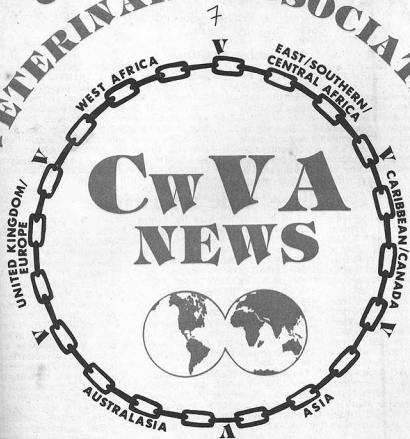


COMMONWEALTH VETERINARY ASSOCIATION



TO
STRENGTHEN THE LINKS
OF
FRIENDSHIP & CO-OPERATION
BY
KNOWING EACH OTHER
BETTER



The Commonwealth Veterinary Association News

Circulating throughout the Commonwealth and beyond



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EDITOR'S REMARKS

The CwVA's 'Book & Journal' project is in need of more support. This project effects, with growing success, the distribution of veterinary books, both old and new editions, and the passing on of veterinary journals, after they have been read, to developing countries where these important sources of information are in scarce supply.

As yet it is impossible to fully respond to the many requests. Have you texts and/or journals no longer of use to you? CAN YOU HELP? The CwVA's financial resources are strained by the overseas distribution costs. A generously donated supply of Merck Veterinary Manuals will go out to graduating students of various veterinary schools in develop-

ing Commonwealth countries. This will draw heavily from available funds. WOULD YOU HELP?

The CwVA News was created to give a public platform for the voices of the many veterinarians working and living in rural areas of the Developing Commonwealth, and for the voices of all interested veterinarians. Many of these have been involved with both successful and unsuccessful development. The cost of publication and distribution is very considerable. The objective of the CwVA News is to stimulate interest and support for CwVA projects, development projects of today and tomorrow. WE, EARNESTLY AND SINCERELY, SOLICIT YOUR SUPPORT.

Goodbye, Eric Shortridge

I have found the experience, of being editor of the CwVA News, fascinating and enlightening, and not without pleasantries and surprises. I had it, on good authority, that getting news from council members was like pulling teeth. Considering the lifestyle of many, who pull teeth professionally, that was rather an odd warning, but, as occasionally happens with information from authoritative sources, not so. There were pleasant surprises connected with the editor's job, and corresponding with council members, such as New Zealand's Eric Shortridge, was high on the list. I have to admit that some council members definitely shy away from letter writing, but there are, however, others, like Eric Shortridge, whose letters, reports, news items and articles make the publishing of a newsmagazine possible.

Eric's article 'A South Pacific Island Interlude', written for the CwVA News, was featured in the July, 1987 issue. In his story the author mentions little

about himself, but from his writing there emerges a spirit of understanding of, concern for and empathy with the peoples of the developing Pacific islands as they meet the challenge of development and the problems and changes that inevitably go with it. Eric is not unique, throughout the Commonwealth there are other CwVA workers of the same spirit and character. The veterinary profession can point, with pride, at these individuals, and the Commonwealth Veterinary Association can be thankful to have them as workers.

In January of this year (1988), Eric Shortridge retired as New Zealand's CwVA Council Member. He had served in that capacity since the formation of the CwVA. In a letter of February 18th, probably his last to the CwVA News, he replies to enquiries, from us, about animal health services on the smaller South Pacific islands. From this letter we reproduce some remarks that merit serious considerations: -

"There are Livestock Officers in most of the island countries of the SW Pacific. In many cases they are graduates, in some agricultural discipline, from the University of the South Pacific. In several countries the employment of a full-time veterinary graduate, for animal health purposes alone, would not be warranted or affordable. These officers are the only Animal Health Officers in these countries and they do a good job. Many have had some veterinary training from veterinarians in countries, such as Fiji, and many of them perform a full range of clinical jobs, including such things as spaying bitches and other surgery. I am not sure that the term 'Animal Health Assistant' is applicable in such cases, as they are THE Animal Health Officer of their country and assistant to no one. I am sure that this group of people would appreciate the CwVA News. It is a vital concern to all that inter-

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For advertising space contact: Dr. J. Archibald, Secretary/Treasurer, CwVA, 35 Lynwood Place, Guelph, Ont., Canada, N1G 2V9, 519-824-1304.

When you have read this copy, please pass it on to a school, library or a new reader.



Patron - His Excellency, Sir Dawda Jawara,
President of the Republic of The Gambia
Honorary President - Dr. L.P.E. Choquette

Executive Committee:

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Vice President - Dr. B.N. Touray
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Caribbean/Canada - Dr. J.L. Robinson
East/Central/Southern Africa - Dr. S.J. Ndaoma
West Africa - Dr. B.N. Touray
UK/Europe - Mr. J.T. Blackburn

President Blackburn's column

It is my intention to make this President's column a regular feature of the News in order to maintain contact with all members to give you some indication of where the Executive are trying to take the Commonwealth Veterinary Association, put forward ideas and hopefully stimulate some discussion. Comments from members on anything which appears in this column will be most welcome and providing it is not libellous will of course be published by the Editor.

Although there may be the impression that there has not been much activity in this Association in the first half of this year, because there have been no regional conferences or meetings organized you may rest assured that the Officers have been working hard on your behalf. Meetings have been attended both in London and in Brussels to promote the affairs of the Commonwealth Veterinary Association and to seek support for some of our projects.

Conferences arranged for this year included Australasian Region - Solomon Islands, June 17; Asian Region - Dhaka, Bangladesh, September; Caribbean Region - Guyana, November. Plans are being drawn together for the second part of the Animal Health Assistant Seminar (you will recall that the first part was held in The Gambia March 1987) to be held in Bangalore, India, February or March 1988.

It is important in trying to formulate plans for this Association so that the Executive are aware of what the members themselves want. There appears to have been the tendency in re-

cent years to indulge in spoon feeding and this Association has simply been looked upon as means of providing money for conferences.

This Association can only be as effective as we are all prepared to make it, which means that we all have to contribute ideas, thoughts, and suggestions. It was reported recently that one Council Member has suggested that unless the Commonwealth Veterinary Association was able to support his National Association Conference, he saw no reason to be in the Commonwealth Veterinary Association. If that remark is in fact true, then it saddens me deeply that members of this Association look upon the Commonwealth Veterinary Association purely as a source of funds rather than being what it is, a unique union of professional people. No one can obtain more out of the Association than they themselves put into it.

Consequently it is entirely up to you to decide how this Association should proceed. Whenever we ask for ideas or send out letters the response is rather disappointing, for example recently I sent out a questionnaire to all National Associations asking for their opinions on the holding of a Pan Commonwealth Conference. Of the 41 Member Associations we have to date received replies for 20. I assume that if a Pan Commonwealth Conference is to be organized then only those people who have responded to the questionnaire would be interested in attending such a conference. I repeat and I shall go on repeating we need your ideas.

It is true that without finance many of our ideas cannot be implemented. We

rely to a very large extent on a grant from the Commonwealth Foundation but as in all spheres of activity funds are being reduced. We shall eventually have to rely entirely on our resources which means that all associations will have to start paying a reasonable subscription. At the moment the burden falls very heavily on a few countries. We could in fact hold more conferences than we do now if all associations pay their dues. It is appreciated that there may be exchange difficulties in some countries but there are methods of overcoming this if you will care to contact the Treasurer to try and make some arrangement.

With regard to National Association meetings, it has never been the intention of the Commonwealth Veterinary Association to assist National Associations in setting up their conferences. It is assumed they will obtain funds from within their own resources - commercial companies, government etc. Conference funds are only available from this Association for regional conferences, seminars or workshops. All council members have been provided with guidelines on preparation of budgets and submissions for conferences and these guidelines at the moment are being revised and updated and once re-issued, hopefully within the next month or two, they would have to be strictly adhered to and any submission which is sent to the Treasurer which doesn't comply with the guidelines will simply be returned and not even be put to Executive for consideration. The days of spoon feeding are over!

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The future of the veterinary profession

The CwVA News is indebted to the New Zealand Veterinary Journal for the following editorial. It was the 'leading article' in the June '87 issue of that journal. There is no doubt that Dr. Trim's remarks are as apropos now as they were a year ago, and there is little doubt but that they will remain so for a few years to come. Of special interest to CwVA workers will be Dr. Trim's comments on 'the skill of listening', the 'value of traditional activities', and the need of working with people whose skills and qualifications differ from ours.

by Peter Trim

This is a time of unprecedented change likely to affect us all.

It is a time when leadership is of paramount importance. Clear vision, rapid response to opportunity and effective communication will provide the profession with a good future. However, initiative has to be balanced with experience. Fundamental change should be implemented only after the risk to tried and valued traditional activities, functions, and the welfare of members has been taken into account.

Listening is a skill with which we as a

A new wind of change

Another well-founded statement, concerning 'change', also serves well as an editorial.

by D. W. Brocklesley

The recent return of Shire horses to the streets of Birmingham is a symptom of change; draught animals are being used more and more throughout the world, as tractors lie neglected and rusting. Draught oxen and buffaloes produce power, milk, faeces for heating and, at the end of their days, meat.

The British veterinary profession is itself undergoing a radical change with the emphasis switching markedly from farm animals to horses, dogs and cats - the so-called "companion animals". This response to the food mountains in Europe has also been dramatically reflected by traumatic changes in agricultural research support in this country, with closures, mergers and contractions being almost a daily occurrence.

The arrival of the "F" in the title of

profession are not too well endowed. We are a body of men and women used to working under pressure. Our conscientious nature causes us to focus on the task in hand. So keen to act, we have not seen the need to spare the time to develop our ability to listen.

Yet we need to listen. We need to listen to each other to adopt a balance between progress and tradition. We need to listen to our clients to understand their needs and the opportunities in the market place. We need to listen to politicians to be warned of how they may affect our future. We need to listen to our assistants and lay staff to improve the conditions of work. We need to listen to our families to protect our way of life.

Practices have not changed much since the time when I was first qualified. The technology has changed dramatically.

There are signs that indicate that practices in ten years time will bear little physical resemblance to their present layout. Vetmark has altered the place of merchandising in rural practices; not so much in the volume of sales relative to total practice income but in the way that merchandising is

carried out. The Animal Health Laboratories have revolutionised their approach to analytical services. The Meat Division is in the process of implementing new criteria for the inspection of lines of lamb carcasses which promises to transform their relationship with practices and their farmer clients overnight.

As these internal pressures for change develop the external environment is experiencing traumatic forces. Much of the farm servicing industry has gone, the remainder is on the last gasp before starvation. Trading companies, garages, fertilizer merchants and manufacturers, stock and station agencies and the agricultural chemical and animal pharmaceutical industries have all been included in the drought. When things come right there will be huge gaps in their ranks. Farmers want a change in service. Never before have farmers needed a change in service so critically. Corporate farming will ask for new terms of business. Urban clients too expect something different from their veterinarians. In both, the expectation is largely untoured. The opportunities will be conditioned by marketing. The word marketing is used to include market analysis, the iden-

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Blackburn's column

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We must have tight budgeting controls and good forward planning which means that when you are considering having a regional conference you need to be planning it at least two years ahead and budgets submitted to the Treasurer for consideration by the Executive at least twelve months before the expected date of the conference. Without correct planning our limited resources will be dissipated. With correct planning we could do more than we are doing now even on our slender funds.

Bear in mind that the Executive is expected to decide what is best for the Commonwealth Veterinary Association as a whole. If some countries feel that they have been hard done by, please remember that the Executive is striving to use the limited resources to its best effect for the benefit of the entire Commonwealth and not just for one part of it.

J.T. Blackburn,
President,
July 1988

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The future of the veterinary profession

from page 4

ification of trends and niche market opportunities, service strategies and business development planning.

Few individual practices have the required resources for this. The time is right for joint ventures and the employment of people with extra skills and qualifications.

New Zealand is full of competent people with skills that we can use to our advantage and for the improvement of services to our clients. Our ability will be judged as much by what we get others to do for us as by what we do ourselves.

Veterinary practices are business centres in the heart of rural or urban communities. They are better placed than many others to survive the current recession. The opportunity is to diversify. Success will mean diverting into areas that fill community needs and are, as a consequence, profitable.

If in the process of securing these opportunities we forget our traditional strengths we will become as vulnerable as those we replace. If we remember that our business is to provide a service in animal health and that we are characterised by professional standards of service which encompass our facilities and our performance then we can move from strength to strength.

There are changes facing us of an even more fundamental nature. The drug residue issue has been passed over to us to control. Our service is required not because the presence of residues have been proven to threaten health but because their presence will definitely limit the market. Quality assurance rather than disease control has become the common concern of practitioners and state veterinarians. The demands of the market are more severe than those of animal health. Our act has to be smarter for the former than for the latter. Communication to clients becomes a critical responsibility. Certification is the hallmark, the quality of which has to be beyond reproach. When a veterinarian signs a veterinary certificate then the right to practise is put on the line. Certification is something nobody else can do. If we are to preserve the right and the responsibility then we must be impeccable. All these factors are making us more accountable. To be worthy of veterinary qualifications from now on will require us not only to graduate from a fairly

stiff university education but to maintain standards that will have to stand audit any day of the week.

The standards expected of us will become higher. The need for specialisation will be intensified at the same time as the inclusion of the services of others in our business mix. Practices, to cut overheads and increase sophistication in the same step, will amalgamate. Practice boundaries will overlap increasingly. Some practices will have national coverage; some may become international. The example of the legal and accountancy professions where practices have become large companies will be followed by veterinarians. This does not mean an end to the personal service. Those aspects of veterinary practice will sur-

vive for which there is client demand. It does mean that we are on the move. It also means that the decisions of today will lead inexorably to the practice of tomorrow.

There are some that are agnostic at the speed of change today and horror-struck at the picture of where things are leading us. Change is inevitable. There are too many factors involved for it to be avoided. The best way to secure a bright future is to participate in its design. The year 1984 was not the milestone that George Orwell predicted, despite aspects of which he foretold coming true. The year 1994, for the veterinary profession at least, will mark a new era. Its construct is up to us all.

A new wind of change

from page 4

increasing demand for their services but are chronically short of money. The educational programme supported by British aid through ODA and the British Council, has been an outstanding success and in several countries there is now a good supply of well trained research workers. They are crying out for support, both financial and also with expertise. In the immediate post colonial period ODA continued to sponsor research projects in developing countries but always insisted on a British presence in these schemes. With an increased availability of well trained indigenous scientists this concept is now unpalatable in many countries and ideas are changing with some rapidity.

In recent years a feature that has emerged rather strongly is the increasing number of institutions in developing countries that express a desire to collaborate with the CTVM. Such "links" are of great benefit to both participants

and we are keen to forge new ones as far as we are able to do so. The new concept is one of equal partnership with jointly agreed programmes of work and frequent exchanges of materials and, perhaps more importantly, of staff. At the moment we have informal links with workers in Kenya, India, Morocco, Indonesia, Colombia and the Cameroon. A new formal link with the Veterinary Department of Malawi is about to be launched. In my view this is the best way for us to continue to give support to institutions that are devoted to the solution of the major problem that faces mankind - the supply of food in the developing countries of the tropics.

Source: CTVM Newsletter No 44 June/87.

Mr. Brocklesby is Director of the Centre for Tropical Veterinary Medicine, Royal (Dick) School of Veterinary Studies, Easter Bush, Roslin, Midlothian, UK.

CwVA welcomes

One of the highlights, of this past spring 1988, for the Commonwealth Veterinary Association was the welcoming in of its newest member, Cyprus. In its next issue, the CwVA News hopes to carry information and news about the Pancyprrian Veterinary Association and its members. The president of the PVA is Dr. Andreas Emmanouel. His address is PO Box 5284, Nicosia, Cyprus.

CwVA Conferences

Sept. '88 - Asian Region
Dhaka, Bangladesh

Nov. '88 - Caribbean Region
Guyana

Early '89 - Animal Health
Assistant Seminar
(Part 2) - Bangalore,
India.

For information write:
Dr. J. Archibald,
CwVA Sec./Treas.,
35 Lynwood Pl.,
Guelph, Ontario,
Canada, N1G 2V9.

Memorandum from the CwVA secretary

A memorandum (of Apr. 18/88) to all CwVA workers from CwVA Secretary-Treasurer Jim Archibald.

I expect imminently to receive, from the Commonwealth Foundation, a request for us to make our submission for a grant for the year 89/90.

In order to do this it is necessary that this office receive from each region a detailed submission of your needs and requests for this period. This should include a description of the anticipated activity; e.g., conference or seminar. In describing the activity the site, date, expense, revenue, etc. should be included.

Prior to making our last submission (1988/89) I was notified by the Foundation that we would be restricted to "zero budgeting". I anticipate that this will again be the case.

I have not yet received the amount of funds to be granted by the Foundation for the year 1988/89, but for your information our grant for 1987/88 was 23,000

pounds (approximately \$46,000 Cdn.). To date only 5,000 pounds of this grant has been received by this office.

Please keep this in mind when preparing your budget requests. The President has indicated that 10% of the total grant received will be used for Administration. This would reduce the amount available for activities in the regions to approximately \$41,400 Cdn. Our costs for publishing the CwVA News are \$10,000 Cdn. annually and the Book/Journal/Audio-Visual Project costs about \$4,000 Cdn., this leaves the funds available for other activities at approximately \$27,000 Cdn. This is the amount available for activities in all 6 regions. If this were to be divided equally amongst the regions it would amount to about \$4,500 Cdn. for each region.

We have received from time-to-time assistance, in mounting our programs, from other agencies; e.g., special grants from the Foundation, from the Commonwealth Secretariat, Non-

Governmental Institutions, C.I.D.A. and commercial firms. It must be emphasized that we cannot depend on these sources when setting up our budget or submission.

Affiliation fees are received from national member associations, but this amount is small and is used for administrative purposes.

Please keep these facts in mind when preparing and submitting your budget requests.

As this matter is pressing I would appreciate receiving your detailed budget request by 1 June 1988.

Thank you,
J. Archibald

The above memorandum has been reproduced so that all, who are interested, may gain a greater insight into the financing of the Commonwealth Veterinary Association and its projects. Signed: The editor of the CwVA News.

Message from CwVA Vice President

As your new Vice President I am particularly pleased to send my greetings to all colleagues in the Commonwealth of Nations. In doing so, I would also like to seize the opportunity to appeal to all to contribute their quota, however small, towards the strengthening of the ties of friendship between members of our noble profession in diverse parts of the Commonwealth.

As we are all aware, the peoples of the Commonwealth are not lucky to the same extent in terms of available resources and circumstances. It is my belief that through the bonds of friendship and interactions, within and bet-

ween, the fortunate members, through the knowledge and understanding of each other's circumstances. The Commonwealth Veterinary Association offers this opportunity to all members of the profession in the Commonwealth.

