8, p1233). As part of the inoculation, she also administered a compound called threonyl muramyl dipeptide, that boosted the monkeys’ immune systems.

A month later, Murphey-Corb challenged the macaques with injections of SIV sufficiently large to cause disease. She also injected SIV into 17 monkeys that had not been immunised. Thirteen months later, after a booster inoculation, she challenged them again, this time with a dose of SIV that was 10 times the size of the original.

Two immunised macaques died from unrelated causes, and another contracted simian AIDS and died within the first year. The remaining nine immunised animals responded to the viral exposure by producing high levels of antibodies. But eight of the nine showed no sign that they were harbouring the virus, such as lowered levels of T4 cells. A year after the final exposure, they remained free of the virus, and none of the nine have contracted disease.

The experiment, conducted in cooperation with Louisiana State University and Repligen, a company in Cambridge, Massachusetts, is encouraging for several reasons. As with other viruses, says Dani Bolognesi of Duke University, “it may not be necessary to completely block infection in order to have a successful vaccine.” In the same issue of Science (p1233), Bolognesi points out that if an individual can tolerate some degree of infection without developing the disease, a vaccine is closer at hand.

Jonas Salk of the Salk Institute in La Jolla, California, and colleagues have been experimenting with a related concept. Salk has inoculated killed virus into human volunteers who are already infected with HIV. The treatment, called post-infection immunotherapy, is supposed to boost the patients’ immune system to deter the onset of disease. So far, Salk’s results have revealed only that the treatment is not toxic. Salk’s vaccine lacks most of the viral envelope protein, the part of the virus that many researchers believe triggers immune response.

Murphey-Corb’s experiment supports a growing hypothesis that killed whole virus can work.

Despite the optimism, researchers sound a note of caution. Inoculating humans with whole virus remains controversial. Bolognesi warns that “whole virus vaccines do not represent a practical avenue for a vaccine against HIV because of the possibility of infectious particles” remaining in the vaccine.

Koff, however, remains upbeat. “Researchers now have eight animals whose immune systems they can watch” to see how they resist permanent infection, he says. - New Scientist, December 16, 1989.

The Regional Meeting of the Australasian Region was held at Harare on 12.9.90

L-R Dr. Pryor (Reg. Rep.)
Dr. Crothers, (Solomon Islands)
Dr. Duckworth (New Zealand)
Dr. Lamenia (W. Samoa) Dr. Numilya
(Papua and New Guinea) and
Dr. D. Banks (Fiji)
The tick *Amblyomma variegatum* was introduced in the Caribbean in 1928-30 into the French Territories. It appears that the source Equatorial West Africa. Because of a system of trading and human compatibility. The tick found itself in the neighboring islands, mainly from St. Kitts to St. Lucia. The incidence was highest in Antigua (1895), St. Kitts, Nevis in that order but less in Montserrat, Dominica, St. Lucia. Mirable dictu, it was only seen in Barbados in 1969.

Associated with this tick are Dematophilosis and Heartwater. The former has been seen in most of the islands except Barbados and latter has been confirmed for Antigua by way of inoculation of supernatant from macerated ticks into susceptible goats at the University of Florida. While symptoms of this particular disease and because similar symptoms occur in cases of other disease, Heartwater has not been clinically confirmed in Antigua, though suspected.

These entities are of major concern to the hemisphere. So much so, a regional program for eradication of the tick has been drawn up through inputs from Regional Veterinarians, FAO, ICA and USAID/USDA. The latter organization has evolved a pilot scheme for Antigua & Barbuda financed by the USA. It has been proposed that what is learnt in the Pilot Project will be applied to the Regional exercise, which is about to be exposed to International donor agencies for funding.

In regard to this Pilot Project in Antigua, an Economic Study was undertaken and the results are awaited. There have been a number of thrusts at a Wild Life Study. In any event, a Wild Life Study should occur before, during and after this eradication in Antigua & Barbuda.

An up-date on the entire picture is as follows:

(A) Antigua USAID/USDA Pilot Project for *A. variegatum*

This project has four related aspects (sub-projects) each in different stages of implementation.

(a) The environment impact study is now complete to the extent that Flumethrin (Bayticol pour-on) acaricide will not be used in the Antigua pilot programme at the moment. Plans are under way to assess the efficacy of other acaricides under local conditions. These include TACTIC (Amitraz), Atroban (Permethrin), Ivomec and Poridon, all of which are registered in the US.

(b) The Wildlife study has already produced three reports on the potential wildlife hosts, including migratory birds, in CARICOM countries and the last exercise which will consider Barbuda (Deer) will be completed by the end of June.

(c) The economic study which started in October/November 1989, involves studies to determine the impact of *A. variegatum* on growth weight of yearling cattle (2 groups - treated (tick-free) and untreated controls (ticky) in four different locations. Total 24 tick-free and 24 tick-infested), it was to terminate 31 March 1990, but may be extended till August to include the whole of the tick season.

(d) The pilot eradication study has not yet started. It will start when results are available from all the above mentioned studies. Start-up depends particularly on the identification of an acceptable acaricide.

(B) Regional TCP

This project proposal was discussed and the CVO and PS indicated that:

(i) Antigua should remain part of the project, and is prepared to host the training of the AHAs foreseen in the project, if thought appropriate.

(ii) If the pilot eradication programme is operational in time Antigua could be considered as host country.

(C) It was indicated that: in the event that the pilot programme goes ahead hopefully by the end of 1990, it was proposed that some of the necessary staff (Animal Health Assistants (AHAs) would be drawn from other *A. variegatum* infested islands in the region. This would serve two purposes, first make available to Antigua suitably trained animal health assistants in sufficient numbers; second give training and experience to the AHAs which could be applied when they return to work in the eradication campaigns in their countries of origin.

It has also emphasized the need to re-introduce Antigua in the Donors' Meeting document, should negotiations with the US regarding the pilot programme fail.

J L Robinson, D.V.M.
Chief Veterinary Officer
Veterinary & Livestock Division
Antigua & Barbuda.
Atlantic Veterinary college

The Atlantic Veterinary college, Canada's newest college of veterinary medicine, is a faculty of the University of Prince Edward Island in Charlottetown. The college accepted the first class of students in September 1986. The official opening of the school took place on May 9, 1987 and on May 13, 1990 the college graduated its first class of forty-seven Doctors of Veterinary Medicine. At the same time, four graduate students were awarded their M.Sc. degrees.