I would therefore implore all members to support and assist the new executive of the Association in its efforts to consolidate and improve on the achievements of the previous Executive members who have done a marvellous job in getting the Association so well established. Without the individual participation, the Association cannot be sustained.

Best wishes to all.
BAKARY N. TOURAY
CwVA VICE PRESIDENT,
AND REGIONAL
REPRESENTATIVE
FOR WEST AFRICA,
AND COUNCIL MEMBER
FOR THE GAMBIA.

Did you know that:

- It is not enough to be concerned for the rule of law in one's own country alone. Human rights are universal and securing their protection (for everyone) a universal duty. (Source: Shridath Ramphal, Commonwealth Secretary-General)

CwVA welcomes new council member

Dr. Ita Umo of Angwan Gada, in the Vom area, is Nigeria's new CwVA council member. He succeeds Professor Tom Aire of the University of Ibadan. Dr. Umo is in private practice and operates out of Vom, in Plateau State. Prior to going into private practice, he was Chief Veterinary Research Officer in Animal Production at the National Veterinary Research Institute at Vom from 1970 to 1986.

Dr. Umo's wife, Dr. Antonella Garuti, is also a veterinarian. They have a family of two children. Dr. Umo was born in Nigeria in 1942 and obtained his D.V.M. degree at Brussels at the age of 27. He also has a DTVM, as well as a Ph.D. in reproductive physiology from the University of Liverpool in the U.K.

Dr. Umo was President of the Nigerian Veterinary Medical Association from 1985 to 1987. He is a former vice-president of the Plateau States Branch of national veterinary association.

Dr. Ita Umo's address is Angwan Gada, PO Box 168, Vom, Plateau State, Nigeria.



Dr. Ita Umo, Council Member Nigeria.

Draught mules an asset to industry

In Swaziland, pulp and paper is of considerable importance. The Usutu Pulp Company operates a pulp mill at Bunyah. Their operation involves the 15-17 year rotational harvest of 70,000 hectares of pine forest. Most of this is marginal mountainous grassland in the high veld. The terrain is hilly with rocky steep descents. The harvested logs, 3 to 5 meters long and up to 40 centimeters in diameter, are pulled down to the roadsides, one at a time, by mules. It is a labour intensive operation thus providing jobs, and the use of mules effects a saving in operational and capital costs.

The mules are used singly with a breastplate harness, known as 'usutu harness'. The muleteer controls the mule by voice commands. If problems arise a lead chain is used. During a 10 hour day, a mule will move an average of 17 tonnes of logs. Working a five-day week, the mules are fed three times a day and watered usually only once a day. On Saturdays and Sundays they are turned out to graze and rest.

Indigenous mules apparently have considerably immunity and/or resistance to ticks and tick-borne diseases. Tails and manes are kept short and tick grease (Coopers) is ap-

plied to the ears and perineal region for tick control. Routine autumn and spring deworming, with valbazen (Smith-Kline) powder, is carried out. Annual vaccination, for African horse sickness, and semi-annual vaccination, for equine influenza, are conducted.

The mules are untouched by a variety of problems which would render horses useless. The most common problem, keeping the mules off work, is harness galling. The usual site is the point of the shoulder. This necessitates refitting the harness, which, in turn, often leads to galling of the withers and ventral aspect of the neck. Healed lesions are subject to a recurrence of galling.

The Conclusion: - Quote "Because mules are so tough and require so little attention they make ideal draught animals. The rough nature of the logging operation shortens the working life of a mule. However, this logging operation has been going on for 25 years, and many of the mules have been there from the start. Mules, in easier work, have a recorded work life of 40 years, outlasting a modern tractor by about 30 years. A comment from an old forester seems a good closing tribute: 'Mules just don't break down.'" Source: SVA Newsletter Mar/88.

News from Zimbabwe Veterinary Association

The 1987-88 ZVA Executive Committee was elected at the Annual General Meeting held during the Sept/87 Zimbabwe Veterinary Association's Troutbeck Congress. President is Dr. C Waghorn, vice president is Dr. F. Flanagan, and Drs. P. Gomwe and D. Knottenbelt are the two remaining members of the committee.

The Troutbeck Inn, Nyanga, was the scenic meeting place of that annual ZVA congress. It was a very successful meeting, with 78 out of Zimbabwe's approximately 100 veterinarians in attendance. There were visitors from Zambia and Mozambique and speakers from Holland, France, Kenya, South Africa and the United Kingdom.

The official opening was highlighted by a speech by Mr. Ben Norton, chairman of Zimbabwe's Cattle Producers' Association. In an informative and often humorous talk Mr. Norton paid tribute to the veterinary profession, and in particular the Department of Veterinary Services, for the role they have played in animal production and disease control in Zimbabwe. He urged

them to continue their important work, as their services would continue to be vital, in order to protect the Lome Beef Contract.

The theme of the Congress was "Herd Health and Production" and it included an excellent series of lectures by Professor Arie Brand of Rijks University of Holland. A very popular presentation was that given by Dr. Russel Taylor of Zimbabwe's National Parks Service. He covered the subject of the buffalo population in the Kariba area.

The Congress dinner was honored by the presence of Dr. and Mrs. John Holt of Australia. Dr. Holt is the president of the World Small Animal Veterinary Association and he and Mrs. Holt had just attended the World Veterinary Congress in Montreal, Canada. During his speech, newly elected President, Dr. Waghorn paid tribute to Dr. Colin Skinner who, almost single-handedly, had organized the Troutbeck Congress. Dr. Stuart Hargreaves, Past President, was also lauded for his many contributions to the ZVA.

For the first time the ZVA will be

Malawi Congress

The 1987 MVA Congress was held in November in Lilongwe, at the new Kudya Discovery Lodge, on the banks of the Shire River. The members of the MVA are all government veterinarians, except for 2 German expatriates and a Danish expatriate. Thus regulatory and other government activities took up much of two days. Many of the discussions centered on disease control, which has been severely restricted by financial constraints.

The last two days of the Congress were open, and among subjects touched upon was livestock production. Dr. Wilson gave an interesting talk on the use of pyrethroid dipping for tsetse fly control and Dr. Waghorn spoke on the practitioner approach to fertility in beef cattle.

Visitors, attending the Congress, included a delegation from Zimbabwe. The ZVA was represented by its president, Dr. Charles Waghorn, and its secretary, Dr. Alex Wilson. The Malawi hosts, expressing pleasure at the Zimbabwean presence, advocated a strengthening of contacts between the ZVA and the MVA. Suggested was a greater bilateral exchange of delegates at future Zimbabwe and Malawi congresses.

Source: ZVA News Dec/87-Jan/88 Dr. Waghorn's report.

printing a complete 'Proceedings Book', of all the papers presented at an annual congress. Parties interested in obtaining the Proceeding of Congress '87 should write to The Secretary, Zimbabwe Veterinary Association, PO Box 8387, Causeway, Zimbabwe, for information about availability and cost.

Planning for Congress '88 is already underway and details will be forthcoming. The tentative dates are Sept. 6 to 9. Veterinarians planning to visit the Southern African region around that time can write to the ZVA for up-to-date information about Congress '88.

Source: ZVA Newsletter Sept/87.

Did you know that:

Sudden death syndrome is an economically important condition of fast-growing broiler chickens in which death occurs suddenly with a short, wing-beating convulsion.

Source: Can Vet J Feb/88 pp 153

Message

A problem in Zimbabwe

Dear Colleagues,

The 1987 Congress has just passed with great success, both socially and academically. The papers presented were of a high standard and many new friends and contacts were made.

It was an honour to receive a brief visit and address from Dr. John Holt of Australia, in his capacity as President of the World Small Animal Association. There were also delegates from neighbouring countries like Zambia and Mozambique and also speakers from five other countries.

The ZVA annual conference continues to expand and embrace our regional colleagues and it is intended to maintain this regional role. Our members have an important and diverse part to play in the improvement of animal production in this country and the Conference is one important means of spreading knowledge in order to improve this role. The spread of knowledge is the principal reason for the existence of this association.

The standard of our Veterinary service must now, more than ever, be of the very highest quality if any progress is to be made in production and if the public's respect is to be maintained. This respect has to be earned, not expected, so our professionalism must not be diminished by anything that transgresses our ethical code. It is now time for Veterinarians to become involved in production and preventative medicine and the papers at the Congress must have given inspiration to those who have ambition in this field.

I wish all members success in the future.

C.C. Waghorn,
President,

Zimbabwe Veterinary Association

Source: ZVA News Sept/87.

Zimbabwe newsletter

- A new 'formulary of drugs in Zimbabwe' has been compiled by Professor George Burrows. It may be that copies of Professor Burrows' work will be made available to interested Zimbabwean veterinarians.

- 'May and Baker' pharmaceutical firm have generously agreed to sponsor the printing of new front pages for the ZVA Newsletter. The new cover, of the ZVA News, will carry the logo of the Zimbabwe Veterinary Association in the national colors of green, yellow, red and black.

This article was derived from a hand-out produced by the Veterinary Research Laboratory in Harare, Zimbabwe. It was written by Dr. C. Nyereyegona.

"Necrotic Stomatitis Nephrosis Syndrome"

A survey is being conducted to determine the epidemiology of Necrotic Stomatitis Nephrosis Syndrome (NSNS) in Zimbabwe with a specific view to establish the aetiology of this not insignificant disease.

The present epidemiological picture may be inaccurate due to possible misdiagnosis of NSNS for example with BVD/MUCOSAL DISEASE COMPLEX, CALF DIPHTHERIA, SWEATING SICKNESS, BLUE TONGUE ETC., and for this reason a separate description of the disease is reproduced.

History

This was first recognized in 1966 (?) in Zimbabwe and has reappeared most, if not all, years since.

Distribution

It appears to be mainly confined to the Marondera and Harare areas and has been reported in Gutu and Chipinge.

Species affected

Cattle, predominantly beef breeds, occasionally dairy cattle.

Age

4 months old upwards

Morbidity

Approximately 5-10%

Mortality

50-100%

Season

Predominantly January to March

Clinical Signs

Frequently a sudden onset, starting with pyrexia, anorexia and erythema of

the oral mucosa and either gradually resolving or, more commonly, rapidly progressing to Necrotic Stomatitis, uraemia and death. Some farmers report death to be acute within several hours whereas other cases take 7-10 days to die. As most cases affect extensively reared beef cattle the disease has probably been present for 24-48 hours plus before being noticed. The typical symptoms being normal or subnormal temperature, obvious loss of condition, halitosis, necrosis and sloughing of the oral mucosa of most or all of the oral structures and occasionally the muzzle and vagina. Teeth grinding, diarrhoea, aggression, dehydration, wet eczema, adipsia (initially polydipsia) have all been reported but not in all cases. Some apparent recoveries die two to three weeks later from nephropathy.

Clinical pathology

The most consistent finding in advanced cases is uraemia, the B.U.N. ranging from 6-40 mg/dl (normal range 1-6 mg/dl) creatinine 150-600 mg/dl (normal range 150 mg/dl). The majority of cases with B.U.N. exceeding 12 mg/dl die.

The P.C.V. is generally high due to dehydration but the red cell picture remains normal. The white cell count ranges from normal to a relative leucopenia with evidence of a left shift and toxic changes in the neutrophils.

Necropsy Findings

Gross pathology of a typical case would include all or some of the following:

Dehydration, loss of weight, necrotic ulcerative stomatitis, oesophagitis, rumenitis, reticulitis, omasitis, vaginitis, non-necrotic abomasitis and enteritis, pallor of renal cortex and

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Did you know that:

It has been confirmed that the trypanotolerant N'Dama cattle in The Gambia are superior in trypanosome control, in anaemia control, and in growth and reproductive performance to zebu cattle, when both types are infected with *Trypanosoma congolense*. As trypanotolerance is under genetic control, identification of the genes involved would in all probability lead to improving resistance and tolerance within the tolerant breeds of cattle and hopefully these genes could be transferred to susceptible breeds by crossbreeding or genetic engineering.

Source: ZVA News Sept/87 - from report of Dr. P. Gormwe.

ZVA Newsletter

With its Oct.-Nov., 1987, issue (vol 5 no 1), the ZVA News moved into the computer age, and editor Francois Flanagan has great hopes that this will expedite his task and ensure more regular production. The ZVA News, with an attractive new cover, has a new format and, as in the past, it carries a good variety of interesting and informative items.

The production of the ZVA News is an interesting example of voluntary and cooperative effort. Dr. Colin Skinner does the computer input and Drs. Gomwe and Milne, at the Mazowe Training Institute, do the photocopying, collating and stapling. Generous support is received from RM (Rhône Merieux) Veterinary Biologicals and Pharmaceuticals, who underwrite the cost of printing, and May & Baker (Rhône-Poulenc Group) who sponsor the new cover.

Obviously, Dr. Flanagan is victimized by the same problem that plagues the efforts of many an editor of the smaller regional newsletters. That problem is the lack of news, case histories and reports of meetings from so many of his association colleagues. In one of his recent editorials, Dr. Flanagan mentions going through many of the Rhodesian Veterinary Journals (of the 1960's) in his research for interesting articles.

Nevertheless, be that as it may, many of the more interesting items, that have appeared in the CwVA News, have come from the smaller veterinary publications, such as the ZVA News, the Papua New Guinea Veterinary Newsletter and the Swaziland Veterinary Association Newsletter.

Participation by ZVA

The Zimbabwe Veterinary Association has become a corporate member of the Zimbabwe Society for Animal Production. The ZSAP plays an active and constructive role in the dissemination of information on animal production.

Beef production, in Zimbabwe, is largely dependent on slaughter stock produced from 650,000 breeding cows, owned by commercial farmers. Cow numbers have declined in recent years due to (a) the slow rise in the controlled price of beef as measured against the more rapid rise in production costs, and (b) the effects of the continuing

drought. The present (1987) level of productivity yields about 360,000 slaughter cattle a year. This leaves a shortfall of some 100,000 head to meet local and export demand. The political response of commercial farmers is that there must be a significant increase in the real price of beef to encourage expansion of herd numbers.

In Zimbabwe the merits, of hybrid vigour in reproductive efficiency, are well recognized, and many commercial herds have crossbred cows. In herds, operating on a low cost basis by producing slaughter cattle from forage feeds, the use of early maturing types, like Hereford and Sussex, as the terminal sire is considered invaluable. Under pen feeding conditions the rapid lean growth of the European breeds, like Charolais and Simmental, is considered an asset.

It is felt that under good management cows, in the higher rainfall areas, should attain a weaning percentage of 80 to 90%. Even in the drought areas a weaning % of over 70 is considered possible, however many cows meet the dry season suffering from lactation stress. Also, because of poor grazing and little protein supplement, due to cost, many cows are unlikely to attain the critical condition necessary to ensure a high conception rate.

Source: ZVA News Oct-Nov/87.

A nice gesture

Johnson & Johnson donated a large quantity of VET.PAK sterile chromic catgut for use by members of the Zimbabwe Veterinary Association who are in clinical practice.

Source: ZVA News Oct-Nov/87.

Interesting questions

The Swaziland Veterinary Association Newsletter of March 1988 contains an interesting editorial by its editor, Dr. G.D. Yao Tofa. The following is from that editorial: -

"Dipping has now gone over to 'traitix' (Coopers) in all government dip tanks. Already we have noticed a sharp decrease in cattle deaths in the rural areas. Will this lead to overstocking? Will it therefore result in an increase in the death toll, at the end of winter, due to starvation? Will the overstocking aggravate an already bad erosion problem?"

"As with most things in life, when something good happens there is usually some detrimental occurrence not far behind. However let us hope that the

tick problem has been solved and worry about future problems when they come."

Acknowledging support

In the Oct.-Nov./87 ZVA News, the Zimbabwe Veterinary Association published the following list of the sponsors, whose generous support contributed a great deal to the successful ZVA Congress '87: -

- Agricura, Bayer Zimbabwe, CAPS, Cattle Co-op, Cattle Producers Assoc., Cooper Zimbabwe, Hoechst, Johnson & Johnson, McDonald Scientific, Milbrow Animal Health, Smith Kline Animal Health, Sterling Products Int., Thoroughbred Breeders, and Windmill.

Did you know that:

In Nepal draught cattle stand just over a metre (3 ft 3 in) in height at the shoulder and weigh from 180 Kg to 250 Kg (400 to 500 lbs). Rice straw is a basic ration. A typical concentrate, fed to working cattle, contains maize flour, rice polishing, mustard cake and sail. Source: CTVM Newsletter No. 44, 1987.

A problem

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medulla, hepatomegaly, fibrinous pericarditis and pleurisy, subepicardial and subendocardial haemorrhages.

Treatment

No successful therapy has yet been established, although high doses of corticosteroids and adequate oral dehydration therapy would seem logical.

Aetiology

As yet we are no nearer to resolving the aetiology of this enigmatic disease than when it was first reported 21 years ago.

The various postulates include:

1. Bont-legged tick toxicosis owing to the many similarities between NSNS and sweating sickness.
2. Blister beetle poisoning
3. Mushroom/toadstool poisoning
4. Mycotoxicosis
5. Plant poisoning
6. Unidentified toxic substances in drinking water
7. Unidentified toxic substances on pasture
8. Unidentified virus substances

Source: ZVA News Mar-May 1987. Reprinted with permission of the Zimbabwe Veterinary Association.

Tanzania VA hosts conference

The fifth Tanzania Veterinary Association Scientific Conference (an annual event) was held at the Arusha International Conference Centre - Northern Tanzania from the 1st to the 3rd December, 1987. This venue has now become the Association's predilection site mainly because of its ideal facilities viz: modern International Conference Halls with all its internal facilities, accessibility both by air through Kilimanjaro International Airport and reasonably good roads, numerous international hotels and guest houses, very cool climate with its attendant tourist attraction sites such as the Serengeti and Lake Manyara National Parks which today still harbour some of the very rare animal species which are extinct elsewhere in the world!! With these facilities, Arusha International Conference Centre could easily host the proposed "Pan African Commonwealth Veterinary Congress" to be held sometime in 1989 or 1990.

The conference, whose theme was "The Veterinary Profession and the African Food Situation", was opened by the Minister for Agriculture and Livestock Development The Hon. Jackson Makweta, M.P. This theme was chosen so as to highlight the role of the Veterinary Profession in promoting food productivity. In his opening remarks the Minister challenged the profession to play a leading role in maintaining the environment "for neither crops nor livestock would survive in an environment which has undergone serious erosion" he remarked. He further stated that his Ministry was placed in an awkward position whereby the Ministry was obliged to provide the health infrastructures for livestock viz: drugs, dip tanks, vaccines etc. but had no ultimate say in the cropping of the livestock. Livestock owners had a final say on this and as such large, unproductive herds of livestock have emerged and have certainly contributed alot in environmental degradation. He urged the profession along with the politicians to play a leading role in educating the people to keep fewer but more productive animals.

The conference was attended by over two hundred and fifty people with some participants from the United Kingdom, Kenya, (Nairobi University, ILRAD, ICIPE, Bayer, Welcome, May and Baker) & Ethiopia (ILCA). A total of twenty-five scientific papers were presented and covered a wide range of production and animal health aspects. In addition, The Annual General

Meeting (AGM) of the Tanzania Veterinary Association was held. Apart from discussing various issues pertaining to the Association, the AGM elected its new Executive Committee for the 1988-90 triennium. Those elected were: - Prof. P. Msolla-Chairman; Dr. Y.S. Sinare-Vice-Chairman; Dr. M.E. Shayo-Secretary; Dr. P. Mkonyi-Treasurer; Dr. W.D. Semurguruka, Dr. G.L. Komba, Dr. J.F. Nyange-Committee members; Prof. B.M. Kessy-Editor Tanzania Veterinary Bulletin; Dr. U. Minga-Assistant Editor, Tanzania Veterinary Bulletin; Prof. S.F.H. Jiwa-Circulation Manager Tanzania Veterinary Bulletin.

Dr. Trevor Blackburn, President of the Commonwealth Veterinary Association, participated at this conference and brought greetings from the British Veterinary Association and the Commonwealth Veterinary Association. He brought very special greetings from the West Counties Division of the BVA to which TVA is twinned and he presented us with a small video film "All creatures - Great and Small" by James Herriot. The film is already being shown to members and non-members across the country.

The BVA also sent us the following gifts: two BVA ties, one set of shirt cuffs, two key rings and a small bag containing the gifts. These gifts were raffled during the TVA dinner held at

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CwVA President Trevor Blackburn (left) and The Hon. Jackson Makweta, M.P., Tanzania's Minister for Agriculture and Livestock Development, at the opening of The Fifth Tanzania Veterinary Association Scientific Conference in Arusha, in December 1987.

ANNOUNCEMENT

6th Tanzania Veterinary Association Scientific Conference

The Tanzania Veterinary Association is to hold its 6th Scientific Conference at Arusha International Conference Centre from the 6th-8th December, 1988.

The theme of the conference shall be "The role of the Veterinary Profession in the developing Countries". Those interested to present papers should submit their abstracts to:

Chairman,
Tanzania Veterinary Association,
P.O. Box 3174,
Morogoro
Tanzania.

NOT later than 30th September, 1988.

ALL interested parties are most welcome.

Tanzania VA hosts successful conference

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New Arusha Hotel on the 3rd December, 1987. BVA also sent us a book by James Herriot entitled "James Herriot's Yorkshire". It was autographed by the author and is now deposited at the Faculty Library.

Social Events

On the first evening of the conference a Cocktail party was hosted at New Arusha Hotel by May and Baker in honour of the Conference participants. The party was also attended by our Guest of Honour the Minister for Agriculture and Livestock Development Hon. Jackson Makweta MP. There was adequate clinical evidence at the end of the party that our hosts (May & Baker) had been generous. However, no stretchers were required.

On the second evening of the conference, May & Baker showed a re-

cently produced "Animal Trypanosomiasis" film. It was viewed by a capacity crowd of conference participants.

On the third evening of the Conference, the TVA dinner was again held at New Arusha Hotel and diners were entertained by the resident musical band. The evening was excellently marshalled by Prof. B.M. Kessy, Dean, Faculty of Veterinary Medicine - Sokoine University of Agriculture - Morogoro. Apart from an excellent arrangement, he also organized a raffle for the items donated by BVA. Each ticket was sold at fifty Tanzania shillings and the results were as follows:
1st Prize - BVA Necktie (Maroon red) - Dr. M.N. Mgassa
2nd Prize - BVA Necktie (Navy blue) - Dr. Mwashia, J.D.

3rd Prize - Shirt cufflinks - Dr. E. Shayo (Mrs.)

4th Prize - Key ring - Dr. M.G.S. Yongolo

5th Prize - Key ring - Dr. N.B. Chukilizo

The conference was officially closed by the Arusha Region Party (CCM) Secretary and member of the National Executive Committee Mr. Mpangala who challenged the participants to come up with recommendations which would assist the Government and the party to come up with a sound livestock policy. He reminded the conference participants that although Tanzania had about thirteen million head of cattle; these animals were still characterized by low production coefficients. He called upon the profession to address itself to increased productivity of Tanzania's livestock.

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Comment on "A Feast in the Wild"

A recently published book, written by UK veterinarian Russell Kyle, is a valuable and an outstanding addition to literature dealing with development and with conservation. The book, 'A FEAST IN THE WILD', is informative, fascinating and a pleasure to read. The author, well versed in his subject, tells a story that, swinging back in time, touches on the historic relationships of man to animals, animals to other animals, and man and animals to the environment.

The greatest value of the book may be that it deals with peoples and areas seldom in the forefront of public attention. The author presents new ideas and polishes up old ones, ideas that may well contain much of benefit for many scattered corners of our world. For those, interested in the developing countries, conservation, animal production, the environment, improved nutrition for the undernourished, and animal rights, 'A FEAST IN THE WILD' should be thought of as a 'MUST' for reading.

From the Feb. 6th, 1988 Veterinary Record, we reproduce its 'Comment' on Russell Kyle's book.

MAKING ECONOMIC SENSE FROM CONSERVATION

It is sometimes forgotten that conservation, as applied to wild animals, can have a sound economic basis, as well as its other indications. The economic justifications for conservation highlight two sources of potential income: tourism and the harvesting of indigenous animal populations for meat, skins, wool and other products. Much of today's conservation effort is focused on using such resources in a sustainable way.

The use of 'wild' animals in many areas of the world has clear financial as well as long-term biological benefits. These are derived by exploiting a species' natural adaptation, which has evolved in response to its own particular environment. The question is, therefore, why has man traditionally concentrated on a relatively small number of species - domestic cattle, sheep, goats - to satisfy most of his needs and why, in response to situations where these domesticated species do not perform well, has he persisted in using them?

In a recently published book, 'A feast in the wild' Russell Kyle, a veterinarian with considerable experience overseas, explores this question in depth. He

presents strong arguments for considering the use of a wider range of herbivore species. After looking at the archaeological evidence of the systematic exploitation of particular animals at the end of the last Ice Age, the author traces the development of man's selection and subsequent dependence on a few key species. He discusses the limitations of these species relative to the advantages offered by more locally adapted species and argues strongly for a drastic re-evaluation of the current devotion to cattle, sheep and goats. Among the species treated in some detail are bison, reindeer, South American camelids, large rodents, deer and African antelopes.

The thesis is quite simple. Within a particular biotype, local species will be better adapted than introduced ones and they may therefore offer significant advantages over conventional livestock. The exploitation of new species, or of old species in new ways, can be a valuable way of answering local needs whether for immediately usable products or for cash revenue from the sale of such products.

Of vital importance currently is the argument that the economic benefit

accrued from the continued existence of the animals is likely to be a powerful inducement to the preservation of these species and of the habitat necessary to maintain them. The survival of many wild areas in developing countries will depend on this. Nevertheless, it is difficult to influence politicians and businessmen away from their devotion to the cow, goat and sheep.

The alpaca, for example, has been a source of meat and wool, as well as a pack animal, in the Andes for thousands of years. The species is extremely well adapted to the high altitudes and poor grazing of the altiplanos. To cope with the reduced oxygen levels at these altitudes, they have a high red blood cell count and haemoglobin concentrations compared with cattle and sheep. Alpaca are able to digest the available fodder up to 30 per cent more efficiently than cattle but, despite these assets, plans exist to increase the number of conventional stock on the altiplanos simply because cattle and sheep carry more prestige.

Dealing with particular species or regions, Kyle produces numerous other instances to support his contention that

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Commonwealth Veterinarian and author, Russell Kyle, with a friend.

Comment on "A Feast in the Wild"

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innovative and sympathetic consideration of a mix of domestic and non-domestic species should be investigated to maximize the potential economic and ecological benefits - cattle and capybaras for instance in Venezuela, guinea pigs, small camelids and sheep in the Andes.

As long as he stays with the suggestion of mixing the management of indigenous wildlife with that of traditional domestic stock as part of multiple land-use policy it all seems potentially practical if it can also be made universally acceptable. Some such schemes in the past have often failed because they were not well thought out and insufficient effort and investment went into the pilot projects.

Any new schemes must consider their potential markets more carefully, invest adequately and be prepared to give the project time. 'A feast in the wild' provides an excellent background to an important subject. It also provides another example of the breadth of vision that the veterinary eye can bring to a subject whose importance is certain to grow as economical pressures are applied to the developing areas of the world.'

From the publisher's brochure we quote:

A FEAST IN THE WILD

The book opens with a question: although there are 200 species of wild, large herbivore in the world, why have less than two dozen been domesticated for food? Now, however, projects are already proceeding in many parts of the world to manage some of the local, wild, large animals for food production. The book gives a fascinating, first-hand account of these projects, as well as explaining the local ecological, zoological and social background to the schemes.

In some areas the meat can be used to improve the diet of the malnourished, local people. In other cases the meat can be sold for a high price to the luxury market, and the revenue can be used to aid the management of the wild animals. Often a properly planned exploitation of the local, wild species can improve the conservation of the animals themselves, and will maintain better land conditions in the wild areas which they inhabit, and these things bring in their train other benefits such as tourism, recreation and local employment.

Everybody stands to gain from a wider selection of meats on carnivorous man's dinner plate. The wild animals gain from more far-sighted management; the malnourished benefit from a

better diet, and the developed countries could enjoy more variety. A selection of recipes at the end of the book shows that wild meats can taste as good as any domestic meat.

It seems appropriate that we should conclude with the author's 'Conclusion', which appears just after the last chapter of the book.

"There are two, totally different markets for the meat of wild animals. First, there is the luxury, exotic market, in which consumers who are already very well fed will pay a high price for wild meat in order to add the spice of variety to their diet. The main justification for exploiting wild animals for this purpose is that it generates money, which can help to pay for the management of the animals, and the maintenance of their wild ranges in a relatively undisturbed condition. It is a common and added bonus that wild animals often produce more meat than domestic animals could do in the same area, at less cost to the condition of the land.

Secondly there is the local, subsistence market. The main moral argument for any exploitation of the wild animals must be the contribution that they can make towards improving the diet of the local, malnourished, human population.

The parts of the world which suffer most seriously from human malnourishment are usually those areas where the productivity of the land is more poor. Table two (page xi) shows that only 11 per cent of the world's land surface is suitable for arable production, and a further 24 per cent is suitable as rangeland for domestic stock. This leaves two-thirds of the entire world land surface which is classed as unproductive for agriculture, half of this being forest, and the remainder a variety of categories like swamp, tundra, desert, mountain slopes, etc. It is certainly possible to reclaim some of these areas for agriculture by the appropriate drainage, irrigation, correction of mineral imbalances, forest destruction, etc., but the cost is usually too enormous to contemplate.

The problem is low primary productivity, meaning that the land in such areas is not capable of producing a sufficiently large volume of vegetation per hectare to be useful either for arable crops, or for feeding domestic livestock. But wild animals, with far greater mobility than domestic stock, can cover the ground far more effectively in search of what little vegetation the area does produce. Thus the most efficient way of using such an area for

food production is often to allow the wild animals to harvest the primary production, and then to crop the animals themselves under a properly managed, sustained yield programme.

The question of a sustained yield is enormously important. The introduction of domestic livestock into areas which are not ecologically suitable for them has often led to overgrazing and a progressive deterioration in the condition of the land, with the result that it produces less in each succeeding year. On the other hand, the well-planned management of the locally adapted, wild animals in the same areas can safeguard the condition of the land whilst also yielding an annual crop of wild meat in a long-term, sustainable way. At the same time many other benefits may be achieved, and the first of these is conservation. It becomes economically rewarding to conserve both the wild animals and their environment. Conservation brings in its train tourism and other forms of recreation, which create opportunities for employment for the local people.

It is far from easy, however, to put this simple theory into practice, and experience has shown that the standard of management needs to be unusually high. To manage a wild animal cropping scheme is certainly more difficult than the management of a domestic animal ranch, since so much is experimental in the former, and there is such a wealth of accumulated knowledge and experience to help with the latter. The carrying capacity of the range, and the size and structure of the prey population need to be exactly monitored and constantly re-examined in the light of changing circumstances, if the animals are to be capable of producing a sustained yield over an indefinite number of years. A number of schemes have failed because of management reasons, such as insufficient market planning, or disastrous overcropping, and these were described in chapter three.

If the management is right, however, the condition of the land under a natural population of indigenous, wild species can be far healthier than under an unnatural cultivation of introduced, domestic animals. This has been a constant theme of nearly all the examples quoted in this book, and it is perhaps the most important feature of the intelligent exploitation of wildlife. The ultimate resource is not the animals, but rather the land where they live. Proper management of the wild animals, including a wise system of ex-

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Henston: essential information

HENSTON was created in order to provide essential information to the many groups of people working with or interested in animals. The Henston Veterinary Vade Mecum is designed for easy data retrieval at the time of need. It is produced annually and is used by busy veterinary surgeons in practice in the U.K., but interest from others working in the small animal health sector has led us to make these specialist publications more widely available.

The Henston Veterinary Vade Mecum Small Animals contains data on diseases and conditions of small animals, including the cause, signs, differential diagnosis and products used in treatment and prevention. It also includes tables of constants, contributed articles, useful addresses, etc.

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Includes aetiology, disease profile, differential diagnosis, treatment and control.

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The Henston Veterinary Vade Mecum Small Animals 1988/89 is a new update edition of The Small Animals Vade Mecum and it is now available.

This new publication includes information in every section including many newly introduced products. It also includes a new section on small animal dietary management and some interesting new articles.

For more information write to: Update-Siebert Publications Ltd., Friary Court, 13-21 High Street Guildford - England GU1 3DX.

CwVA becomes a growing force

CwVA workers will remember the 1988-92 Executive Committee as the Executive who moved with a quiet dignity. Tactically indicating their determination to "GET THINGS DONE" the present executive committee took office on the 1st of January, 1988, with a minimum of fanfare. There were no news releases, not even a headline or lead item in the CwVA News.

Now, after six months in office, the CwVA Executive can look back with satisfaction and move ahead with confidence and optimism. There has been a steadily increasing correspondence with and from all regions of the Commonwealth. An adopted 'Forward Planning Outline' is beginning to exert its influence. A twinning scheme, with the British Veterinary Association carrying out the pilot projects, is underway. The 'Book & Journal' programme has grown at such a rate that new sources of funds, to cover the ever increasing mailing costs, are being sought.

From a variety of sources comes new interest in and support for CwVA projects. Much bodes well for the CwVA. It now enjoys a growing recognition as a creditable working group, deeply and pragmatically concerned with many aspects of development in the rural developing Commonwealth.

Prestigious honour bestowed

Early this year, 1988, His Excellency, Sir Dawda Jarawa, Patron of the Commonwealth Veterinary Association, was elected to Fellowship of the Royal College of Veterinary Surgeons. This is the highest honour that the RCVS can bestow and it is limited to persons of distinction, who have given outstanding service to the veterinary profession.

CwVA President, Trevor Blackburn, spoke for many when he said that colleagues throughout the Commonwealth were absolutely delighted that that honour, well-deserved, should be bestowed upon Sir Dawda Jarawa.

Source: Communication from J.T. Blackburn.

Did you know that:

The behavioral responses of lambs, aged 3 to 6 weeks, to docking or docking plus castration depended on the method being used. The agitated behavior indicative of extreme distress, and presumably pain due to tissue ischaemia after the application of rubber rings, is consistent with earlier observations of Brown, et al (1953;1954). These authors found that the discomfort experienced with rubber rings could be reduced by using the

rings within a few days of birth. The cause of pain in ischaemia is not known, although the accumulation of lactic acid due to anaerobic metabolism when blood flow to the tissue is blocked may be responsible (Guyton 1981). Although the surgical method produces less distress, there are good reasons for this method also to be carried out as early as possible, for it is known that the younger the lamb the more rapid is the wound healing (Johnstone 1944).

Source: Aus Vet J Jan/88 p7.

"A Feast in the Wild"

from page 13

exploitation, can be the best means of managing the land in the most difficult agricultural areas; and the land is the ultimate resource upon which the survival of the plants and hence the animals, and finally the human race, depends."

A note about the publishing

A FEAST IN THE WILD, with 210 pages and over 40 illustrations, is published by KUDU Publishing, 1 Lyne Road, Kidlington, Oxford OX5 1AE, England. It can be supplied by air to any address in the world. Prices are reported to be Paperback - 12 pounds; Hardback 18 pounds.

About the author

Russell Kyle's involvement in

wildlife management began in 1971, when, as a veterinary student, he spent a long vacation in East Africa studying schemes to domesticate the eland. Later he spent a year travelling around the world in order to seek out and study projects in every other continent, where the aim was to manage the wild species for food production. Faced with the sad fact that every single wild habitat is bound to suffer from increasing human intrusion as time goes on, he feels that the best way to conserve the animals and their environment is to show that they can have an economic value. The book is the result of 15 years of research, which he has combined with running an agricultural, veterinary practice in Oxfordshire.

Monitoring swine fever still a necessity

The recent outbreaks of Hog Cholera (Classical Swine Fever) in Great Britain (April 1986) and African Swine Fever (ASF) in Belgium (1985) and the Netherlands (1986) are reminders that maintaining a disease free status requires a sustained effort by the veterinary profession. Through strict zoonosanitary preventive action, Canada has succeeded in maintaining its swine industry free of Hog Cholera (HC). However, the threat of disease introduction remains.

In North America, HC is endemic in Mexico and it is also prevalent in Central and South America. In Europe and Asia, the disease still causes severe outbreaks and is responsible for serious economic losses and imposition of trade restrictions. For HC, economic losses can be minimized following effective but costly vaccination, mostly with live attenuated vaccines. However, the wide use of vaccine plus the selective pressure exerted on virulent viruses by the slaughtering of swine herds having an acute form of the disease has resulted in the emergence of strains of low virulence in the pig population of some countries where such procedures are followed. As the prevalence of these

strains increases throughout the world, the probability that a disease free country may become infected increases. Infection with low virulence strains may be difficult to diagnose clinically as it could be easily confused with other diseases of lesser significance. The clinical signs ascribed to infection with low virulence strains may include coughing, dyspnea, diarrhea, nervous signs and reproductive problems such as abortion, stillbirth, weak pigs and sterility in breeding stocks. Clinical signs may be more severe in young animals than in adults. Following initial introduction, the dissemination of the infection may be slow and the clinical signs may be restricted for weeks or even months to a few animals or to a few groups. As the virus acquires more virulence, the severity of the clinical signs may increase and the more classical lesions of petechia, congestion and hemorrhages, which most diagnosticians have been trained to look for, may become noticeable on the organs at necropsy.