The college (A.V.C) was also recently granted a seven year full accreditation status by the Council on Education of the American Veterinary Medical Association. The site visitation inspection team included representation from the Canadian Veterinary Medical Association's National Examining Board, the Prince Edward Island Veterinary Medical Association and the president of the CVMA.

The Atlantic Veterinary College accepts forty-one qualified students into the DVM program each year from the four Atlantic provinces of Canada, nine international students including those from the United States and two from other locations in Canada for a total of fifty-two.

In addition to the usual emphasis on medicine and surgery for both food animals and companion animals, the DVM program strongly stresses aquaculture/fish health and epidemiology/herd health in the large animal department.

The ambitious research program already in place is growing at very rapid pace. Research funding at the College to-date exceeds $5 million.

The Class of 1990 at AVC
A.V.C's First Graduating Class of 47
"Doctors of Veterinary Medicine"
with Several Faculty Members on the Right.
Roger Bovell Guyanean Veterinary Student in India

I joined the University of Agricultural Sciences, Bangalore, India in 1985 to pursue my undergraduate studies in Veterinary Science. Under the ICCR Cultural Scholarship Scheme, at that time, as much as I was interested in Veterinary Science, I was also apprehensive about studying in India. This was so, for two reasons. Firstly, I had acquired certain negative stereotype impressions about India, a direct result of my ignorance, and secondly because I was doubtful about the usefulness of an Indian degree outside India. My apprehensions were of course unfounded, and I think I've been rather fortunate to have studied Vet Science in India. In fact, I have benefited immensely from the wide exposure to clinical cases of infections diseases such as Babesiosis, the enemias FMD, Rabies & other diseases common to the tropic, which will no doubt be of service in Guyana.

If asked to compare Veterinary education in India with that of the western countries, without hesitation, I can say that a Western education certainly affords greater access to advanced diagnostic and therapeutic techniques, however it offers no more than a textbook knowledge of most tropical diseases. The other aspects of Veterinary education would be similar in most countries and for the reason I consider India to be an ideal training ground for anyone aspiring to work in developing or Tropical countries.

My 5 years in India has been a culturally and educationally richly rewarding experience. Over the years I have come to appreciate India as a world of its own with the diversity of cultures, language, religion, tradition and climates. It's simply unbelievable. Also unequalled, is the hospitality of the Indian people. Which has touched me very deeply. I would therefore like to use this opportunity to thank my Professors, Teachers, Classmates and friends who have made my stay in India a pleasant and memorable experience. I am certainly looking forward to visiting India sometime in the near future.

Roger Bovell
Guyana, South America

Serendipity is looking in a haystack for a needle and discovering the farmer's daughter

-Julius Comore
1. Background and Introduction

The need for private Veterinary Practice in Uganda was first seriously discussed during the 1970 Annual Departmental Conference of the Department of Veterinary Services and Animal Industry. At the Conference a paper entitled “Prospects for Young Veterinary Graduates”, was presented by Dr. G. Mukembo, then himself a young graduate. It was noted that Uganda by 1988 already had forty-six (46) veterinarians, 32 of whom were Ugandans all under the employment of the Department. It was feared that automatic Government employment was likely to flood in future. Prospects in other related spheres were examined. Future graduates were advised to consider setting up private practice rather than think of Government services only. The conference however noted that many graduates lacked the capital necessary for a viable private practice.

In recent years the Uganda Veterinary Association reopened debate on this subject. The idea reached the Agricultural Task Force of the Country’s Agricultural Policy Committee which subsequently made recommendations for its implementation. The implementation strategies were debated by the Uganda Veterinary Association during its Annual Conferences in 1988 and 1989. It was realised that government Veterinary Services were deteriorating alarmingly. Unlike in many other East and Southern African Countries, Uganda had no tradition of private Veterinary Practice. Veterinary Services to the livestock industry have always been provided by the Government. This had been very effective and played a vital role in the rapid development of the industry until late 1970. However, that rapid development could not be sustained. Because of our political instability and perpetual internal wars of recent years, there has been a general breakdown of the improved livestock services followed by a sharp drop in Government resources to the industry.

While veterinary staff numbers have been increasing, their salaries and allowances have been decreasing in real terms. In most cases field allowances are never paid. Although vehicles for field operations may be available, there have been no adequate funds for their maintenance and operation. It is therefore little wonder that major disease and production problems are becoming a major constraint to the rehabilitation of the industry. It is the conviction of UVA that private veterinary practice will provide some solutions to some of the problems. It is expected that private practice will gradually replace government veterinary services beginning with high producing areas. In each practice area, an agreement will be signed with government regarding those activities that will be performed by government veterinarians and those by practitioners. This will be necessary to avoid unfair competition.

2. The Proposed Set-up

Veterinary Private Practice Program is a component of the Livestock Services Project to be financed by the I.D.A. loan of the World Bank. The Livestock Services project preparation team reviewed the status of animal disease control, livestock fly infestation, provision of veterinary services, milk collection, processing and distribution, and forage development in Uganda. The main constraints to production were identified and national strategies and programs developed to mitigate or remove those constraints.

Implementation of these strategies and programs form the basis of the Livestock Services Project and hence the Veterinary Privatisation Program.

Through the intermediary of a Commercial Bank, credit would be made available to the intending practitioner. Terms and conditions of lending would be agreed upon under a tripartite agreement between Government of Uganda, Uganda Veterinary Association and the participating commercial Bank. It is expected that the proceeds of the loan would be used to finance the following for each applicant:

- transport
- pharmaceuticals
- equipment
- cold storage
- office rental and housing
- and some working capital.

The size of the loan will vary according to the individual requirements but will be in the region of U.S. $20,000 (twenty thousand) per applicant. The project is to run for some six (6) years and during the first year of operation, it is expected that about twenty (20) applications will be processed and approved.

3. Supporting programs

In order to sustain and improve private veterinary services to be established under both the World Bank project and the EEC Pilot Scheme, a number of supportive programs are being undertaken:

a) Upgrading Private Practice Skills.

The veterinarians who are to go into private practice will undergo tailored training programs to update their skills. Short but intensive courses will be conducted at the Faculty of Veterinary
Medicine, Makerere University. There is already an ongoing program of Continuing Education financed under the UNDP technical assistance and it will form the basis of our program. A lot of emphasis will be laid on clinical and surgical skills, internal parasitism, tickborne diseases, reproduction, reproductive disease and animal nutrition.

b) Improvement of Diagnostic Facilities

In order to facilitate diagnostic activities of the practitioners, two centres will have to act as referrals and facilities in those centres will have to be considerably expanded and upgraded where necessary. These centres will be Faculty of Veterinary Medicine Makerere University and Animal Health Research Centre. Certain services at these centres will have to be run on a private basis by the staff manning them. This will be in line with the Private Veterinary Practice concept.

c) Veterinary Co-operative Society

This is now under formation. The purpose of the society is to purchase and wholesale veterinary drugs and equipment to the practitioners. The supply of veterinary drugs in the country is presently very irregular and sometimes inadequate. This is due in part to infrequent allocation of foreign currency for their importation. The society will be fully owned by UVA and its membership will be open to all members of Uganda Veterinary Association. Initially, the society will receive hard currency from the proceeds of the World Bank loan but subsequently it will generate its own local funds for purchase of foreign currency from the Central Bank for importation of veterinary drugs and equipment. The society will ensure that slow moving veterinary products which normally do not attract private importers, but are essential for private practice, are readily available in the country.

4. The Role of UVA

The Uganda Veterinary Association is already playing a leading role in shaping the establishment of private practice in Uganda. These activities are revolving around the following: mobilisation of veterinarians in the field to appreciate the need for private practice; mobilisation of farmers to realise the value of livestock and commercialize their livestock enterprises; constant consultations with government to ensure its support both morally and legislatively; regular discussions with Central Bank officials and Commercial Bank officials in formulating the necessary modalities for operating the loan.

In order to carry out its heavy responsibility effectively, UVA Executive has been appropriately strengthened. The project has supplied it with a vehicle. This has enabled the Executive to meet most of the association members in the field at regional level throughout the country. The Executive is now establishing a full-fledged secretariat with the necessary office equipment supplied by the project. Initially, the Project Manager, Secretary and two supporting staff will be renumerated by the project. In order to give due recognition to the immense importance of the project, the Executive has appointed a subcommittee from among its members to handle exclusively matters concerning private veterinary practice in Uganda.

The subcommittee is composed of a Chairman and two members. As part of learning about private practice from those who are actually engaged in the business, some visits to appropriate overseas countries are being arranged though finance is the greatest limiting factor. The first visit will coincide with the Pan-Commonwealth Veterinary conference in Harare in September of this year. It is hoped that the UVA delegation to the Conference will tour private practices in Zimbabwe a week before the conference starts.

The project also provides UVA with funds to hire consultants and advisors in various fields in order to consolidate its management systems and also upgrade various legislations in line with the general spirit of private practice.

The following consultants would be engaged appropriately: legal advisor, financial advisor, business advisor, veterinary administrative consultant, credit consultant, promotions and extensions consultant.

The European Economic Community Pilot Scheme Of Private Veterinary Practice

As part of the Pan African Rinderpest Campaign which aims at Rinderpest eradication over a 10 year period, EEC is funding a project on Rinderpest control in conjunction with Government of Uganda.

Under this project, EEC will fund a pilot scheme to support veterinarians who wish to set up private practice. The project will provide funds to about twenty veterinarians over a period of two years. The exercise will be introduced in close collaboration with Uganda Veterinary Association. A special line of credit will be established with the Uganda Commercial Bank. A special committee will be established in order to discuss and approve on a case by case basis the credit contracts foreseen under the pilot scheme for private veterinarians. The committee will be composed of the Ministry of Animal Industry and Fisheries, the Uganda Commercial Bank, the EEC Delegation and the Uganda Veterinary Association. The monitoring of the approved credit contracts will be the responsibility of UVA.

The project will also provide funds for the strengthening of UVA management. This will include supply of office equipment and stationery, journals and some operational capital.

The World Bank Project and EEC Pilot Scheme will be complimentary to each other. UVA will run both projects as an integrated scheme with separate books of account.

The EEC project will be operational shortly.
UGANDA LIVESTOCK SERVICES PROJECT

Project Pre-Implementation

1. In the period following project preparation, until project implementation starts, the UVA would establish the basic management systems for implementing the Veterinary Privatisation and Training Project, and collect and collate further detailed information necessary for decisions on private veterinary practice viability. This work would be conducted under some form of pre-implementation financing and would require the UVA to prepare detailed profiles on each potential practice area covering:

   a) Livestock numbers (type, breed, herd/flock size, production systems and management systems).

   b) Livestock raisers, farm managers and livestock farm/ranch owners in respect of: the numbers, sizes categories and locations of the livestock production units they manage; their occupations other than with livestock; their incomes derived from livestock and other sources; their facilities for handling livestock; their education levels and likely acceptance of rates of different livestock management systems, including the use of private veterinary services; and their livestock development plans, and the influence of previous bad experience.

   c) Physical infrastructure including; roads and road condition; transportation, freight and public bus routes and regularity; air strips, etc.; communications by telephone, radio, postal and courier services; and electricity.

   d) Established veterinary services and veterinary product suppliers in respect of: the extent of services and range of supplies; their facilities; the qualifications and experience of those providing the services; source of supplies; and prices and margins charged.

   e) Services available and their costs including: water and electricity; transportation and communications; builders, painters, plumbers, electricians; motorcycle and vehicle servicing, fuel; housing and rentals; medical facilities; and others.

2. From this basic information, as well as what can be derived from the EEC-supported self-employed veterinarian pilot project, UVA would prepare a number of financial models of potential private veterinary practices.

3. UVA would also collect and prepare the information needed to assist the Bank of Uganda and the commercial banks in further developing the Credit Guarantee scheme.

4. UVA staff would prepare procedures and implementation details for veterinary privatisation credit lines, and establish the basis for future negotiations.

5. In consultation with the Director, Exchange Control Division of the Bank of Uganda, other involved sections of the Ministry of Finance and the Ministry of Animal Industry and Fisheries (MAIF), UVA would prepare the modus operandi for arranging foreign exchange for the procurement of veterinary products.