African Swine Fever is endemic in several countries of Africa, the Iberian peninsula and possibly in other foci in the Western Hemisphere. As for HC,

acute and mild forms of ASF are also prevalent in endemic areas. The acute forms of ASF and HC are difficult to differentiate from one another on clinical and gross pathology. The emergence of strains of low virulence makes a clinical differential diagnosis between ASF and HC and other bacterial septicemia even more difficult.

In cases where the practitioner has diagnosed a condition which could be, among others, HC or ASF, it is recommended that consultation with the local Veterinary Inspection Directorate (VID) field veterinarian (District Office) be held. That person has received specialized training to advise the practitioner. The VID person has the equipment and training to collect the suitable tissues and send them correctly to the Animal Diseases Research Institute, Nepean, for laboratory confirmation. He/she also has the option of sending the specimen as "Confirmatory Negative" which does not incur automatic quarantine of the herd and allows monitoring of suspect cases with a minimum of hardship to the owner.

Prepared by: Food Production and Inspection Branch Agriculture Canada.

Parapoxvirus infections in farmed red deer

A clinical communication by Drs. G.W. Horner, A.J. Robinson, R. Hunter, B.T. Cox and R. Smith is most interesting. It is entitled "Parapoxvirus Infections in New Zealand Farmed Red Deer (*Cervus elaphus*)". The following is extracted from their communication:-

"This communication describes parapoxvirus infections in red deer on eight New Zealand farms. Infections were usually associated with extensive skin lesions but the velvet was the principal site of infection in stags. The cases were seen between late November 1985 and May 1986."

"Parapoxvirus infections are common in sheep, goats and cattle in New Zealand, and have also been reported in chamois and man. Poxvirus infections of deer have been reported elsewhere. This is the first occasion that parapoxvirus infections have been diagnosed in deer in New Zealand."

"The epidemiological features are summarized as follows:

Farm A - scabs were present on the muzzle, face, ears and velvet. The lesions were multiple being both focal and diffuse. There was alopecia and

crusting with fissuring. Removal of the scabs left a red raw surface.

Farm B - the affected fawns lost condition with large areas of hair loss and encrustations around the face, mouth and covering 60-90 percent of the body. The lesions had a fetid smell. Two other older fawns were found to have several scabby lesions on their mouths.

Farm C - stags were first observed to have swellings around the eyes with the velvet cracking and oozing serum. At a later stage scabs covered most of the velvet with some oozing pus. Only the velvet was affected except for one stag, which also had some scabs on the head. Farm D - one spiker was seen with multiple crusty lesions (3-4mm diameter) on the ears, face, velvet and partly down the neck. Within seven days the disease appeared in yearling hinds, yearling stags and the regrowth velvet of mature stags. The later cases did not have the facial swelling seen in some of the other cases."

Farm E - the affected deer had been captured four to six weeks prior to developing skin lesions and were in good condition. All 55 animals became sick and lost about a third of their

bodyweight over eight days. Twenty-one animals died. Severe depression and recumbency occurred prior to death with most animals dying after being sick for four to five days. All had dermatitis with lesions being present mainly on the legs although some animals had lesions on the mouth, eyelids and perineum. The disease was suspected to be multifactorial but this could not be proven. Two months after the outbreak a further case was confirmed in a two month old fawn.

Farm F - the group of affected deer had small scabs (5mm diameter) on the muzzle, face and inside the lips. There was pus under the scabs on removal. Only one animal appeared sick. It had pyrexia (40.3 degrees C) and submandibular oedema.

Farm G - within three weeks of capture a feral deer developed scabs and pustules on the lips and had an ulcer on the dental pad. Although the animal was thin and had a temperature of 39.3 degrees C it was bright and still eating. The deer was destroyed and no further cases were seen.

Farm H - scabby lesions were present

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Blue Heliotrope poisoning

Psoroptic Mange

This case is unique because up to the time of the author's observations (Jan/84) the causative mite, *Psoroptes ovis*, was not known to occur in free living giraffe. This giraffe was seen in the Masai Mara game reserve in Kenya. There were skin lesions over a good portion of the withers, back, neck and face. Binoculars revealed several raw and ulcerated areas. These skin lesions were obviously extremely irritating as the animal spent a good portion of the day rubbing its back and neck against trees.

The giraffe was anaesthetized and skin scrapings taken. Close examination of the lesions revealed an exfoliated yellowish raised epidermis and serious exudate causing raw areas with resultant hair loss. On the edges of the lesions were thick encrustations of epithelial debris. Diagnosis of *Psoroptes* sp was made by microscopic examination. Transmission studies were required to identify the species. These studies involved rabbits and cattle. Lesions on the rabbits were minimal or nil. However with the cattle raw areas and encrustation with hair loss, typical of psoroptic mange on cattle, were present after 3-4 weeks. Large numbers of mites were recovered and identified microscopically as *Psoroptes ovis*.

Psoroptes ovis is known to be a cosmopolitan mite that may infest horses, donkeys, sheep, goats and cows. It is most commonly found in sheep and cattle, causing a condition called scab. In domestic animals in Kenya, scab lesions may occur on all parts of the body that are covered with hair; most frequently they are found around the shoulders, sides and back. On this giraffe, lesions were most severe over the withers and back and the extent of the lesions indicated that the condition was chronic.

The mode of transmission in this case is unknown since no domestic animals were anywhere near the vicinity. Some Masai herdsman had goats and cows several kilometers away in the savannah country where giraffe were seldom seen.

The mites recovered from the skin scrapings of the giraffe were easily transmitted to domestic cattle. It is therefore evident that this biotype may pose a threat to giraffe if domestic livestock are allowed to roam in game reserves.

Source: The Kenya Veterinarian Dec/84 V8 N2 p22-23. Case report by Dr. Elisha W. Burr.

Blue heliotrope (*Heliotropium amplexicaule*) is a native plant of South America. It is also known as wild verbena. In Australia it has become naturalized in southern Queensland, northern New South Wales and South Australia. Blue heliotrope is a perennial which dies back during the winter. It grows along roadsides, in cultivated ground and in pastures. It grows especially well in red loam soils and can be a serious pest of pastures and crops.

The South Burnett district of southern Queensland has red loam soils. Over the past eight years, several cases of poisoning with liver pathology consistent with pyrrolizidine alkaloid poisoning have occurred in cattle in this area. (Indicine, a pyrrolizidine alkaloid, has been isolated from blue heliotrope). The following are summaries of four case histories:

1. A four-year-old Murray Grey bull from a herd of 40 cattle was sent to the abattoir in winter (July) following chronic wasting with weakness and incoordination. Depression and a staggering gait were observed. During the preceding two years this bull had been grazing a 4 ha paddock, where during summer and autumn blue heliotrope dominated the pasture.
2. A four-year-old Hereford crossbred cow from a group of five cattle died in winter (August) following signs of compulsive walking into obstructions as if blind. Compared with case 1 a more severe 'walkabout' syndrome was observed in case 2. The cattle (in case 2) grazed in a 2 ha paddock adjoining the farm of case 1, pasture conditions were similar. Four cattle had died on this farm in the previous two years. Symptoms observed included depres-

sion, shuffling gait, circling with limb stiffness and blindness.

3. Fourteen crossbred beef cattle, 12 to 15 months of age, were affected with profuse scouring, wasting and photosensitization. Three died after seven days and two survivors were sent to the abattoir but were condemned. These cattle had been brought onto the farm four months previously. This case occurred on the same farm as case 2 but 30 months later and in the summer (February). Blue heliotrope dominated the pasture and cattle were seen grazing the plant.

4. Two four-month-old Friesian calves became severely ill in summer (February) and after three days showed signs of anorexia, ruminal atony and tenesmus without passing faeces. The conjunctivae were infected and jaundiced. Two steers and two cows in the same paddock were unaffected. The calves had been observed eating blue heliotrope as well as kikuyu, white clover and the native grasses. It is suggested that the calves may have been less discriminating in their grazing as well as more susceptible to toxicity than the older animals. The calves were killed and postmortems done.

Livers of affected cattle varied from pale with nodular surface and fibrous texture (Case 1) to yellow with rounded edges and firm texture (Case 4). The gall bladder wall of Case 1 had fibrous nodular thickening. Jaundice was seen in Case 2 and Case 4. Ascites was present in the yearlings and calves of Cases 3 and 4.

Source: Aus Vet J Apr/87 V64 N4 p115-116 :Authors P.J. Keterer, PE Glover, L.W. Smith.

Eye infections

Any inflammatory disease of the conjunctiva can result in increased mucus production or decreased tearing. Either or both of these result in mucous accumulation or a mucoid discharge. The absence or obstruction of the nasolacrimal duct will prevent the mucus, normally produced, from exiting from the eye.

Mucus is produced by the goblet cells of the conjunctiva and is a normal component of the precorneal film on the conjunctival surfaces. It serves to protect and lubricate these surfaces and allow smooth eye and lid movement. A

mucus on each mucous along the interior lid margin also plays a role in trapping foreign material and removing it from the eye as this thread migrates to the medial center. Mucus is diluted by tears and leaves the eye via the nasolacrimal duct. Accumulation of mucus in the conjunctival sac or on the cornea, or a mucoid discharge from the eye implies either overproduction of mucus or failure of the mucus to leave the eye.

Source: Vet Professional Topics 1987 V12 No.3 - Drs. A.H. Brightman and L.C. Helper.

A handy hint on collecting blood samples

The following useful suggestion, "A Simple Method for the Collection of Bovine Blood Samples at the Slaughter House", comes from the Sept. '87 issue of the *Canadian Veterinary Journal*. It is contained in CVJ's letter to the editor section and is from Dr. Nicole Gregoire of Montreal. Dr. Gregoire is a veterinarian on the staff of Agriculture Canada.

Dear Sir:

The collection of bovine blood at the abattoir for brucellosis testing has traditionally been done at the time of bleeding, following stunning. This method of collection involves risks to the safety of the collector, given that floors are often slippery, and the sudden contractions of stunned animals.

The following will outline a technique for the collection of blood, which is both simple and safer to perform.

The method consists of collecting the blood from the subclavian vein after the carcass has been split. This vein is

located cranially to the first rib, near the manubrium of the sternum. It is often necessary to trim the fat, and occasionally the thymus located in the cervicothoracic region, in order to reach the subclavian vein. Between 6 mL of noncoagulated blood can be harvested from the subclavian vein if a tube is placed below the vein while the thoracic limb is being raised about 30cm. This procedure can be carried out on either half of the carcass. It appears that electric stimulation of the carcass applied a few minutes after the bleeding does not interfere with the collection of the blood from the subclavian vein.

In conclusion, this method offers several advantages. The procedure affords greater safety to the collector, since the collection of blood is performed at the time of final inspection instead of at the time of bleeding. As a result, the working area is cleaner, less slippery, and away from the splash of blood. It is also removed from the con-

tractions of the animal following stunning, and from the employee assigned the task of removing the horns. In addition the identification of the animal is conserved by matching the ear tag number to the appropriate tube. Following Canada's recent brucellosis free status and the resulting abolition of bovine brucellosis testing at auctions the number of blood samples collected at the abattoir will likely increase. This method may prove useful in meeting the increasing demand for serological testing at slaughter because it is easier and safer to perform.

I wish to thank Drs. R. Higgins, G. Morin and A. Bisailon for their assistance in the preparation of this letter and Dr. W.B. Hooker for his help in the translation.

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Water-damaged wheat causes nervous disorder

In October 1985 an outbreak of a fatal, tremorgenic, nervous disorder in pigs fed water-damaged wheat was investigated. It was found to have resulted from the ingestion of tunicamycin-like toxins in the wheat. Tunicamycin is the type compound of a group of toxic substances produced by soil-borne bacteria of the genera *Streptomyces* and *Corynebacterium*.

Tremors, ataxia and death occurred in pigs at Gulargambone, New South Wales. Seventy-five of 100 pigs of various age were affected and 48 subsequently died. The outbreak commenced four days after the pigs were offered decomposed, mouldy, water-damaged wheat grain as the sole feed. Moderately affected pigs displayed a fine, intermittent body tremor, pelvic limb paralysis and a mildly ataxic gait. Severely affected pigs lay in lateral recumbency and displayed marked body tremors that gradually increased in frequency and severity, leading to convulsions and death. The clinical signs were exacerbated by forced exercise and excitement. Some affected pigs vomited. The clinical signs lasted for two to four days before death occurred.

At autopsy the livers of affected pigs were swollen, congested and friable,

with contrasting areas of pale yellow and dark red parenchyma. The intestines were congested and there were small haemorrhages on the serosal surface of the stomach and small intestines of some affected pigs. The lungs were dull greyish-red in colour and congested. Small epicardial and endocardial haemorrhages were present in some animals. The other major organs appeared normal.

Tunicamycin-like toxins had apparently been produced in the wheat while it was in a temporary public storage bunker, prior to delivery to the piggery. The bunker had been constructed with concrete walls, a bitumen floor and a polyvinyl chloride sheeting

cover. It was loaded with 29,250 tonnes of wheat during the November-December harvest of 1983. During the three month period from November 1983 to January 1984, 333 mm of rain fell on the bunker. As a result, water ran under the cover and down the inside wall on one side. When the bunker was unloaded in 1985, approximately 140 tonnes of wheat from the floor in this area was classified as water-damaged, including 50 tonnes sold to the piggery. Excessive wetting would have allowed bacteria and fungi to multiply in the wheat while in the bunker.

Source: *Aus Vet J* Apr/87 V64 N4 p 127-128; Author C.A. Bourke.

Parapoxvirus infections in farmed red deer

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on the lips and noses of this group of hinds. They were first seen several days before scab samples were taken."

"In the outbreaks described above the lesions varied in distribution and severity. Mortalities occurred on two of the farms where skin lesions were extensive and secondary bacterial infec-

tions severe. Multifocal lesions were present on the velvet on three of the eight farms. This meant a considerable financial loss to the farmers who had affected deer as the damaged velvet could not be marketed. The estimated loss on Farm A was \$24,500."

Source: *NZ Vet J* Apr/87 V35 N4 p41-44

Lily of the Valley poisoning

The following is a letter to the editor (New Zealand Veterinary Journal):

Madam: We recently treated a goat poisoned by the lily of the valley tree. On Thursday the 30th of December, an adult Angora buck was presented with the following symptoms: projectile vomiting, ataxia, depression, excessive salivation, toxic mucous membranes, weak ruminal movements and a sub-normal temperature. The vomiting was spectacular and included numerous leaves of one species of plant.

Exploration of the paddock in which the buck had been browsing revealed two known poisonous plants - ngaio and foxglove. Although the latter was abundant, and had been eaten, the symptoms did not resemble digitalis poisoning. The paddock abutted a farm homestead against which was a lily of the valley tree (*Clethra arborea*),

planted as a specimen for decoration. It had been eaten, and the leaves recovered from the vomitus were obviously from it.

Lily of the valley tree is a member of the *Erica* family and therefore a relative of the rhododendron species. The signs of poisoning matched those of rhododendron poisoning.

The buck was treated with an antispasmodic, hyosine (buscopan, Boehringer Ingelheim); antibiotics; fluid and electrolyte replacer (vytrate, Beecham Veterinary Products); and a universal antidote (light MgO, activated charcoal and Kaolin). It made an uneventful recovery over a 24 hour period.

Signed - M.C. Gibb, Paraparau Veterinary Hospital, PO Box 183, Paraparau, New Zealand.

Source: NZ Vet J Apr/87 V35 N4 p59.

Branched onion weed poisoning

Branched onion weed (a species of the plant family Liliaceae) is indigenous to the south western regions of South Africa. It has become well established in the south west of Western Australia, where it is now recognised as a toxic hazard for grazing livestock. Disease in grazing livestock in South Africa has also been attributed to this plant. The disease is characterised clinically by a severe parietic syndrome. Animals appear to become affected over a period of weeks when there is a scarcity of alternate feed.

The following case history is interesting:-

"During March and April of 1982, a disease was investigated in a flock of 600 mixed-age Merino sheep grazing on a partially cleared coastal block near Lake Preston, 60 km south of Perth, Australia. The flock also had access to uncleared bush country, and vegetation in the cleared area consisted largely of branched onion weed and kangaroo apple (*Solanum cydoniifolium*). The sheep had been on the block for about 18 months and about 50 had died during the few months prior to consultation. Affected animals were first observed to lag behind the mob when driven and would stagger and collapse if chased. Eventually they became recumbent, but remained bright and alert until they died."

However, none of the affected sheep recovered, and all eventually died in recumbency."

Six affected animals were admitted to Murdoch University Veterinary Hospital for investigation. All were in a poor nutritional state, with wasting of the limb muscles. Four sheep were recumbent, one could stand but not walk and the sixth could walk but had a severe gait abnormality associated with extensor contraction. All sheep had a markedly increased respiratory rate (72 to 112/min) and two had urinary incontinence. They had little interest in food and continued to lose weight.

It was noted that there is some similarity to ovine Phalaris staggers, in which a neuromelanin pigment accumulates in neurons and severe disturbances of gait are seen. There is a strong suggestion that it is really a disease of poor management, and toxicosis occurs when the animals are forced to eat the plant in large quantities over several weeks. In South Africa, horses, goats, sheep, cattle and pigs have been affected by *Trachyandra*.

Source: Aus Vet J Apr/87 V64 N4 p 105-108 : Authors C.R. Hustable, H.M. Chapman, D.C. Main, D. Vass, B.H.G. Pearse and B.J. Hilbert.

Brucella Ovis

Brucella ovis causes epididymitis and impaired fertility in rams and sometimes abortion in ewes. It is found worldwide and is quite common in Australia and New Zealand. Attempts have been made to control the disease in many Australian states and in New Zealand, where it is the most common cause of epididymitis. (*Actinobacillus* is the next most important, while *Caryobacterium*, *Pasteurella*, *Staphylococcus* and *Streptococcus* cause sporadic disease).

Brucella ovis does not cause systemic disease in sheep but remains in the reproductive tract. It is usually passed from older carrier rams to younger susceptible rams venereally, usually prior to and during the mating season. However all ages are susceptible. Ewes become infected during mating, and compared with uninfected ewe they show increased returns to service, more abortions in late pregnancy, and the birth of weak or dead lambs near term. Generally the infection is eliminated from ewes before the next breeding season.

Not all infected rams become infertile or develop lesions. At first the lesions are soft and painful swellings usually at the tail of the epididymitis. These become localised hardened lesions which may obliterate the groove between the testes and epididymis on palpation. The testes may become fibrotic and atrophied in some cases. Either one or both testes can be affected. Semen from rams thus affected often contains inflammatory cells and *Brucella ovis*.

Some rams are asymptomatic carriers of the disease and thus pose a risk to all susceptible in-contact rams.

There is a voluntary scheme to accreditation ram flocks in New Zealand free from *Brucella ovis*.

Source: NZ Vet J V35 No.6 June 87.

Bovine Leukosis

In Newfoundland, Canada's largest island province, a study of bovine leukosis indicated a 9.3 percent prevalence rate in dairy cattle and a 0.5 percent prevalence rate in beef cattle. That study indicated a herd prevalence rate of 41 percent in dairy cattle and a 10 percent herd prevalence rate in beef cattle. A more recent report indicates a 5 percent animal prevalence rate and a 14 percent herd prevalence rate in dairy cattle.

Source: CVJ Sept/87; Cross-Canada Disease Report section; report by Dr. Hugh G. Whitney.

Liver Fluke infection in cattle

Following the recognition of the presence, in New Zealand, of the snail (*Lymnaea columella*) a highly efficient intermediate host of the liver fluke, *Fasciola hepatica*, further investigation demonstrated that the range of the parasite was expanding. During 1984 and 1985, reports of liver fluke infected cattle, detected at slaughter, were collected by the meat division staff of the New Zealand Ministry of Agriculture and Fisheries. Between August of 1984 and July of 1985 all properties, identified by slaughter examination as having liver fluke infected cattle, were contacted by a livestock officer. During telephone conversations farmers were offered information about liver fluke and asked some questions about herd management.

It was noted that infected dairy herds were mainly located in clusters, while the distribution of infected beef herds was more random. Of 34 dairy herd owners contacted, none were aware that the liver fluke was present on their properties. Out of 14 beef breeding owners, only three knew that they had liver fluke infection. Most of the farmers contacted in this study believed

that *F. hepatica* infection had no effect on production. Ross, a research worker, has stated that in cattle, which have a measure of resistance to fasciolosis compared with sheep, low or moderate infection levels resulted in so called "subclinical disease". This subclinical condition may or may not be recognized by the farmer. United States' reports suggest that losses due to fasciolosis, as a subclinical and clinical disease entity in cattle, may be greater than previously recognized.

Fasciola hepatica does cause liver condemnations, decreased livestock efficiency, reduced growth rate, lowered milk yield, the production of poor quality wool and meat, and infertility. In subclinical fasciolosis, particularly in cattle with a degree of resistance, significant production losses may be experienced despite the absence of overt clinical signs. In the light of these and other reports, it is apparent that production losses due to subclinical liver fluke disease in cattle may be more significant than is often assumed.

The geographical distribution of infected herds showed all the dairy herds to be in lower lying and/or swampy

areas, many of these properties having a relatively high water table and swamp. It was hypothesized that the distribution of infected properties must be closely related to the distribution of the intermediate host (the snail, *Lymnaea columella*). Pullan, et al, had made many isolations of snails from ponds frequented by ducks. According to Pullan, a number of workers have noted the dispersal of molluscs by wild ducks and other aquatic fowl. The Manawatu (a liver fluke region of New Zealand) has many areas frequented by ducks, so there must be considerable potential for the spread of lymnaeid snails by these means.

Many infected drystock cattle originate from traditionally high prevalence liver fluke areas in Hawke Bay or further north in King County and North Taranaki. Grazed on properties, which harbour the intermediate host, must eventually become sources of liver fluke infection for livestock grazing on these and nearby properties, to which the snails may migrate.

Source: NZ Vet J May/87. Extracted from a clinical communication by Dr. Bruce W. Faul.

Did you know that:

Over the long course of human history, the vast majority of mankind has been 'jobless'. By that, I do not mean that most men have been unemployed — certainly not. They have had to labour, and usually to labour diligently, to wrest a livelihood from the soil and the sea.

But their labour has not been organized as 'jobs'; work has not, until recent times, been separate from all the other aspects of life. Only in the last couple of centuries has the majority of men had to 'go to work'; only in that period has work been separated from home. 'Going to work' is no mere incidental arrangement; it is an aspect of social organization which symbolizes a profound change in the structure of western society and in the psychology of western man. Obviously, the separation of work from home did not occur simultaneously in all areas or industries, but steadily work became an autonomous activity, and in doing so there emerged a culture of work.

Source: Vet Practitioner Mar/87 V17 No. Extracted from "Whatever Happened to the Work Ethic?" by Dr. Bryan Wilson.

The "Leaning Tower of Pisa" in Italy was built in Italy in 1174. It is still inclined to elicit a response from visitors. Source: Insider's Report Nov/87.

Observations of Ivermectin toxicity in neonatal piglets

In an area of Southwestern Ontario, Canada, 13 piglets, four to seven days old, from three farms, were submitted for laboratory examination. All had histories of central nervous disorders after intramuscular injections of ivermectin. Clinical signs consisted of shivering, tremors and ataxia. Some piglets assumed a dog-sitting position, others were in lateral recumbency.

It was reported that between 1/10 ml and 1/4 ml of an ivermectin product, with a concentration of 10mg/ml, had been administered intramuscularly to each of the piglets. Laboratory tests confirmed that there were substantial levels of ivermectin in tissues.

The authors go on to note that although are no specific recommendations for ivermectin dosing of neonatal piglets, it seems to be a growing prac-

The Atlantic Veterinary College (Canada) is committed to devoting about 30% of faculty and staff effort to research and to extend knowledge.

tice in Ontario as part of a total herd treatment for the control of sarcoptic mange. This is usually done without veterinary supervision and farmers are likely using 6 ml or 12 ml syringes. Ivermectin has a wide safety margin in feeder swine. Experimentally ivermectin toxicity occurred in pigs injected with 100 times the recommended dose but not at 10 or 50 times. It is very possible, however, that the neonatal pig may be susceptible at much lower doses. Furthermore, unless a graduated 1 ml (tuberculin) syringe is used, and the agent further diluted with an innocuous carrier such as propylene glycol, the possibility of grossly overdosing neonatal piglets is great.

Source: CVJ Sept/87; Cross-Canada Disease Report section; report by Drs. S. Ernest Sandford and Ab Rehmulla.

The source of the items in this section is *CTVM's Newsletters Information Leaflets (TIL)* Courtesy of the Centre for Tropical Veterinary Medicine, Easter Bush, Scotland.

Arbovirus Infections

Antibodies reactive with Murray Valley encephalitis virus and Ross River virus, two pathogens of man, are frequently detected in the sera of Australian horses. Although both viruses are suspected to be pathogenic for horses confirmation is (1987) lacking, (TIL v22 1987 n10).

Buffalo Pox

Drs. K. Mitra and A. Chatterjee, of the Cattle Resettlement Project at Ganganagar, West Bengal and Maitri Research Laboratory in Calcutta respectively, studied the clinical response of six milkers milking buffaloes infected with buffalo pox, manifested by the appearance of pocks on the teats and udders. All the milkers sickened; the onset of cutaneous lesions was preceded by severe bodyache and high fever for 48 hours. Then macules appeared on the fingers used for stripping the teats during milking. The macules evolved into vesicles and then pustules over the next three to four days. The fever then abated and signs of healing were observed within seven days. (TIL v22 1987 n10).

Drought and Overstocking

It has been reported that, with indigenous African cattle under a traditional management system, in semi-arid central Mali calf birth weight was 16.6 Kg and growth rates to weaning at seven months averaged 185 grams per day. Cows did not reach mature weights (230 Kg) until after five years of age and work oxen did not achieve a mature weight of 297 Kg until after six years.

Over a seven year study period the decline in the mature weights of oxen was 4% per year, equivalent to about 80 Kg over the seven year period. For cows the decline was 2.7%, mature weights being about 40 Kg less in 1984 than in 1978. The slow growth rates, low mature weights, and reduction in adult size, are considered to be due to chronic overstocking on already denuded feed resources and to a decline in rainfall over the period. (TIL v22 1987 n14).

Rift Valley Fever

Although Rift Valley fever virus is regarded as being one of the most dangerous pathogens of animals and man, epidemics occur at relatively rare intervals. Nevertheless it poses a potential disease threat worldwide. (TIL v22 1987 n15).

Bovine Theileriasis in India

A 1987 study, of the incidence of *Theileria annulata* infection in cattle on four farms in India, indicated that:-

-Animals of all age groups could be carriers of the infection without any evidence of clinical symptoms.

-The overall picture was indicative of subclinical rather than clinical theileriasis.

-The epidemiological picture was one of enzootic stability with a high transmission rate of subclinical infection to the calves at a very young age. (TIL v22 1987 n11).

Goat Project in Malawi

The Centre for Tropical Veterinary Medicine was involved in a Goat Project in Malawi. Along with other activities the health of goats, kept extensively in villages, was compared with the health of those kept intensively in a breeding farm at Lifidzi. Project workers reported the following observations:-

"In village herds there were no infections of importance observed during a six month observation period. Parasitic gastroenteritis had been thought to be a potential problem, but an anthelmintic trial using fenbendazole showed no significant difference in weight gains between treated and control groups. More serious was the loss in weight experienced by adults and weaners during the rainy season. This was attributed to the practice of tethering which starts once fields are being cultivated. Other losses were caused by predation and road accidents."

"On the Lifidzi breeding farm several diseases were important. Coccidiosis killed over 20% of goats in one large weaner group and many others in the group failed to put on weight. That outbreak occurred in the dry season, obviously the infection built up in the enclosure where the animals were kept at night and during the midday. Caseous lymphadenitis (Corynebacterium pseudotuberculosis infection) affected from 20% to 25% of the Lifidzi herd at any one time, compared to a less than 2% incidence in village herds. Lameness was also more common at Lifidzi. Overgrown feet and other hoof deformities were seen but the most serious problem was manifest by chronic swelling of tissues above the hoof and occasionally arthritis of the hoof joints. This condition was not footrot, possible causes were considered to be trauma and non-specific infection associated with ticks, thorns, and the use of slats in the nightkhola. Source: CTVM Newsletter No. 44, 1987, pg. 2.

Windborne Myxomatosis

The phenomenon of dissemination of Arthropod-borne viruses by wind-borne infected arthropods is now firmly established in respect of viruses that multiply in the arthropods. Dr. Sellers, the former director of AVRI, Pirbright, and the leading authority of the phenomenon has now published an analysis of meteorological conditions that strongly suggest that the first outbreaks of myxomatosis in southeast England in 1953 resulted from wind carriage of infected mosquitoes, probably *Anopheles atroparvus*, from northern France. The transmission of myxomatosis virus by mosquitoes is mechanical and this wind-borne hypothesis opens up another dimension in the epidemiology of the disease and in the epidemiology of all arthropod-borne diseases. (TIL v22 1987 n13).

African Swine Fever

The application of restriction endonuclease analysis to the genome of African swine fever virus has pinpointed the origin of recent epidemics in Dominica (1978), Haiti (1981), Cameroon (1982) and Italy (1983). Strains from these epidemics are related to strains from Lisbon (1960) and Madrid (1978). The Iberian Peninsula, therefore, is the probable source. (TIL v22 1987 n16).

John's Disease

The incidence of clinical John's disease in dairy herds appears to be considerably less than it was in the past. This is possibly due to the change to Friesian cattle which have a lower risk of developing clinical disease than the Channel Island breeds. Changes in husbandry practices may also have been beneficial.

Recommended husbandry practices for use in cattle herds to reduce exposure of calves (the most susceptible age group) to infection are:

Suspected clinical cases should be isolated and a diagnosis obtained by bacteriological examination of faeces; confirmed cases should be slaughtered without delay; offspring of confirmed cases should not be reared; where possible, calves should be removed from their dams at birth and reared in a clean environment; colostrum and milk fed to calves must be collected hygienically and the use of milk substitute should be encouraged; water and food supplies should be kept free of contamination; young stock should not be mixed with adults until one year of age; pasture used for young stock should not have been used by adult cattle or sheep for one year; ponds and ditches should be fenced off; pasture

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should not be treated with fresh slurry or manure.

In beef suckler herds not all of these management practices are possible but vaccination has been effective in such herds and should be considered as a means of control. (TIL v22 1987 n9).

Japanese Encephalitis Prophylaxis in Man—

Denning, D.W. and Kaneko, Y. (1987). Should travellers to Asia be vaccinated against Japanese encephalitis? *Lancet*, 1, 853-854.

Japanese encephalitis, a serious viral infection of man (and horses), is endemic in the lowlands of Nepal, Bangladesh, the eastern states of India, Sri Lanka, northern Thailand, Malaysia, Vietnam, Indonesia, China, Korea and Japan. The case fatality rate in man in epidemics ranges from 10 to 50% and about half of the survivors are left with neurological damage. The causative flavivirus is transmitted by rice field-breeding mosquitoes of the genus *Culex*. It is maintained in migrating birds and amplified in pigs. Attempts in endemic areas to control mosquitoes with insecticides have been unsuccessful. Although immunization of pigs is effective the up-take in rural areas is poor. Consequently immunization in man (and horses) is the only practicable way to prevent the disease. Two vaccines are available for human use. Both are inactivated. One is a mouse-brain preparation made in Japan and Korea and the other is prepared from infected primary hamster kidney cells in China. The former is administered in two doses a month apart followed by a booster dose one year later. The Chinese hamster kidney vaccine is given in four doses. Side effects with both vaccines are negligible; less than 1% of the recipients had systemic reactions manifested as fever and the frequency of allergic reactions was less than 0.02%.

In the past, epidemics occurred in Japan in the summer monsoon season but nationwide vaccination introduced between 1965 and 1968 has almost eradicated the disease and cases today are usually only seen in unimmunized foreigners or people over 35 years of age. None of the other countries in which the disease is endemic have nationwide immunization programs. Consequently Drs. Denning and Kaneko of the Research Institute for Tropical Medicine, Alabang, Philippines recommend that visitors in the summer monsoon months, all visitors to rural areas, visitors staying more than one month, and business men regularly visiting

cities in the endemic areas should be immunized by receiving two or more injections, seven to 14 days apart, one month before travel. (The authors do not discuss procedures for visitors already immunized against yellow fever). (TIL v22 1987 n10).

Malignant Catarrhal Fever

Malignant catarrhal fever (MCF) is a clinicopathological entity which has been reported from virtually every country in the world. Outside Africa it can usually be associated with more or less close contact between presumed carrier sheep and susceptible indicator species. This 'sheep associated' (SA) disease has also been reported by many workers in Africa where the majority of cases are, however, known to be derived from contact with two species of alcelaphine antelopes, the blue or 'white bearded' and the black or 'white tailed' wildebeest. The use of the term 'African MCF' could, therefore, be misleading and the description 'wildebeest-derived' (WD) is accurate and more informative.

Whilst MCF is generally a sporadic disease, its incidence is probably increasing in farmed deer; the sheep-associated infection of cattle has, possibly, diminished recently. Wildebeest-derived disease is a problem in Africa where cattle and wildlife share pastures; it is also now reported more often in zoological collections and ranches with exotic ruminants.

The most important clinical manifestations of MCF are: sudden, persistent pyrexia; severe congestion, necrosis and erosion of nasal and oral mucosae; serous, later mucopululent, discharges; scleral and conjunctival congestion; centripetal corneal opacity; hypopyon; generalized enlargement of lymph nodes, etc.; muscular tremors; diarrhoea or dysentery (especially deer); dermatitis and laminitis.

The epidemiology of both the SA and WD forms of MCF is essentially the same world-wide. The great majority of outbreaks can be related to close contacts between the reservoir species, sheep or wildebeest and the indicator hosts; the reservoir animals show no clinicopathological evidence of infection although suspected MCF in sheep has been reported. The reservoir hosts are not capable of transmitting infection at all times, otherwise MCF would be a much more serious problem. With very few reservations it can also be said that transmission by contact between indicator hosts does not occur.

The majority of cases of MCF, whether of the SA or WD forms in cat-

tle, deer or exotic ruminants, can be readily recognized from the clinicopathological features. Hyperaemic cases, which are not infrequent in some of the species of deer, may not arouse suspicion because the characteristic discharges, necrosis of mucosae, skin and eye lesions, diarrhoea or dysentery may all be absent; nevertheless, typical histopathological changes may still be present.

All forms of the disease can be prevented by avoiding contacts between reservoir and indicator species, especially at times when the former are producing offspring. In practice, this can be difficult in some parts of Africa where there are no stock-proof fences and thousands of wildebeest competing with cattle for grazing and water; the occasionally catastrophic results of allowing cattle and other susceptible species to have close contacts with sheep and possibly other caprine reservoirs, emphasize the desirability of separating the two classes of host.

In the case of zoos and ranches with mixed exotic species, especially those threatened with extinction in the wild, it has been advocated recently that routine serological testing should be employed to avoid introduction or movement of potential carriers of virus and that notification of cases of MCF should be mandatory. It is also advocated that hand-rearing of calves of reservoir species, such as wildebeest, should not be undertaken to avoid the particular risks from these high level excretors.

In those parts of Africa where cattle share the grazing with large herds of wildebeest, particularly in the Masailand of East Africa and in Botswana, MCF vaccination could be an attractive alternative to restriction or elimination of the game. Attempts to develop attenuated vaccines or killed virus vaccines by empirical methods have, so far, been a failure or of limited success. (TIL v22 1987 n12-Plowright, W. 1986, *Revue Scientifique et Technique*, CID 5(4), 897-918).

Warning

Some dog owners really deserve to be put in the doghouse. They continue to risk human hydatids by unsafe dog feeding. Never feed uncooked offal (liver, hearts, kidneys, etc.) from any animal.

Issued by the National Hydatids Council.

Source: New Zealand Vet Script March/88

A bit of history

As with many other arts and sciences, the origin of veterinary science appears to be lost in the mists of antiquity. Consequently, it is difficult to determine precisely the era of its commencement. One can hardly imagine that veterinary science, any more than any other, had a sudden or spontaneous origin, or that it just happened. Therefore, (one must assume) that it came into being by some process of evolution.

Adam is not credited with being the founder of veterinary science, as he was essentially an agriculturalist. Abel, however, in his capacity of livestock manager apparently displayed some knowledge of animal breeding; exercising judgement in selecting the best animals from which to increase and multiply his flocks. He moreover kept his stock healthy by frequently transferring them to fresh pastures and clean water supplies, thus avoiding risks of losses from disease through soil and water contamination. Certainly, Abel rendered the necessary service required for any ailments or injuries suffered by his flocks. (Therefore there is a sound basis) to look upon Abel as the first man to practice anything in the nature of veterinary art.