6. With the legal and accounting consultants, UVA would review the various organisational and legal alternatives for:

   a) the privatisation of the operations and management of the veterinary clinics and field and diagnostic services of the Veterinary Faculty;

   b) the privatisation of Animal health Research Centre's veterinary diagnostic services by the Centre's staff; and

   c) the establishment of the veterinary product wholesaler primarily owned and wholly controlled by the UVA Cooperative society.

7. UVA would initiate negotiations with MAIF and other relevant government bodies on the conditions by which government-employed veterinarians and para-veterinarians would leave the Ministry to enter private veterinary practice. UVA would also address the issue of unfair competition from government-employed veterinarians working in private practice areas, or on any other matters affecting the transfer of veterinary services to the private sector.

8. UVA would initiate the design and preparation of the major farmer promotion and extension programmes on private veterinary services.

9. In close collaboration with the Veterinary and Agricultural Faculties of Makerere University, UVA would prepare curricula and practical programmes for retraining veterinarians who are about to enter private practice. UVA would also prepare guidelines for a national veterinary post-graduate training programme for both government-employed and private veterinarians.

10. The Veterinary Practitioner Chapter or equivalent would be established within the UVA as a specialist professional group whose minimum membership requirements would be acceptable as an appropriate professional qualification for veterinarians in private veterinary practice.

11. UVA would prepare the guidelines and Terms of Reference for the employment of the legal, financial and business advisers, and the various consultants in veterinary administration, veterinary product wholesaling, professional and small business credit, and promotion and extension methods.

12. UVA would make the necessary arrangements to employ those advisers and consultants who would be required during the project pre-implementation period.
New Regional Representative

A new regional representative of East, Central & Southern Africa was elected at the Regional Meeting at Harare. She is Dr. Khomari from Lesotho. Dr. Khomari is a graduate from Iran and did her Post-graduation from UPSALA, Sweden. She is working as Principle Veterinary Officer in the Ministry of Agriculture at Maseru, Lesotho.

Dr. Khomari with the President of CVA Dr. Blackburn

Regional Meeting of the East, Central & Southern Africa
L-R Dr. Dube (Swaziland), Dr. Khomari (Lesotho) & Dr. Ndamba (Malawi)

Dr. Ndizinge, (Botswana) with Dr. Odour (Uganda)
HISTORY OF THE GHANA VETERINARY MEDICAL ASSOCIATION

With the return to Ghana of Ghanaian trained veterinary surgeons abroad in the 60's, the idea of forming a Veterinary Association was mooted in early 1963 and the first inaugural meeting attended by fourteen (14) veterinarians was held on June 14. Founder members, Dr. Cecil Jackson was elected as the President with Dr. S.B.K. Quartey as Secretary and Prof. Oppong as the Treasurer.

A draft constitution with following objectives was drawn up and the association officially registered on 25th February 1964 under Act 179 of the companies Code of 1963.

The objectives are:

a) To foster and encourage the loyalty of all members of the veterinary profession to the ethics of the profession.
b) To promote the study of, and research into veterinary science.
c) To publish or assist in the publication of research papers, articles and other information on veterinary subjects.
d) To encourage its members to play the fullest part in the development of the nation and to ensure that their service to the state are the highest possible standards.
e) To collaborate closely with allied professions.

For the association to meet its financial obligations, dues were levied at 3 guineas (3.3s.) per annum and other contributions sought from firms and organizations. The going was quite tough and on many occasions the founding members had to bail the association out.

On 20th November 1964, a four man committee was set up to have a register of veterinary surgeons gazetted and they were given the following terms of reference:

a) To study the Medical and Dental Act 1959;
b) To see if it could be modified to accommodate a Veterinary Surgeons Act; and
c) To find a means of implementing (b).

The four man committee with Dr. K.O. Gyenyi as convener with Drs. L.L. Oyekola, S.B.K. Quartey and E.N. Oppong as members were able to complete their mammoth task in 1968 and the proposed act was submitted to Government in the same year for enactment. It is unfortunate that up until now nothing has come from this pioneering work. The reasons for this lapse are numerous, but it can generally be attributed to lack of goodwill from agencies concerned with such enactment.

The association also tried to meet its objective of assisting in the publication of research papers, articles and other information on veterinary subjects by establishing a newsletter which, owing to economic reasons was in the form of a cyclostyled newsletter. Dr. Zwart was the first editor of the newsletter.

Perhaps the greatest achievement of the association for its members has been the elimination of the large disparity in salaries between medical doctors and veterinary surgeons. The association argued that the training of medical officers (6 years) and veterinary surgeons (5 or 6 years) was parallel and similar, the only difference being the species of mammals made as the centre of their medical training. Yet while a human doctor received a salary of 1,080.00 p.a., a veterinary surgeon was paid only 920, a difference of 160. In the second year, the difference became even more; while the veterinarian crawled at 950 the medical officer jumped to 1,280.00, a difference of 330. The association felt this disparity in pay would discourage people from taking
up the noble profession of veterinary practice as a profession for it was strongly felt that anybody who could qualify as a veterinarian could certainly qualify as a medical doctor. This right for the right of veterinary surgeons went on until December 1978 when a salary review committee finally equated the remuneration of veterinarians and medical doctors to be at par.

The other battle which is being fought presently is the right to take full responsibility for meat inspection. Presently, the inspection of meat is done by both veterinarians and that of personnel of the Ministry of Health and although numerous representations have been made to the government, the situation has yet to reach an impasse and in some localities veterinary personnel are performing ante-mortem inspection with health personnel carrying out the post-mortem. This duplication of duties does not auger well for a developing country like Ghana.

This executive on assumption of duty almost two years ago decided to publicise the activities of the association and also to pursue the legislation of veterinary surgeons. This objective is being seriously pursued and a new draft Veterinary Surgeons Act, taking into consideration what has been obtained in other countries like Britain, Zimbabwe, and Nigeria, etc. has been presented to the PNDC government through the Secretary for Agriculture who has acknowledged receipt and has referred the document to the appropriate authorities for action to be taken on it.

On the publicity aspect, the association decided to celebrate its silver jubilee this year under the theme "The Veterinary Profession in a Developing Economy". A lot of activities have been planned including farmers fora, television and radio programmes, jubilee lectures and crowning of the activities with a general meeting involving all the members of the association in August. It is also envisaged to launch a half-yearly journal to publicise the activities of the association and to publish articles by members.