According to biblical history, the earliest, as well as the most remarkable, instance of livestock concentration was that in Noah's Ark. That ship's company was afloat for 150 days in an extremely limited cubic space, yet the ordeal was survived without any losses, and so far as can be gleaned without any impairment of function or other untoward results of any consequence. To effect so successful an ending to the voyage of the Ark either Noah, himself, or some member of his family was not only endowed with such knowledge of veterinary science, as had been acquired since Abel's time, but also applied it in the care bestowed on these animals. Whatever knowledge of veterinary science, that was then possessed, certainly survived with the grounding of the Ark and the liberation of the livestock.

In a code of laws enacted in Babylon, in or about 2000 B.C., there was one which prescribed a scale of fees for doctors of oxen and asses, as well as appropriate penalties for illegal practices. Moses was aware of the communicability of animal diseases to his human flock. The Mosaic law lays down what the people should avoid in consuming food of animal origin. (Thus Moses laid the foundation for meat inspection.) Moses further protected his

people from the dangers of parasitic disease of animals by directing that the flocks of Jerico should be segregated from the residential areas occupied by people and (the flocks be) herded on that far side of the desert, thus providing an efficient and safe neutral or buffer area in between.

With the spread of civilization, we later find, from the records of medical and agricultural writers of the day, that in ancient Greece and Rome the veterinary art was ranked with that of human medicine and surgery. Thus it would appear that animal welfare was regarded of such importance in those old days that veterinary medicine was highly placed among the leading professions.

Many diseases with which we are familiar today were wellknown in Egypt in biblical times, as for example anthrax, tuberculosis, contagious abortion, rabies and others. All of these exist today in some part of the world, hav-

ing followed in the wake of civilization, migration and development even into countries thousands of miles overseas. As with all the arts and sciences which became highly cultivated down to that time, veterinary science, as such, became entirely lost or passed into oblivion with the decline and downfall of the Roman Empire. Whatever ultimate good may have been the outcome of that historical event, there can be no doubt that its effect on veterinary science was calamitous. We hear little or nothing of (veterinary science) again until soon after the beginning of the iron era, when, with the discovery of that now universally used metal, the farrier came into being as a shoer of horses, and through such activities, though in a measure somewhat crude and primitive, the advisor on all animal ailments and injuries.

Source: *Aus Vet J* Feb/88. Historical title - author Colonel E.A. Kendall (1930).

Veterinarians have other interests

Dr. John Holt of Sydney, Australia, is the current president of the World Small Animal Veterinary Association. He is also a world class rifle shot, having represented Australia at the 1958 World Championships and the 1960 Olympics.

Professor Doug Blood of Werribee, Australia, has made a generous donation to the Companion Animal Health Foundation (Australia). He has assigned all future royalties from his book 'Veterinary Law: Ethics, Etiquette and Convention' to the Foundation.

Source: *Aus Vet J* Feb/88

Charles Darwin's comments on a 'Rabies' outbreak. Quote: -

"In 1835 in the Valley of Copiapo, in Chile, an order was issued that all stray dogs should be killed and we saw many lying dead on the road. A great number had lately gone mad, and several men had been bitten and died in consequence.

On several occasions hydrophobia has prevailed in this valley. It is remarkable thus to find so strange and dreadful a disease appearing time after time in the same isolated spot. It has been remarked that certain villages in England are in like manner much more subject to this visitation than others.

Dr. Unanue states that hydrophobia was first known in South America in 1803; this statement is corroborated by Azara and Ulloa having never heard of

it in their time. Dr. Unanue says it broke out in Central America and slowly travelled southward. It reached Arequipa in 1807, and it is said that some men there, who had not been bitten, were affected as were some others who had eaten a bullock which had died of hydrophobia. At Ica forty-two people thus miserably perished. The disease came on between twelve and ninety days after the bite; and in those cases, where it did come on, death ensued invariably within five days. After 1808 a long interval ensued (in these regions) without any cases."

Source: *Journal of Researches During the Voyage of H.M.S. Beagle*.

Did you know that:

The neem tree, by virtue of its drought tolerant qualities and its need for little care after planting, forms an integral part of the Sahelian ecosystem. Neem oil contains an active ingredient which protects against a variety of insects and pests both in the field and in storage. Other parts of the tree contain chemicals active against soil insects and nematodes. In India commercial products, such as soap and toothpaste, are manufactured from neem oil.

Source: *Senelaa* Apr/87

COMMONWEALTH

The Commonwealth is a voluntary association of independent sovereign states, consulting and co-operating with each other in the interests of all their peoples and in the promotion of international understanding and world peace.



Head of The Commonwealth, Her Majesty Queen Elizabeth II

Unity in diversity

One billion people live in the modern Commonwealth. They make up a quarter of the world's population. They include people from a few of the world's rich countries and many of its poorest. They live on every continent, some in very large and others in very small countries. They have different languages, cultures, religions, races and ways of living.

Membership of the Commonwealth, limited to independent countries, rose to 46 in 1981. Some other countries, which will qualify for membership when they gain independence, are associated with it.

The Commonwealth is one of the world's strongest international groupings. Membership is voluntary. Member nations work together in such fields as agriculture, industry, science, education, health and law. The Commonwealth also provides a forum for them to act together on world issues. Examples of this are its role in Zimbabwe's independence and its work to advance the North/South dialogue (a dialogue to find ways rich and poor countries can work together to combat poverty and underdevelopment).

Common Aims

In 1971, when Commonwealth Presidents and Prime Ministers met in Singapore, they drew up the Declaration of Commonwealth Principles, which sets out their allegiance to world peace, individual freedom, racial equality and national self-determination. They also agreed to work to reduce the inequalities of wealth in the world, to try to broaden world trade and make its terms more fair, and to encourage development in poor countries. This declaration was reinforced by the Lusaka Declaration on Racism and Racial Prejudice (1979) and the Melbourne Declaration (1981) on the North/South dialogue.

Working Together

Every two years, Commonwealth Presidents and Prime Ministers gather for a week of intensive, informal talks. Last year they met in Australia; they meet in India in 1983. At these meetings, leaders discuss world issues and agree on programmes of co-operation. Ministers of finance, education, law and health also meet regularly.

These meetings have set up a number of Commonwealth programmes to enable countries to share resources and

skills. The Commonwealth Secretariat administers many of these programmes. The Commonwealth Fund for Technical Co-operation (CFTC) which functions as part of the Secretariat assists developing countries in their social and economic progress. The CFTC supplies experts, most of them from developing countries, in many fields. It also helps people from developing countries to receive training in other such countries, and it has special units to promote exports and industrial growth.

The Secretariat is also active in international and economic affairs, and has programmes in education, law, health, public management, youth, science, food production and rural development, women's role in development, and information.

Specialists

Other agencies serve co-operation in science, agriculture, telecommunications and other fields. Many non-governmental organisations link people in different walks of life: parliamentarians, journalists, lawyers, nurses, surveyors, librarians. The Commonwealth Foundation, set up by governments, assists links within the professions.

The Commonwealth has no formal structure or constitution. Queen Elizabeth is the symbol of the association and as such head of the Commonwealth.

Information on membership

Commonwealth membership has remained at 49 since January 1984 when Brunei Darussalam became a member. Twenty-six member countries are republics; 18 have Her Majesty Queen Elizabeth as Head of State and five are monarchies with their own sovereigns. All members accept The Queen as a symbol of the free association of independent states and, as such, Head of the Commonwealth.

Nauru and Tuvalu are special members; they are entitled to participate in all Commonwealth activities but do not attend pan-Commonwealth summits.

Only independent countries are members, but the Commonwealth also embraces the self-governing states and dependencies associated with members. These countries, which together have about six million people,

take part in many Commonwealth activities, including programmes for technical co-operation.

Members

Antigua and Barbuda, Australia, Bahamas, Bangladesh, Barbados, Belize, Botswana, Britain, Brunei Darussalam, Canada, Cyprus, Dominica, Fiji, The Gambia, Ghana, Grenada, Guyana, India, Jamaica, Kenya, Kiribati, Lesotho, Malawi, Malaysia, Maldives, Malta, Mauritius, Nauru, New Zealand, Nigeria, Papua New Guinea, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Seychelles, Sierra Leone, Singapore, Solomon Islands, Sri Lanka, Swaziland, Tanzania, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Vanuatu, Western Samoa, Zambia, Zimbabwe.

Source: 1987 Report of The Commonwealth Secretary-General.

Advertising Space Available Commonwealth Circulation

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Structure of Foundation Fellowships

The following is reproduced from an article on the initiatives introduced by the Commonwealth Foundation, which appeared in the October 1987 edition of 'Commonwealth Currents'.

"Another initiative of the Foundation which is about to enter its fourth year is its scheme of Fellowships for the Promotion of Commonwealth Understanding. Twelve fellowships are awarded each year to outstanding individuals who are in a position to influence others. They are drawn from the professions and from governments, and take part in a one-month programme. This is structured to enable them to get an informed view of the major issues addressed by the Commonwealth, the Commonwealth's contemporary role, and the working role of important Commonwealth organisations, both official and unofficial.

Activities under the programme were initially limited to Britain, but this year a start was made in combining activities in Britain with the opportunity to follow a similar programme in another member country - India. The 1988 Fellows will spend two weeks in Britain followed by two weeks in either East Africa or South East Asia.

Nominations for the fellowships are invited by the Foundation from a wide range of Commonwealth professional bodies, NGOs and Commonwealth official organisations. The age range for nominees is 30 to 50 years.

Since it was started, the Queen has taken a keen interest and has on each occasion received the Fellows at Buckingham Palace. The programme in London includes a visit to the Secretariat and a discussion with the Secretary-General.

The programme in India included a meeting with the Vice-President, a discussion with senior officials at the Ministry of External Affairs on Commonwealth affairs, and a two-day seminar on the working of parliamentary democracy in India.

Those selected for fellowships in the past three years have been drawn from a wide variety of professional backgrounds. The programme allows the fellows opportunities for contact with professionals in their own fields. Interaction among the fellows themselves is seen as an important part of their experience."

The CwVA has not yet been successful in its nominations for these Fellowships, probably largely due to the fact that the nominations sent to its Secretary tend to be too late.

The Foundation usually calls for nominations about July for awards for the following year. Different countries are asked for nominations each year but these are not known until nominations are sought.

In order to be on time with CwVA nominations, national associations should identify possible nominees and submit their names to their Regional Representative well in advance of the call for nominations in order to allow time to submit the nominations to the CwVA Secretary.

The fact that we will not know until later which countries are to be asked to provide nominations is irrelevant if we have a possible nominee from each association.

Give the matter some thought; a veterinary surgeon could make a valuable contribution to this programme as well as deriving benefit from their involvement.

J T Blackburn
5.11.87

Marlborough House - a commonwealth centre

Sir Christopher Wren was commissioned to build Marlborough House for the first Duke of Marlborough, but it is to the latter's Duchess, Sarah, that the building owes its existence. The idea of a town house was hers and it was she who secured a lease of the site from Queen Anne and chose Sir Christopher Wren as her architect in preference to Sir John Vanbrugh, who was then building Blenheim Palace for the Duke. When she fell out with Wren and dispensed with his service she herself supervised the completion of the house. It was, moreover, the London house of her long widowhood and it was there that she died in 1744.

The Duchess herself laid the foundation stone in 1709 and the house was finished in 1711. The actual design was probably drawn out by Christopher Wren, the younger, under the supervision of his father. It was a simple, dignified design, almost plain, and the only bravura was the splendid series of historical paintings of the Duke's battles which lines the walls of the central saloon and the staircases. The house was built of red Dutch bricks, brought to

England as ballast in the troop transports that had carried soldiers for the Duke's army in Holland.

The Dukes of Marlborough occupied the house until 1817. Following the marriage of Princess Charlotte, only daughter of the future King George IV and heir presumptive to the throne, to Prince Leopold of Saxe-Coburg-Gotha in 1816, Marlborough House was given to them as their London home. After the Princess's death Prince Leopold continued to use Marlborough House until he became King of the Belgians in 1831. In that year King William IV came to the throne and Parliament provided that his consort Queen Adelaide should have Marlborough House for life in the event of her widowhood. After the King's death the Queen Dowager spent much time at Marlborough House and it was here that she gave a wedding banquet after the marriage of Queen Victoria and Prince Albert. Shortly after the death of Queen Adelaide the house was settled on Edward, Prince of Wales (later King Edward VII) with a view to its becoming his official residence on his reaching the age of 18.

Meanwhile the building was put to various public uses. The Vernon and Turner collections of pictures - part of the National Collection - were exhibited on the ground floor. Later, the Government School of Design and the Department of Practical Art (by-products of the movement which led to the Great Exhibition of 1851) were granted accommodation in the rest of the building.

Extensive alterations were necessary for the occupancy of the Prince of Wales in 1863 and those were planned by Sir James Pennethorne, chief architect of the Office of Works. The main effect of Pennethorne's alterations were to enlarge the principal rooms by knocking two or even three into one, providing extra accommodation in a northern extension and heightening the building.

After the accession to the throne of Edward, Prince of Wales, the house was allotted to his second son, the Duke of York, who soon became Prince of Wales (and eventually King George V), the new occupation beginning in April 1903. On the death of King Edward VII,

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Marlborough House - a commonwealth centre

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his widow Queen Alexandra returned to Marlborough House. Queen Mary, in turn, moved to Marlborough House on the death of King George V in 1936. She died there in 1953.

At the Commonwealth Economic Conference in Montreal in September 1958 the British Government offered to provide, for the many Commonwealth activities and meetings which are held in London, suitable premises which might be regarded as a Commonwealth centre. This suggestion was welcomed by the conference, and in February 1959 the Prime Minister announced in the House of Commons that Her Majesty The Queen, who had shown a close personal interest in this project, had graciously placed her Palace of Marlborough House at the disposal of the Government, so that it might be available for this purpose.

Few structural alterations were needed but some adjustment and modernisation was required to adapt the building to its new purpose, and new furnishings and equipment were installed. The initial cost of adapting the building was met by the British Government, who also bear the cost of maintenance. The Governments of the 12 countries then members of the Commonwealth each presented six chairs for the main conference room.

On 28 March 1962, Marlborough House came into use as a Commonwealth centre.

Commonwealth Conferences

The main purpose of Marlborough House is to serve as a centre for Commonwealth meetings and other activities in London. The most important of these meetings are those held by the Commonwealth Prime Ministers. Sixteen such meetings, which have replaced the more formal pre-war Imperial Conferences, have been held since 1944. The first and only meeting so far to have been held outside London was that at Lagos in January 1966. The 1962 Commonwealth Prime Ministers' Meeting was the first to be held at Marlborough House.

Commonwealth Organisations

The Commonwealth Secretariat, given final approval at the Commonwealth Prime Ministers' Meeting in 1965, has its headquarters in Marlborough House. The Secretariat, under The Secretary-General, Mr. Arnold Smith, makes preparations for the Commonwealth Prime Ministers' and

other Ministerial meetings and circulates factual information on international affairs of interest to Commonwealth members. It performs a similar function in economic and social affairs and assists with the co-ordination of Commonwealth aid projects.

The Commonwealth Foundation, set up at the same time as the Secretariat, also has its headquarters in Marlborough House. Its Director is Mr. G. W. St. J. Chadwick and its object is to increase interchanges between Commonwealth organisations in professional fields.

The headquarters of the Commonwealth Education Liaison Committee, which was set up in 1959 as a result of a recommendation of the Commonwealth Education Conference, is at Marlborough House. The committee is composed of representatives of all member countries with a representative of the United Kingdom dependencies, and provides a forum for consideration at the policy level of measures for Commonwealth co-operation in education. The Commonwealth Education Liaison Unit, which was set up in 1960 under the general direction of the committee to act as a centre of reference on Commonwealth educational co-operation has now been integrated with the Commonwealth Secretariat.

The Association of Commonwealth Universities has a branch office at Marlborough House which acts as a secretariat for the Commonwealth Scholarship Commission in the United Kingdom and assists overseas universities in the Commonwealth in finding suitable teaching and research staff. The Commonwealth Scholarship Commission is the statutory body which administers the Commonwealth Scholar-

ship and Fellowship Plan in the United Kingdom. The plan, as agreed by Commonwealth Governments at the Commonwealth Education Conference held at Oxford in 1959, created over 1,000 postgraduate awards at any one time throughout the Commonwealth. Of this total the British Government agreed to provide half, and in 1966, expanded the plan by providing an additional 100 medical fellowships. Canada in 1968, announced a 20 per cent increase in the number of awards it would make under the plan.

Arrangement of Marlborough House

Marlborough House stands to the east of St. James' Place, between the Mall and Pall Mall. The main central part of the house now provides on the ground floor a suite of conference rooms for Commonwealth Prime Ministers' meetings and other Commonwealth meetings, together with secretariat offices, a reference library on Commonwealth subjects, and reception rooms. On the upper floors, there are offices for Prime Ministers and their accompanying delegations and staffs. Organisations connected with the Commonwealth occupy most of the two wings of the building.

There is a small Commonwealth Information centre and Reading Room, open to the public, as well as a larger Press Room on the ground floor of the West Wing. The Press Room can accommodate Commonwealth, foreign and home press.

When not in use for Commonwealth conferences and meetings, the assembly and conference rooms and other former state apartments are open to the public at stated times from Easter to October.

Information and resource services

The Commonwealth Institute has announced changes in its library and information services, following recommendations made in a Foreign and Commonwealth Office review of the Institute's work. To provide a more effective information service, and to meet increasing demands for educational resources, the library services are being restructured.

From 1 November 1987 a new Educational Resource Centre will provide a loan service aimed primarily at teachers seeking material about the Commonwealth. Other individuals

working with young people or within education may borrow the resources which include books, slide packs, videos and posters. It is hoped that in the future, artefacts from around the Commonwealth will also be available for loan. This new development means there will not be a general loan service from present Arts and Literature or Support collections. Publications suitable for use in education will be incorporated into the new service and reference copies will be available to visitors. The Information Centre will

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CwVA represented at CVO Conference

Close and friendly relations exist between the President of the CwVA and the CVO of the United Kingdom and, as a result, there is a growing spirit of cooperation between those two organizations. The CwVA was invited to send a representative to the March/88 Conference of Commonwealth CVOs which was held in Kuala Lumpur, Malaysia. Dr. W.J. Pryor of Australia, CwVA Regional Representative for the Australasia Region, represented the CwVA. A full report will be published in due course, in the meanwhile Dr. Pryor writes:-

"At the request of the President of the Commonwealth Veterinary Association, I represented the CwVA at the Conference of Commonwealth Chief Veterinary Officers, held in Kuala Lumpur, Malaysia, March 8 - 11, 1988. There were approximately 30 delegates, including myself and the representative of the ODA. In addition some 20 observers were present.