The silver jubilee activities have actually started and the launching of the celebrations was done in May this year. This was followed by a farmers forum in which views were exchanged on the livestock and poultry production in Ghana. The association in conjunction with Animal Health and Production Department sponsored the immunization of dogs and cats against rabies this year. The rest of the activities have been spread out to cover other regions of the country. Actually, the original programme was quite comprehensive and was supposed to have involved most of the Commonwealth Veterinary Associations but this objective had to be curtailed in view of the first Pan-African Veterinary Conference and participants are only expected from the West African Veterinary Associations.

On the international scene, the Association participated in the Pan-African Veterinary Association Conference in Lagos last year but unfortunately most African Veterinary Associations did not turn up. Although the Association continues to be invited to a lot of international conferences and symposia, it has not been possible to attend most of them owing to financial constraints. However, with the present massive drive of retrieving all outstanding dues from members and institution of levies, it is envisaged that by the end of the year, the Association especially the Commonwealth Veterinary Association which has close links with the GVMA.

POWERFUL NEW ATTACK ON RIVER BLINDNESS

A renewed attack on onchocerciasis — river blindness — in West Africa is being made by Sight Savers, also known as the Royal Commonwealth Society for the Blind.

River blindness is estimated to affect between 20 and 30 million people worldwide, with some 500,000 to one million going blind. It is particularly virulent in West Africa where it can have severe economic consequences because whole communities have been forced to abandon fertile riverside villages and resettle in safer but more arid areas, with a consequent loss of food production.

The disease is transmitted by a blackfly, Simulium, passing on microscopic worms from an earlier human host. The worms grow and burrow under the skin, producing millions of offspring called microfilariae. These move through the body, causing intense itching, weight loss and, most serious of all, eye lesions which can lead, ten years or so later, to blindness.

Until fairly recently the only way to combat the disease was through spraying insecticides in the rivers where the blackfly breed. However, in the late eighties a revolutionary new treatment became available. The pharmaceutical manufacturers Merck Sharp & Dohme discovered that a drug originally developed as a treatment for worms in animals, ivermectin, could be used in humans against the microfilariae, killing invaders for up to a year, and thus preventing the disease from developing to the stage of blindness.

Sight Savers, together with several other NGOs, are already involved in the Onchocerciasis Control programme in West Africa. As part of a massive collaboration between this programme, national governments and voluntary agencies, Sight Savers will develop community distribution networks in Commonwealth West Africa (Nigeria, Ghana and Sierra Leone) and also, in collaboration with other agencies, in non-Commonwealth Francophone countries such as Guinea, Mali and Senegal.

Whole new health delivery systems will be set up to ensure that the drug is distributed consistently in the medically correct amounts, with heavy investment in transport.
Britain's Royal Veterinary College Celebrates its Bicentenary

Congratulations to the Royal Veterinary College, London, on its Bicentenary 1991

The Royal Veterinary College 200 years of Veterinary Education

The establishment of the London Veterinary College in Camden Town in 1791 marked the introduction of formal veterinary education to England. There were already some veterinary schools on the continent and the College's first principal was a Frenchman, Charles Viel St Bel, Professor of Veterinary medicine at the school in Lyon.

Most, if not all, of the veterinary schools now existing in the English speaking world owe a debt to the London college, having been established by people who can trace directly or indirectly, the origins of their qualifications to Camden Town. An early alumnus, William Dick, established the school at Edinburgh in 1823.

The London school, which became the Royal Veterinary College in 1875, is intensely proud of its place in the history of the veterinary profession and wishes members to share the celebrations of its 200th birthday in 1991.

The celebrations will be in two parts: a series of scientific meetings at, or in association with, the college and a 'three day event' of functions and receptions between April 25 and 27, 1991.

This will be the first time that the University of London has allowed one of its honorary degree ceremonies to be a college event. The honorary graduates will be proposed to the university by the Royal Veterinary College and, since the Princess Royal is both Chancellor of the University and a Fellow of the Royal Veterinary College, it is hoped that she will confer the degrees.

It is hoped that Royalty will also attend the reception at St James's Palace on the evening of April 25. This will be followed by the bicentenary ball at the Royal Lancaster Hotel, arranged by the students.

The second day, April 26, will provide an opportunity for members of the profession and their guests to tour the Hawkshead campus, visit the trade fair and watch various exhibitions and events. In the evening the bicentenary banquet will be held at the Guildhall which, as tradition dictates, will be a Parliamentary, City and business affair.

The third day, Saturday 27, will be informal. The college will be open to the public as well as the profession and its guests. A party of the college's guests will go to the races at Sandown park to see the Whitbread Gold Cup, the Guardian Trophy and a perhaps less well known race, the Royal Veterinary College Trophy.

The Royal Veterinary College hopes that all in the profession will share these celebrations. It welcomes suggestions from individuals as well as groups as to how they may be enhanced. As it is expected that the events will be oversubscribed, those wishing to participate, are urged to write for further details to the Bicentenary Office at the Royal Veterinary College, Hawkshead House, Hawkshead Lane, North Mymms, Hatfield, Hertfordshire AL9 7TA, to register their intention to participate.

BICENTENARY CELEBRATION 1991 - PROGRAMME

Thursday April 25th 2.30 pm
UNIVERSITY OF LONDON HONORARY DEGREE CEREMONY in the presence of The Chancellor, HRH The Princess Royal at THE ROYAL VETERINARY COLLEGE, ROYAL COLLEGE STREET
6.30 pm ST JAMES'S PALACE RECEPTION in the presence of Royalty
8.30 pm BICENTENARY BALL at THE ROYAL LANCASTER HOTEL

Friday April 26th PROFESSIONAL TRADE FAIR DAY at THE ROYAL VETERINARY COLLEGE, HAWKSFIELD CAMPUS
8.00 pm BANQUET at the Guildhall

Saturday April 27th PUBLIC OPEN DAY at THE ROYAL VETERINARY COLLEGE, HAWKSFIELD CAMPUS

SANDOWN PARK RACES including THE ROYAL VETERINARY COLLEGE CUP
India: The Milking Buffalo Project in Tamil Nadu, Southern India started at the beginning of January with the first peg for the buffalo shed at T. Kallupatti being driven into the ground. Within three days, the complete site had been pegged out, hole digging for upright posts commenced and materials for the construction were being delivered on site.

The Project start up had been made possible by a single large donation from a charitable trust that matched the ODA contribution for the initial infrastructure costs.

At the same time as the Project started we launched 'An Adopt A Buffalo appeal'. To date we have received a magnificent total of £2,249.70 for this purpose. We have a target of £12,000 to raise so we are over a third of the way towards this. A donation of £150 is sufficient for the purchase of one buffalo. We will be giving donors a full account of their buffalo when purchased and regular updates on how it is faring with its new owner. The purchase of the buffaloes will commence once the new shed has been completed and all the required equipment and feeds have been bought in. The Peoples Service Society (PSS) are working with all speed to be ready for the buffalo as soon as possible. Their last letter reported that the main shed uprights have been set in place and that raftering, roofing and concreting of the floor was in progress.

The History Of Vetaid

The formation of Vetaid was born from a suggestion by a graduate from the Veterinary School in Lyon, France. He came to the Centre of Tropical Veterinary Medicine (CTVM), Edinburgh in 1987 to study for a MSc degree.

In 1982 in Lyon, A charity called Veterinaires Sans Frontieres (VSF) was formed with the aim of aiding poor village farmers in livestock development.

The student proposed the formation of a British equivalent of VSF and along with three other veterinary surgeons at the CTVM set up 'Vets for the World'. This was in the spring of 1988 after consultation with other aid agencies. There was an unanimous agreement supporting the need for a small specialist non-governmental organisation in the veterinary field.

Commencing with a shaky financial status, the Organisation has grown and changed rapidly. In late 1988 the name was changed to Vetaid and in mid 1989 it changed to a charitable limited company with an expanded Board of Directors.

In 1989, Vetaid was one of the founding members of VSF Europa consisting of similar groups in eight European countries. This was in order to facilitate co-ordination of activities between groups e.g. the recruitment of staff and supply of equipment to two member groups working in the same area.

Vetaid funds are provided by veterinary surgeons throughout the country, drug companies and private trusts. The Overseas Development Administration and Comic Relief have provided financial donations for specific projects.

However, despite the changes in the management and budget, the initial objective of helping the poorest people of the world improve their nutrition and health by improving the well being of their livestock will always remain.

INTERNATIONAL VETERINARY STUDENTS ASSOCIATION

Miss Francis O'Connell, Vice President of International Veterinary students associations represented IVCA at the Pan Commonwealth Veterinary Conference, Harare.

The IVSA gives unique opportunities for students from different countries to meet each other and exchange views. It also gives an opportunity for veterinary students to learn about certain diseases they are not familiar with in their own country. Miss O'Connell, who is the Senior British Representative of IVSA was sponsored for a 6 week programme at SOWOTO SPVA in S.Africa. The IVSA has the development fund which can be used for sponsoring students from developing countries to visit other countries or congresses. The IVSA also donates books to developing countries. Every year more than 100 overseas students apply to come to UK. About 6-8 are selected to visit practice in the country. There are also group exchanges. One such exchange programme exists between Netherlands and Scottish Veterinary Schools. IVSA organises two congresses every year. The summer Congress this year will be held in Netherlands and the next year in Finland. The Winter Congress is held in Switzerland and Austria. For further details on IVSA, write to

Miss Francis O'Connell
11, Hill crest, Potters Bar, Herts EN 62 RT UK.
**DIFFERENTIATION OF ANAEMIAS IN DOGS AND CATS - A HELPFUL APPROACH REMOVES MUCH DIFFICULTY**

by D H Read, Ruakura Animal Health Laboratory

The anaemic dog or cat presents a special diagnostic challenge to the clinician because there are many causes of anaemia and few diagnostic clues are present at physical examination. Laboratory assistance is therefore usually sought and this brief account seeks to explain the concept of marrow responsiveness as a key to understanding the causes of anaemia in light of haematological findings.

Classification of anaemias according to marrow response is simple because anaemias often fall into two distinct classes: responsive and non-responsive. The classification is useful because only two mechanisms lead to responsive anaemias: blood loss or haemolysis.

A check list of causes of blood loss or haemolysis are in Tables 2 and 3. If, on the other hand, the anaemia is non-responsive, causes of blood loss and haemolysis can be ruled out and Table 4 can be consulted for the many and varied causes of this type of anaemia.

As well as being simple and useful, the classification according to marrow response is practical. This is because most responsive and non-responsive anaemias can be readily distinguished from each other by use of a simple laboratory test, the reticulocyte count. This test numerates circulating reticulocytes in peripheral blood and can be performed in tandem with the CBC on the same sample of blood, i.e. EDTA blood.

The classification also helps the clinician decide if a marrow tap is worth considering. Marrow taps are unlikely to yield diagnostic information when the anaemia is responsive whereas they may well do so in non-responsive anaemias.

By way of background, reticulocytes are young red cells, so called because they show a prominent reticulin network when stained with a vital stain such as new methylene blue. They are easier to see, and hence easier to count, than their counterparts (polychromatophilic red cells) which are evident in routine blood smears stained with fixative-based stains such as Leishmann or Wrights.

The laboratory terms reticulocytosis and polychromasia have the same meaning, i.e. excess numbers of young circulating red cells. Both indicate a responsive marrow, but reticulocytosis is the more useful term because it is a quantitative assessment of marrow response and is therefore useful in monitoring the progression/amelioration of the anaemia, e.g. in relation to therapy.

Interpretation of a reticulocyte count depends on the haematocrit (HT). One study has documented expected reticulocyte counts in responsive anaemias of dogs and cats for different ranges of haematocrit (Table 1). The lower the haematocrit, the more reticulocytes are expected, and vice versa.

But numbers of reticulocytes in peripheral blood also depend on the stage of the anaemia. After a significant haemorrhagic or haemolytic episode, reticulocytes being to appear in the peripheral blood of dogs and cats in about 48 hours and peak at about seven days. Therefore, an initial CBC and reticulocyte count should always be followed up by a repeat Ht and reticulocyte count in 3-4 days. Repeat observations avoid wrong diagnoses and they effectively monitor progression/amelioration of the anaemia.