Origin of Conference: The meeting was advised that this was the second such conference. At the opening ceremonies, it was stated that the genesis of the present meeting came from the efforts of Howard Rees, the CVO of the United Kingdom.

Organization: The conference program

followed closely that set out in the official program. Dr. A. Mustafa, of Malaysia, was elected chairman, and Dr. W.H.G. Rees, of the UK, vice chairman. The program included one particular item which the CwVA has for some time been advancing with vigor, namely "The training of veterinary and support staff". Other topics included animal health status, import controls, contingency planning and disease control, laboratory techniques, meat hygiene, veterinary marketing, and organization of veterinary services and cooperation.

The Social side of the conference was quite comprehensive and encouraged an abstemious approach. A half-day inspection of cultural venues and a field visit to veterinary and livestock centres greatly enhanced the value of the visit, to Malaysia, for the delegates.

Input by the CwVA Representative: I was invited to address the Conference for 15 minutes on the second day. I used the time to attempt to inform the delegates of a number of CwVA initiatives and interests. These included greetings from CwVA President Blackburn, CwVA organization and publications, forward planning and future programs, training programs, Merck Index distribution, Regional Conference in Solomon Islands in June of 1988 and possible links with CVOs.

I stressed that, unlike the CVOs, the CwVA had a continuing and active management structure, some continuity of funding including member association subscription. I also pointed out that it would be very wasteful for the CVOs to ignore such resources and proceed with duplications. I assured the Conference that the CwVA would offer a maximum of cooperation. Copies of the most recent edition of the CwVA News and the program for the Solomon Island Conference were left for all the delegates.

Appreciation: The host country, Malaysia, was sincerely thanked for the major effort it made to ensure the success of the conference. Although my visit was somewhat rushed, I appreciated the opportunity to revisit Malaysia and to represent the CwVA. Omission of CwVA representation would have been most unfortunate and the Commonwealth Foundation is accordingly thanked, most sincerely, for providing the means for this representation.

As CwVA representative, I appreciated the recognition shown to the Commonwealth Veterinary Association, in being seated, at his invitation, next to the Conference Chairman in the official photo. Dr. Mustafa, the chairman and a member of both the Commonwealth
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== COMMONWEALTH ==

Commonwealth food crops

One in three of the Commonwealth's billion people do not get enough to eat, and over 40 of its 49 member countries are net importers of food. Yet the Commonwealth produces a great variety of foods, incorporated into many cuisines. There is also important trade in food, many countries earning the cash to buy fuels or machinery from its sale. For all these reasons, growing more food and distributing it more fairly are important priorities of the Commonwealth.

Cereals are the biggest food group. Rice, grown in India since the earliest times is the crop of The Commonwealth Asia, and is also grown in Africa and the Caribbean. Maize leads the field in Africa, and wheat, the world's widest-grown grain, covers vast acreages in Canada, India, Britain and Australia.

Other important staples are the root

crops cassava, potatoes, sweet potatoes and yams, and the fruit, banana. These have less protein than grains, but are good high-energy foods, cooked into many different dishes. Bananas (dessert, or fleshy types cooked with spices) are among the oldest cultivated fruits and have travelled around the tropical world from their original home in Indo-Malaya.

Coconut, groundnuts, peas and beans, are seeds rich in protein. Coconut (providing milk and meat) is, like groundnuts and bananas, an important export of many Commonwealth countries.

Commonwealth countries are also among the world's major producers of tea, coffee, cocoa, sugar and spices, products adding taste and flavour to meals all over the world.

*Factual
 information
 easily available*

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continue to provide factual information about the Commonwealth, its countries, people and cultures.

The Commonwealth Institute is visited by 400,000 people a year and its Outreach services reach a further 100,000 around the country. In November 1987 the Institute celebrated its 25th birthday with a special visit from Her Majesty Queen Elizabeth II.

For further information please contact Rosalyn Fry, Head of Press and Marketing, Commonwealth Institute, Kensington High Street, London, W8 6NQ, Telephone 01-603-4535.

Involvement in fish diseases

As more and more veterinarians become involved in fish production, it is of interest to note that in 1986 Dr. Mike Nunn (Papua New Guinea) attended, under the sponsorship of FAO, a workshop on ulcerative diseases of fish. The workshop, held in Bangkok, Thailand, was the culmination of survey work by Ron Roberts and a team from the University of Sterling's Institute of Aquaculture. These workers had been investigating the aetiology and pathogenesis of ulcerative diseases of estuarine and freshwater fish that had occurred throughout Australasia and South East Asia in recent years. Major outbreaks occurred in 1975-76 in the Purari River (PNG) and in 1962-83 in the Sepik River (PNG). Sporadic cases have been reported from those same areas in more recent years.

Source: PNG Newsletter Aug/86.

Interesting observations

In a discussion on indicators of animal welfare Dr. D.M. Broom (Univ. of Cambridge) notes the following:

- 'Welfare of an individual' may be defined as 'its state with regards to its attempts to cope with its environment'.

- Failure to cope with the effects of an environment may involve increased mortality, a reduction in numbers of offspring surviving, or a delay in the production of offspring.

- The welfare of most diseased animals is poor and disease reduction is a most important part of welfare improvement.

- Mortality due to disease sometimes occurs independently of the quality of living conditions, but susceptibility to disease may be increased if difficult conditions result in impairment of immune system functioning.

- Behavioral attempts at coping with difficult conditions range from excessive amounts of normal regulatory behavior to stereotyped (behavior) and self-inflicted injury. Both abnormal excesses of certain activities and abnormal inactivity or lack of responsiveness may be indicators of poor welfare.

- Individuals vary in the methods which they use to cope with difficult conditions, any single indicator can show that welfare is poor. Consequently, in the assessment of systems for keeping animals, a wide range of welfare indicators should be used.

Source: Editorial PNG Newsletter Aug/86.

Malaysia has two

In Malaysia the veterinary profession is represented by two associations, the Malaysian Veterinary Association and the Association of Veterinary Surgeons of Malaysia. A merger into one new association is being seriously considered.

The Malaysian Veterinary Association's 1987/88 executive committee are:-

President: Prof. Dr. Syed Jalaluddin Syed Salim, Vice President: Dr. Shahirudin Shamsudin, Hon. Secretary: Dr. Abdul Aziz Saharee, Hon. Treasurer: Dr. Lim Yew Keng, Committee Mbrs: Dr. Ismail Mohd Noor, Dr. S. Vellayan, Dr. Chong Fan Heng, Dr. V. Ananthan, Dr. G. Baskaran, Dr. M. Sivamoorthy.

The address of the MVA is: c/o Balai Iktisias Malaysia; BIM Bldg; 51B; Jalan SS 21/56B; Damansara Utama; 47400 Petaling Jaya, Malaysia.

Important notice

The Foundation for Continuing Education of the New Zealand Veterinary Association now has available a comprehensive list of publications covering a wide range of topics. The Foundation published its first book in 1983. For information about available books and prices write to: - The New Zealand Veterinary Assoc., 6th Floor 203-209 Willis Street, PO Box 524, Wellington, New Zealand.

New Zealand

Skin Condition in Farm Animals

The wet spring and early summer has had its effect on the skin of animals, particularly young sheep and goats. Dermatophilosis has been the most common condition and has been recorded in cattle, goats, horses and sheep.

Skin diseases appear to be more florid on the West Coast. On one property, with lambs and kids, a combination of dermatophilosis and scabby mouth was diagnosed in both species:

- In lambs, scabs were present around the mouth and on the coronets of the forefeet

- In goats, large scabs were present on the coronary band, and extended up the legs. The animals were in poor condition.

Dermatophilosis was seen in histological sections and orf-like particles were seen by electron microscopy.

Australasia council members

Australia - W.J. Pryor, Fiji - N. Tabunakawai, Malaysia - Ahmad Mustaffa B.H.J. Babjee, New Zealand - E. Snorrdreg, Papua New Guinea - M. Nunn, Singapore - Giam Choo Hoo, Solomon Islands - G.K. Polke, Tonga - M.Z. Hussain.

Problems with copper injection

Problems can occur with supplementing copper parentally. A 4 year old cow on the West Coast developed a fatal *Clostridium chauvoei* cellulitis at the site of the intra-muscular injection. A 4 year old deer at Waimate died 1 day after being given a copper EDTA preparation. She showed jaundice, haemosiderosis and nephrosis. Source: NZ Vet Script March/88 MAF News.

Did you know that:

During the period from 1976 to 1986, 557 bats were diagnosed rabid in Canada. The disease has been reported in several species of bats in Canada, the most common ones being the big brown bat, the silver-haired bat, the hoary bat, and the little brown bat.

Can Vet J Dec/87

Swine fever was reported for the first time in Sri Lanka in April 1983. That outbreak killed about thirty percent (30%) of the Island's estimated pig population of ninety-four thousand (94000) within a period of four (4) months.

Source: The Sri Lanka Vet Jour. Vol. 31. p.50.

CwVA at Conference

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CVOs and the CwVA, clearly understand the role of the CwVA and of the Commonwealth Foundation. This was, I felt, an excellent portent for future cooperation."

W.J. Pryor,
Regional Rep.
Australasia.

Editor's Note: A full report was received in time for this edition and is included.

Veterinary organizations in UK

When describing the British Veterinary Association it is necessary to give a brief history of the profession to indicate why there are two major organizations dealing with veterinary matters in the UK - the Royal College of Veterinary Surgeons (RCVS) and the British Veterinary Association (BVA).

Although these bodies liaise and work closely together in all veterinary matters, their functions are very different and it is important to distinguish between the two.

The RCVS is a statutory body, created by Royal Charter with specific responsibilities in maintaining professional and ethical standards, which include the administration of the Veterinary Surgeons Act. Membership of the RCVS is obligatory for anyone wishing to practise veterinary surgery or medicine.

The BVA on the other hand is a voluntary body, created to look after the professional interests of its members who number approximately 70% of those on the RCVS register.

ROYAL COLLEGE OF VETERINARY SURGEONS

The veterinary art has been practised in the United Kingdom since earliest times. The ability and popularity of the people who practised the art fluctuated over the centuries until the 18th century when the veterinary art fell into disrepute and a group of interested and influential people decided to establish a veterinary school. The first school opened in London in 1791 and is now known as the Royal Veterinary College. A second veterinary school was opened in Edinburgh in 1823 now known as the Royal (Dick) School of Veterinary Studies.

Towards the middle of the 19th century it became obvious that it was necessary to exert some form of control over people who called themselves veterinary surgeons and to ensure maintenance of standards of instruction, otherwise the profession would fall into disrepute.

Graduates from the two veterinary schools joined forces and petitioned the Queen for a Royal Charter, incorporating them as the Royal College of Veterinary Surgeons. This Charter was granted in 1844 and declared the practise of veterinary medicine to be a profession; and further declaring that the members of the College "solely and exclusively of all other persons whomsoever shall be deemed and taken recognized to be members of the said profession, or pro-

fessors of the said art, and shall be individually known and distinguished by the name or title of VETERINARY SURGEON".

The Charter provided for the governing of the veterinary profession, election of Council and Officers, examination of the students of the existing veterinary colleges, graduands to be Members of the Royal College of Veterinary Surgeons.

Various supplemental Charters have been issued since the original Charter to bring the governing of the profession into line with modern developments.

Four more veterinary schools have been founded since the RCVS was created:-

Glasgow 1862

Liverpool 1873 (Originally the New Veterinary College, Edinburgh, moving to Liverpool 1904)

Bristol 1949

Cambridge 1949

For over 100 years from its inception the Royal College held all the professional examinations for those wishing to qualify as veterinary surgeons - no matter at which school the candidates had studied. Since the Veterinary Surgeons Act of 1948, however, professional examinations have been conducted by the universities with the College entrusted by statute with the duty of visiting the University veterinary schools and ensuring that proper standards are maintained. The College has continued, however, to conduct examinations for veterinarians from overseas wishing to practise in this country, and also postgraduate examinations for the Fellowship of the Royal College, for the Diploma in Veterinary Anaesthesia and the Diploma in Veterinary Radiology. The College also maintains the profession's principal library in the country and deals with several thousand enquiries every year.

The Council which was set up by the original Charter is now composed of 45 members, made up as follows:

- Members elected by members of the profession - 24,
- Members representing universities with veterinary schools in the UK - 12,
- Members representing the Irish veterinary schools (2); and the Minister for Agriculture and Fisheries for the Republic of Ireland (1); members elected by the profession in the Republic of Ireland (2) - 5;
- Members appointed by the Privy Council (i.e. by Government). These normally consist of Government's Chief

Veterinary Officer, one farmer or businessman and two members of Parliament - 4,
- Total - 45.

From this it will be seen that those members of the College Council elected by members of the profession themselves are in a clear majority. This is of major significance. It is also not without significance that several members of the Council have been Presidents of the British Veterinary Association, with which the College has the most cordial relations. It is fair to say that acceptance of the College's authority on matters for which it is responsible is largely due to the democratic and widely representative nature of its Council. The Council, incidentally, elects the President of the Royal College from among its own members.

There is also little doubt that the authority of the College in ethical matters extends beyond the veterinary surgeon in practice. Veterinary surgeons in commerce and in Government service are certainly not above this authority. Whenever Government has a new plan which involves veterinary surgeons, it will discuss the ethical implications with the College, in the same way as it will discuss the financial and other implications for the practising veterinary surgeon with the British Veterinary Association. Commercial companies, too, with new schemes involving veterinarians will discuss them with the College if there is any fear that it may be said that their veterinary surgeon employees are acting other than in accordance with the ethics of the veterinary profession. Thus the College believes in trying to persuade members and others to adopt correct attitudes rather than contenting itself with taking action after the offence has occurred. To use a veterinary analogy, the College believes in as much preventive medicine as possible.

Members of the profession are encouraged to adopt similar attitudes in respect to each other. Veterinarians in Government service consult widely and on equal terms with their colleagues in private practise - either as individuals or through the British Veterinary Association. The links between the RCVS and BVA itself are further strengthened by formal and informal meetings, for example there are joint RCVS/BVA committees for dealing with European Community Affairs and Continuing Professional Development.

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**UNIVERSITY OF EDINBURGH
CENTRE FOR TROPICAL VETERINARY
MEDICINE
Diploma/MSc POSTGRADUATE COURSES**

The following courses will be available

- (i) **TROPICAL VETERINARY MEDICINE.** This course is designed for field veterinarians aiming at the senior and middle ranks of veterinary services in developing countries. It deals with the prevention and control of animal diseases at regional and national levels and has a strong epidemiological component. Related aspects of animal productions and veterinary public health are also covered.
- (ii) **TROPICAL VETERINARY SCIENCE.** This is a course for veterinarians, which is mainly concerned with the laboratory diagnosis of diseases of animals including poultry and wildlife in developing countries. It also includes the organization and management of tropical veterinary laboratories and the epidemiology of the major diseases of animals.
- (iii) **TROPICAL ANIMAL PRODUCTION AND HEALTH.** This course which is organized in conjunction with the University's Department of Agriculture is open to agriculture or veterinary graduates intending to specialize in animal production in developing countries. It provides a comprehensive review of the main constraints to animal production likely to be encountered in these countries with an indication of how they may be overcome.

Candidates are registered as Diploma/MSc students. All students take the same course from October to June. Students who attain a required standard in the June examination may continue for a further 3 months during which time they prepare and present a dissertation for the MSc degree. Students who do not reach this standard but who achieve the necessary marks will be awarded the Diploma and complete their studies in June. Students who do not reach the Diploma level in June may resit the Diploma examination in September.

Application forms and further information can be obtained from the Dean, Royal (Dick) School of Veterinary Studies, Summerhall, Edinburgh EH9 1QH, Scotland. Applications should be returned by March 31st (but preferably earlier as the courses are usually over-subscribed) for admission in the following October.

Any further details can be obtained from the Director of the Centre for Tropical Veterinary Medicine, Easter Bush, Roslin EH25 9RG, Midlothian, Scotland.

UK Organizations

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Joint Officers meetings, that is meetings between senior officers and staff of RCVS and BVA take place at frequent intervals and of course the Presidents of RCVS and BVA maintain close informal contact.

Thus there are good lines of communication between the practising veterinary surgeon, the veterinary surgeon employed by commercial companies, and the veterinary surgeon in academic life, and all other aspects of the work of a veterinary surgeon, through both RCVS and BVA. This probably results from the very sensible appreciation which the veterinary profession in this country has always had of the fact that it is too small a profession to be able to afford to operate in watertight compartments - Government veterinarians here, commercial veterinarians there, and the practising veterinarian out on his own. Ever since 1844 the motto of the Royal College has been "Vis unita, fortior" - "strength, when it is united, is greater".

BRITISH VETERINARY ASSOCIATION

About the same time as the granting of the Royal Charter, 1844, and the right to use the title "veterinary surgeon" being restricted to the graduates of the two veterinary schools, groups of veterinary surgeons were meeting to discuss matters of common interest. Local associations were formed, some of the oldest being West of Scotland, the Lancashire, the Yorkshire and the Midland Counties.

By 1880 there were 15 of these associations; the idea of a national association was mooted and in 1881 a National Veterinary Congress was held in London where it was agreed that a British National Veterinary Association should be set up. The committee formed to consider this included not only members of the various associations, but also members from the colleges and the Army Veterinary Department. Thus the foundations were laid for a mixture of territorial and specialist interests which has lasted to this day.

The only function of this National Association was its annual meeting and growth of the Association was slow. Eventually it was decided to affiliate the local associations to the National Association. This was accomplished over a period of years and in 1919 the enlarged association changed its name to the National Veterinary Medical Association of Great Britain and Ireland.

The Veterinary Record was purchased by the NVMA in 1920, and has been the mouthpiece of the Association ever

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Veterinary organizations in UK

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since. Membership then began to grow and it became evident that the Association needed permanent office accommodation. In 1920, it acquired two rooms in Buckingham Palace Road. Further moves took place over the years; in 1925 to three rooms at 10 Grays Inn Road; in 1937 to 36 Gordon Square and finally, in 1954 to Mansfield Street, London.

The Association gradually became a more effective political force. It acts in the interests of its members and campaigns for the best deployment of veterinary resources in the interests of the community.

In 1952 the NVMA changed its name to the British Veterinary Association. The BVA now has 8440 members. The 18 regional veterinary medical associations have now expanded to 31 territorial divisions. Nineteen special interest groups have also become divisions. They all have a powerful influence on BVA policy through their representation on the Association's Council.