In practice, actual reticulocyte counts are sometimes lower than the expected value. In such cases the anaemia is still responsive if the actual count is >60 for dogs and >40 for cats (x 10^11/L). The actual count may be lower because the animal was sampled too soon for the expected response or because the response is only partial. In general, haemorrhagic anaemias, particularly those with external blood loss, e.g. GI bleeding disorders, are less responsive than haemolytic anaemias.

In summary, separation of anaemias into responsive and non-responsive types provides a sound practical working strategy for the differential diagnosis of canine and feline anaemias.

Acknowledgement: Tabulated data was taken and modified from the textbook: Veterinary Laboratory Medicine, Clinical Pathology. (Duncan J R and Prasse, K W, Iowa State University Press, Iowa 1986)

| Table 1: Expected Reticulocyte Numbers in Responsive Canine and Feline Anaemias in Relation to the Haematocrit (HT) |
|-----------------|-----------------|-----------------|-----------------|
|                | Canine          | Feline          |                |
|                | Ht: Present (%) | Expected No. of Rets (x 10^11/L) | Expected Ht Present (%) | No. of Rets (x 10^11/L) |
| >37            | 30 - 60         | >24             | 20 - 40         |
| 25-37          | 60 - 200        | 16-24           | 40 - 100        |
| 15-25          | 200 - 500       | 8-16            | 100 - 250       |
| <15            | 500 - 800       | < 8             | 250 - 400       |
Table 2. Causes of Blood Loss in Dogs and Cats

<table>
<thead>
<tr>
<th>Acute haemorrhage</th>
<th>Chronic haemorrhage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma</td>
<td>Parasitism</td>
</tr>
<tr>
<td>Surgery</td>
<td>Hookworms</td>
</tr>
<tr>
<td>GI ulcers</td>
<td>Fleas (neonates)</td>
</tr>
<tr>
<td>Haemostatic defects</td>
<td>GI ulcers</td>
</tr>
<tr>
<td>Disseminated intravascular</td>
<td>Haematuria</td>
</tr>
<tr>
<td>Coagulation</td>
<td>Thrombocytopenia</td>
</tr>
<tr>
<td>Warfarin poisoning</td>
<td>Haemophilia</td>
</tr>
<tr>
<td>von Willebrand's disease</td>
<td>GI neoplasma</td>
</tr>
</tbody>
</table>

Table 3. Causes of Haemolytic Anaemias in Dogs/Cats

<table>
<thead>
<tr>
<th>Intravascular Haemolysis</th>
<th>Phagocytosis Haemolysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immune-mediated</td>
<td>RBC parasites</td>
</tr>
<tr>
<td>Autoimmune haemolytic anemia</td>
<td>Haemobartonella spp.</td>
</tr>
<tr>
<td>Incompatible transfusions</td>
<td>Immune-mediated</td>
</tr>
<tr>
<td>Neonatal isoelectrolysis</td>
<td>Autoimmune haemolytic anemia</td>
</tr>
<tr>
<td></td>
<td>Lupus erythematosus</td>
</tr>
<tr>
<td></td>
<td>Feline leukaemia virus</td>
</tr>
<tr>
<td></td>
<td>RBC parasites</td>
</tr>
<tr>
<td></td>
<td>Haematopoietic neoplasms</td>
</tr>
<tr>
<td>Haenz body-type</td>
<td>Haemangiosarcoma</td>
</tr>
<tr>
<td>Onions (in hamburgers)</td>
<td>Intrinsic RBC defect</td>
</tr>
<tr>
<td>Acetaminophen (cats)</td>
<td>Pyruvate kinase deficiency</td>
</tr>
<tr>
<td>Methylene blue (cats)</td>
<td>(Basenji)</td>
</tr>
<tr>
<td>Ketamine HCl (cats)</td>
<td>Microangiopathic (fragmentation)</td>
</tr>
<tr>
<td>Copper (Bedlington Terriers)</td>
<td>Disseminated intravascular coagulation</td>
</tr>
<tr>
<td>Venom (bee stings)</td>
<td>Haemangiosarcoma</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
</tr>
<tr>
<td>Massive trauma</td>
<td></td>
</tr>
<tr>
<td>Extensive burns</td>
<td></td>
</tr>
<tr>
<td>Chemical</td>
<td></td>
</tr>
<tr>
<td>Lysol, Phenol</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Mechanisms and Causes of Non-Responsive Anaemias in Dogs and Cats

<table>
<thead>
<tr>
<th>Reduced Erythropoiesis</th>
<th>Defective Erythropoiesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erythropoietin lack</td>
<td>Disorders of nucleic acid synthesis</td>
</tr>
<tr>
<td>Chronic renal disease</td>
<td>B12 deficiency</td>
</tr>
<tr>
<td>Hypothyroidism</td>
<td>Folate deficiency</td>
</tr>
<tr>
<td>Hypoadrenocorticism</td>
<td>Disorders of heme synthesis</td>
</tr>
<tr>
<td>Anaemia of chronic disease</td>
<td>Pyridoxine deficiency</td>
</tr>
<tr>
<td>Chronic inflammation</td>
<td>Lead poisoning</td>
</tr>
<tr>
<td>Advanced cancer</td>
<td>Chlorampheicol poisoning</td>
</tr>
<tr>
<td>Myelophthis</td>
<td>Abnormal maturation</td>
</tr>
<tr>
<td>Lymphosarcoma</td>
<td>Erythremic myelosis</td>
</tr>
<tr>
<td>Granulocytic leukaemia</td>
<td>Erythropoikae</td>
</tr>
<tr>
<td>Metastatic cancer</td>
<td></td>
</tr>
<tr>
<td>Myelolobrosis</td>
<td></td>
</tr>
<tr>
<td>Cytotoxic marrow damage</td>
<td></td>
</tr>
<tr>
<td>Cytotoxic drugs</td>
<td></td>
</tr>
<tr>
<td>Oestrigen</td>
<td></td>
</tr>
<tr>
<td>Infections</td>
<td></td>
</tr>
<tr>
<td>Feline leukaemia virus</td>
<td></td>
</tr>
<tr>
<td>Panleukopenia virus</td>
<td></td>
</tr>
<tr>
<td>Immune-mediated</td>
<td>Pure red cell aplasia/aplastic anemia</td>
</tr>
<tr>
<td></td>
<td>(10-20% of cases)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extra label use of Animal Remedies

Animal remedies are licensed in New Zealand for certain species and for specific diseases. These constitute the legal uses of licensed animal remedies, but veterinarians may, using their professional judgement, use products off label for animals under their care. The following guidelines, established by the Animal Remedies Board, are for the assistance of both licensees and veterinarians.

a. Information on extra-label use may only be given directly and personally to veterinarians, and only following a specific request.

b. It must be made clear for what species and for what indication the product is currently registered.

c. Veterinarians are to be reminded of their responsibilities when using the product in an extra-label manner.

d. Only published scientific information or other well-documented information may be communicated.

e. Above all, this advice should be regarded as a service to assist veterinarians in their use of a drug and must not be regarded as a specific promotion of that drug.

f. Information may be given on specific contraindications in the extra-label use of a product.

g. Since drug elimination rates vary, dependent on the species being treated, the veterinarian should advise an extended withholding time to allow drug residues to reach a safe level.

Research and development covers the work in experimental stations, in designated properties and in the market. It is therefore appropriate to differentiate various categories of provisional licences.

ACKNOWLEDGEMENT.

'Differentiation of Anaemias in Dogs and Cats' was provided by the Small animal Society of the NZVA. Vetscript Jan-Feb 1990
**ABSTRACTS**

**Feline ImmunoDeficiency Virus Infection: Disease Associations and Clinical Signs**

One hundred and forty-one clinically ill cats for which detailed case records and Feline Immunodeficiency Virus (FIV) serology were available, were used to study the risk factors associated with FIV infection. Individual FIV serology results were correlated with a number of variables derived from historical, clinical and pathological information. Variables were considered alone and in combination.

In the MUVH hospital population tested for FIV, 30% were positive. There were no statistically significant associations between FIV infection and the occurrence of anaemia, diarrhoea, lymphadenomegaly, pyrexia, oral cavity disease, upper and lower respiratory tract infections, cat fight abscesses or neoplasia. However, there was a trend for anaemia, lower respiratory tract infection, oral cavity disease and pyrexia in combination to be associated with FIV infection. The only finding of statistical significance was that compared with age-matched FIV negative cats, FIV positive cats were more likely to have died irrespective of cause.

Although limited numbers and the lack of an aetiological diagnosis limited interpretation in some disease categories, it was concluded that there was no single clinical syndrome studied that could be firmly associated with FIV infection. These findings contrast with those reported by workers in other countries. However, considering the high prevalence of FIV infection in healthy West Australian cats, its role in the pathogenesis of disease in the "sick" cat population is likely to be subtle.

S.E. Shaw, Murdoch University, Murdoch, W.A., 6150. (09 332 2777).

**TREATMENT OF CANINE LYMPHOSARCOMA WITH A NEW COMBINATION CHEMOTHERAPY PROTOCOL**

Lymphosarcoma was diagnosed in 37 dogs (23 males, 14 females) from 1987-1989. The mean age at time of diagnosis was 7.9 years (range 3-14 years). The tumour classifications were: multicentric (27), dermal (3), primary hepatic (2), intestinal (diffuse) (2), rectal (single site) (1), and mycoses fungoides (1).

Fifteen dogs were treated with a combination chemotherapy protocol that included the following drugs: vincristine, 1-asparaginase, cyclophosphamide, doxorubicin, chlorambucil, methotrexate and prednisolone (G. McEwen, pers. comm. 1986).

Two dogs died within a week of commencing treatment and are not included in the following analyses. Complete remission was achieved in eight of the 13 dogs. The median remission and survival time (all dogs that relapsed were euthanased within a week of relapse) was 7.5 months. The median remission for dogs with multicentric disease (nine dogs) or involvement of only one node (one dog) was 10.5 months, and the median remission time for dogs that achieved complete remission was 10.75 months. Five dogs survived for over 12 months, four of which are still alive (range 12-28 months).

Side effects were judged to be minimal (occurring very occasionally) in 10 dogs and significant in three dogs (requiring reduction or cessation of treatment).

In conclusion, the protocol described appears to give greater remission times than others described in the literature, particularly for dogs that have multicentric disease and achieve complete remission. The regimen is no more difficult to administer, despite its apparent complexity, but is approximately 50% more expensive than other protocols.

Jill E. Maddison, David B. Church and David L. Watson, Department of Veterinary Clinical Sciences, University of Sydney, N.S.W., 2006. (02 692 3437)

**CORRESPONDENCE**

Dear Sir,

Environmental Action.

"Veterinarians and the Environment" is the theme for the Australian and New Zealand Veterinary Associations joint annual conference to be held in Sydney, May 13th to 17th 1991.

It is our belief that the veterinary profession has a pivotal role in the research, development and implementation of measures intended to gain a sustainable future for us all. On the third day of the conference speakers from government veterinary departments, pharmaceutical industry, university teaching and general practice will speak on the Implementation of Practical Measures.

As the veterinarian with responsibility for the private practice segment, I invite suggestions on measures veterinarians can incorporate into their practices to help safeguard our environment.

Such measures might include:

- Providing kittens with free collar and bell at vaccination time.
- Establish a recycling depot in an unused corner of the practice carpark.
- Mean while I look forward to receiving numerous ideas as examples (in English please) making for a global effort.

Many thanks,

Yours faithfully,

Tom Lonsdale.

21st September 1990
CALENDAR

1991

May 12-17  AVA and NZVA National Conference, Darling Harbour Convention Centre, Sydney.

August 10-16  Sixth Intern. Soc Vet Epidemiology and Economics, Ottawa.


August 20-24  Seventh Intern. Cong for Animal Hygiene, Leipzig, GDR.

October 2-5  WSAVA Conference, Vienna. Further Information: Mrs A Jirasek, Faulmabbgasse 4, A-1040 Vienna, Austria.

1992

May 12-17  AVA National Conference.
Adelaide.
V International Conference on Goats, India. Details later.

STOP THE PRESS

Dr. J. Archibald Secretary/Treasurer of Commonwealth Veterinary Association has resigned. Dr. Bert Stevenson, Council Member (Canada) is the acting Secretary/Treasurer of the CVA. Dr. Archibald tendered his resignation as he is not keeping good health.

On behalf of the Commonwealth Veterinary Association we wish Dr. Archibald a speedy recovery.