Following the tradition established in 1881 the BVA continues to hold its annual congress but the individual Divisions, which are autonomous associations also arrange their own meetings and even their own congresses. The specialist Divisions, of which the British Small Animal Veterinary Association is the largest and most influential, arrange annual congresses which themselves have achieved a high reputation and attract many overseas delegates.

Today the BVA, with a total member-

ship of over 8000, is organized on the basis of 31 territorial and 19 specialist divisions, covering the whole of the UK including Northern Ireland, (many people being members of several different Divisions), which elect members to represent them on BVA Council, which is made up of the Officers, Committee Chairmen, four past Presidents and elected divisional representatives giving a total of 71. The main work of the Association is carried out by ten standing committees, some of which have groups dealing with a specific part of their work.

The committees meet three times a year and report to the Executive Committee, consisting of the Officers of the Association who come from any and all fields of veterinary medicine, which deals with day to day organization, finance and urgent matters which arise between committee meetings.

BVA Council, at its meetings, considers the reports of all of the committees and ratifies (or otherwise) all policies proposed by the committees.

The individual member can influence policy by two routes. First, he can write to the Chief Executive of the Association, who may deal with the matter directly or may refer it to the appropriate committee. Alternatively, the member may raise the matter in his division and after discussion there the subject can be fed into the headquarters system for further consideration. Head office organization has a staff of 36 headed by a Chief Executive, and is divided into three sections each with a Head of Department. The first is

Administration, which services the committees described above. It also controls finance and organizes members' service. The second is Publications and the third External Affairs. The Publications Department produces three major journals, the Veterinary Record, In Practice and Research in Veterinary Science. The Veterinary Record is the only weekly veterinary journal in the world and keeps members abreast of the latest scientific achievements as well as news of interest to the veterinary surgeon.

The BVA maintains close contact with the RCVS as indicated previously. It also maintains a close working relationship with various government departments, particularly the Ministry of Agriculture, Fisheries and Food (MAFF) who will frequently seek BVA opinion of matters affecting veterinary surgeons.

BVA in its turn of course attempts to influence government thinking not only by contact with government departments, but also by informal contact with Ministers and Members of Parliament. To our regret we still do not have a veterinary surgeon in the House of Parliament, but that situation will no doubt change eventually.

Further information on the BVA or any of its Divisions can be obtained from:

British Veterinary Association, 7 Mansfield Street, London, W1M 0AT, United Kingdom, and of course any member of a Commonwealth Association would be most welcome at any time at BVA Headquarters to see how we function, and arrangements can be made to visit the RCVS.

Post-graduate training course at Royal VC

In 1987 the Royal Veterinary College, London University, celebrated the coming of age of its Animal Health postgraduate training course. For 22 years the course has endeavoured to provide advanced training for veterinarians working in the field of animal production in both the developing and developed countries.

Professor R. Lovell, Professor of Bacteriology at the College in the 1960s, conceived the idea of postgraduate training and during his last years at the college prepared plans for a course which would provide postgraduate education for veterinarians working in the general field of animal production in developing countries. With this in mind, in 1965 Mr. A.L.C. Thorne (former Senior Animal Health Advisor,

ODA) was appointed to the staff of the Department of Animal Husbandry to organize and direct the course under the general supervision of Professor J.A. Laing, head of the department. Thus the experience that Tony Thorne had gained in developing countries, particularly in Nigeria where he was for some time director of the Veterinary Research Institute, Vom, complemented the wide knowledge of animal production that Professor Laing offered. Together they designed a course in animal production and disease control with considerable, but by no means exclusive emphasis on problems and conditions in developing countries. The first group of five students was admitted in October 1966 for a course of nine months' duration

for which the Diploma in Animal Health was awarded to those students who successfully completed their studies.

During this first year, Sir John Ritchie on his retirement from the post of Chief Veterinary Officer in the Ministry of Agriculture, became the Principal of the College. He took a keen interest in the course, and with the help of his previous experience he was able to assist in adapting the course to serve both students from overseas and also those from within the British Government Veterinary Service.

In 1966 Mr. Tony Thorne relinquished his post at the Royal Veterinary College in order to take up an appointment as Animal Health Advisor in the Overseas Development Administration. Though

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Course structure of post-graduate training

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he remained with ODA until his retirement in 1984 his links with the course and the college continued. He was replaced by J.E.T. Jones who brought to the course the advantages of a research and teaching background: Professor Jones had spent four years previously at the RVC in the Pathology Department. In 1958 he left to join the Animal Health Trust as research officer for projects related to farm animals and until 1963 he worked with H. Williams Smith on epidemiology and pathogenesis of enteric diseases associated with *Escherichia coli* in young farm animals and investigated, for the first time in the U.K., diseases of sows. Prior to his return to the RVC he took up a Fulbright scholarship in the University of Pennsylvania and investigated endocarditis and atherosclerosis in pigs. When he took over the Animal Health Course he augmented the curriculum with short courses on general virology, immunology and reproductive physiology. Professor Jones stayed with the course for the next 17 years. Under his guidance it evolved and adapted to meet the changing needs of students from both developing and developed countries. Through his direction the course has established an international reputation. During these years, he was ably supported in turn by Dr. J.B.Q. Arbuckle, Dr. A.J. Madel and Dr. M.J. Meredith.

In 1984 Dr. A.J. Wilsmore became course director and was assisted by Dr. P.J. Goddard. Dr. Wilsmore had spent a major part of his professional career in developing countries, having worked in Kenya, Ethiopia and the Yemen Arab Republic. He is, himself, a graduate of the Animal Health Course having spent a year at the RVC in 1969-70. He returned in 1979 and studied perinatal mortality in small ruminants. After a short period in practise Dr. Goddard returned to the RVC from where he graduated and studied for his PhD in the Department of Obstetrics before joining the Animal Health section. Postgraduate students from a variety of countries and backgrounds frequently require assistance to enable them to adapt to the different social and living conditions they meet in Britain and concentrate on their studies. Mrs. Anne Palmer, the course secretary, has dealt with these needs for the last 10 years. Many of the graduates from the course remember her help and correspond with her regularly, providing the staff with news of their progress since graduation.

The syllabus for the course can now be considered under four headings:

ANIMAL PRODUCTION

Animal production, including physiology of reproduction, genetics, animal breeding systems, environmental physiology, animal behaviour, nutrition and principles of agricultural economics.

Intensive and extensive systems of management, including relevant programmes for the maintenance of health and disease control. Animal Welfare.

MICROBIOLOGY, PARASITOLOGY AND IMMUNOLOGY

The general aspects of microbiology, parasitology and immunology necessary for an understanding of the pathogenesis, diagnosis, epidemiology and control of infectious diseases.

DISEASE CONTROL

Epidemiology, statistics, surveys and field-trial techniques. Veterinary economics.

The major epidemic diseases of international importance.

The economically important infectious and non-infectious diseases of cattle, sheep, pigs and poultry, with special reference to herd and flock problems under modern systems of management.

Computer assisted disease monitoring and modelling.

ORGANIZATION AND ADMINISTRATION

Organization and administration of the control of animal health.

Evolution and functions of local, national and international authorities in the control of animal diseases.

A variety of teaching methods is used ranging from lectures to less formal seminars, discussions, demonstrations and practical classes. By these means it is hoped to not only increase the students' knowledge but also their ability for logical thinking and reasoned argument.

In addition to contributions from staff of the RVC, much of the teaching is done by visiting workers who are currently engaged on research into the subjects they have come to discuss. The college is indebted to the organizations from which these visitors originate. They come from Government, University and business establishments. Visits are also organized for the students to research institutes, farms, commercial organizations and breeding centres. In particular, two weeks are spent at the Poultry Research Station, Houghton to study poultry production and diseases.

During the Easter vacation the students are given the opportunity to develop their particular interest by ar-

anging a three week stay at another scientific establishment. Most frequently they visit a government veterinary investigation centre of their choice but other places may be considered, for example the Central Veterinary Laboratory, Weybridge; Animal Virus Research Institute, Pirbright, another university; or an animal breeding centre. These visits have not always been confined to places in Britain: for example, one British student visited the Pathology Department of the University of Berne; a Greek student visited Oklahoma Animal Diseases Laboratory at the College of Veterinary Medicine, Stillwater, U.S.A.

Formerly, in addition to the course work, students were asked to review the literature and write a report on a subject concerning animal health or production chosen by themselves and their supervisors. This exercise develops the ability of the individual to abstract information critically and to communicate it precisely. In the mid 1970s the need was expressed, particularly by students from overseas, for a course leading to a masters degree rather than a diploma. To meet this requirement, in 1978 there was a change in status of the course. It was extended from nine to 12 months duration and successful students are now awarded an MSc. The three month extension has given students time to expand their individual work, and now, in addition to a report and a literature review, they are expected to conduct a project, related to their review, during July, August and September. The work undertaken is selected to suit each student's particular interests and the subjects are diverse. They may range from field work to laboratory work, or perhaps may contain an element of both. They can vary from animal behaviour study to a microbiological investigation for example. Each project is supervised by a member of the RVC staff except where the necessary expertise can best be provided elsewhere, and if facilities for the work are better at another institution, then arrangements are made for the project to be undertaken there.

Since the course was established, 177 veterinarians have completed it: 95 gained the diploma, and, since its change in status, 81 have gained the MSc. The students have come from 45 different countries, 16 of which are within the Commonwealth. In fact, more than half of the graduates from the Course are from Commonwealth countries.

New ideas and technology are affect-

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Black Spear Grass

Black spear grass (*Heteropogon contortus*) is a perennial summer-growing grass of medium height which dominates over 20% of the grazing pastures of Queensland, Australia. It is a major natural resource of feed for ruminant animals but matures before winter, then remains dormant as a low quality roughage. Early settlers initially stocked these pastures with sheep but the high prevalence of ulcerative lesions, resulting from the penetration of the fleece and skin by the long thin awn and spikelet structures around the spear grass seed, necessitated the change to cattle. Since the introduction of cattle there have not been any reports, to our knowledge, of a significant occurrence of subcutaneous abscesses in grazing animals. However, now, the potential for serious mouth lesions in ruminants, fed chopped spear grass, has been reported. Source: *Aus Vet J* Jan/88 p28.

Heartwater

Heartwater, an often fatal disease caused by the rickettsial organism *Cowdria ruminantium*, was confirmed on three Caribbean islands in 1980 and 1984. A common vector of the organism, *Amblyoma variegatum* has been found on sixteen Caribbean islands. Of interest to Trinidad and Tobago is that *A. cajennense* has been shown to be a vector of heartwater. Source: *Vet-News (Trinidad & Tobago)* v3 n2 1987.

CwVA at work

Information on veterinary drugs, with emphasis on appropriate uses, warnings of detrimental side effects and recommended controls, was recently sent to Dr. Ahmad Mustafa Bin Babjee, at Jalan Maharajeru, Kuala Lumpur, Malaysia, by the CwVA Secretariat in Guelph. This was in response to a request from Malaysia's Association of Veterinary Surgeons.

The information was generously supplied by ministries of two Canadian governments. These were the Ontario Ministry of Agriculture and Food (OMAF) of the Province of Ontario, and Health and Welfare Canada of the Federal Government. The cooperation of Dr. J. Breton, of that federal ministry's Bureau of Veterinary Drugs, did much to facilitate matters.

Rice Straw

Rice straw, available as a byproduct of the rice industry, makes up the bulk of rations for ruminants in Bangladesh. This ration is inadequate for animals which are used for milk, meat or draught purposes. Lack of protein is one of the important limiting factors in the feeding of crop residues. Source: *Bangladesh Vet J* July-Dec/86.

Bangladesh poultry

Poultry are kept by a great many rural families in Bangladesh. Not only are these domestic fowl and their eggs important sources of dietary protein but, for many of these families, they are sources of extra income.

Helminth parasites are considered to cause an appreciable loss in poultry production in Bangladesh. A study, on the incidence of helminth parasites in poultry under rural conditions in Bangladesh, was conducted. Four hundred fowl from different areas of Bangladesh were examined. The species of helminths identified and the status of incidence were as follows: -

- *Heterakis gallinae* 80%, *Ascariida* Gall 45%, *Hymenolepis carioca* 40%, *Raillietina echinobothrida* 40%, *Raillietia tetragona* 30%, *Amoebotaenia sphenoides* 20%, *Raillietina cesticius* 20%, *Capillaria columbae* 15%, *Acuaria spiralis* 10%, *Capillaria annulata* 10%, *Catropis verrucosa* 10%, *Echinostoma revolutum* 5%, *Metroliasthes lucida* 0.5%. Source: *Bangladesh Vet J* July-Dec/86. Author Dr. Md. Shamsul Huq.

Arusha,

many attractions

Arusha, Tanzania, is the home of the modern Arusha International Conference Centre. Among the many meetings held there are the scientific conferences of the Tanzania Veterinary Association. December of 1987 saw the 5th TVA Scientific Conference and December of 1988 will see the 6th TVA conference once again in this impressive and most comfortable setting.

Arusha is endowed with a cool climate and is surrounded by fascinating game parks, rich in wildlife. It is in reality the centre of Tanzania's famous tourist attractions and it is easily accessible by air through the Kilimanjaro International Airport.

The guinea-pig

From 2500 B.C. onwards the guinea-pig was more important than any other source of meat for most ordinary Peruvians. By the time of the Inca empire, in the 15th century A.D., it was the principal meat of the common people.

A painting in the cathedral at Cuzo, Peru, by the 17th century artist Marco Zpata, shows Christ at the last supper. At that table, laden with local fruits and vegetables of the Cuzo area, the main dish before Christ is a roasted guinea-pig. Source: 'A Feast in the Wild' by Russell Kyle.

Commonwealth Currents

Commonwealth Currents, published every two months by the Commonwealth Secretariat, reports on the work, achievements and problems of the Commonwealth, and is issued free of charge to readers in all member countries. Of particular value, to newsletters and newsmagazines of Commonwealth associations, is the fact that the contents may be reproduced without permission or acknowledgement. Interested persons, not receiving Commonwealth Currents, should write to The Commonwealth Secretariat, Marlborough House, Pall Mall, London SW1Y 5HX, England.

Post-grad training

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ring animal production and disease control. Demand for animal protein increases in the developing countries and systems of management are changing to meet these needs. These changes, together with the increased international movement of livestock and animal products, affect the incidence of classical infections and non infectious disease and introduce others. For the past 22 years the animal health course has adapted to cope with these developments. It provides training in animal health and production at an advanced level for veterinarians from both the developing and developed countries and gives them the opportunities to develop their special interests. It will continue to undergo constant adjustment to meet the changing priorities.

The above article, by Dr. A.G. Wilmshire, Director of the animal health postgraduate training course at RVC, was made available to the CwVA News by Mr. Trevor Blackburn.

The veterinarian's role in international development

by R.G. Stevenson
CVMA Representative

Commonwealth Veterinary Association

Over the years veterinarians have been involved in many significant international development programs. The efforts made through organizations such as the World Health Organization, the Pan American Health Organization, the Food and Agricultural Organization and others in the planning, funding and administration of various agricultural or veterinary programs are known to all. The role played by Canadian veterinarians in projects sponsored by the Canadian International Development Agency (CIDA) is perhaps less well-known except in certain circles and those projects sponsored or supported in part by the Canadian Veterinary Medical Association (CVMA) International Development Committee are even less well-known. It is doubtful that more than a handful of veterinarians are aware of projects which have been carried out in the Caribbean by the CVMA International Development Committee in cooperation, at times, with the Commonwealth Veterinary Associations.

International veterinary associations such as the World Veterinary Association (WVA) and the Commonwealth Veterinary Association (CwVA) have significant responsibilities in international development. Through the World Veterinary Congress the WVA is able to take a leading role in voicing the global concerns affecting veterinary science. In addition to its role in the dissemination of veterinary knowledge the CwVA has as an important part of its mandate the provision of aid in the creation of the necessary veterinary infrastructure in countries where it does not presently exist or where it is only rudimentary. At a recent meeting in The Gambia, attended by most African members of the CwVA as well as Regional Representatives from around the world, a session was devoted to the role of veterinarians and how there might be increased cooperation. Four general areas were identified: those affecting the veterinarian profession; animal production; animal industry; and socioeconomic factors. The

ignored it makes good economic sense for Canada to be involved. Canada is very fortunate in having one of the healthiest livestock populations in the world. That this is so has not been due solely to chance. Knowledgeable and well-organized federal, provincial and private veterinary services coupled with enlightened agricultural importation policies have helped Canada achieve this status. It is expected that Canada will continue to enjoy this advantage but in an ever decreasing world where travel from around the world is measured in terms of hours there can be no assurances that an exotic disease will not someday gain entry. An example of such an occurrence relatively close to Canada is the introduction of the bont tick *Amblyomma variegatum* and *Cowdria ruminantium* (heartwater) into some Caribbean countries. Involvement by Canadian veterinarians in the eradication of African swine fever from some Caribbean countries is another example of the importance of controlling the spread of "exotic" diseases.

Mention international aid and anyone who has travelled extensively can cite examples of waste or mismanagement, usually caused by poor planning or ignorance of local customs. What is appropriate for Western Europe or North America is not necessarily good for a developing country with limited

resources where the primary requirement is still the production of animal protein for human consumption.

Better training is required for veterinarians interested in participating in international development projects. Perhaps the CVMA should take the lead role in furthering this aim. As the national veterinary body it has a legitimate interest in international programs and in ensuring that Canadian veterinarians have the opportunity to pursue careers in this worthwhile field. Training could be the joint responsibility of the veterinary colleges and the Food Production and Inspection Branch of Agriculture Canada. Much of the course work could be given in the veterinary colleges whereas practical training working with exotic diseases would be provided in federal animal pathology laboratories or by secondment to other countries. Part of the course could be a requirement to work in a developing country.

Until such time as formal training programs are available there is a need to obtain as much information as possible from veterinarians who have worked on previous projects. The hard lessons learned through experience would be much appreciated by novice veterinarians wishing to participate in international development programs. Reprinted with permission from The Can Vet J 1987;28:10:Oct 87.

Dermatophilosis in Antigua

by Drs. Jose Mathew
(Veterinary Officer) and
J.L. Robinson
(Chief Veterinary Officer)

Dermatophilosis (cutaneous actinomycosis, cutaneous streptotrichosis, lumpy-wool disease, mycotic dermatitis, senkobo) is a bacterial infection characterized by exudative dermatitis and scab formation.

Etiology: The causative agent is the bacterium *Dermatophilus congolensis* which, up to a decade ago, was considered to be a fungus.

cent of Antigua's cattle get infected with dermatophilosis, lesions range from mild to severe. Of an estimated 2,000 infected head, only a small number are reported and treated. The balance of the infected animals are either sent to the abattoir during the early stage of infection, treated traditionally with topical medication; die without treatment, or recover spontaneously.

(Numbers of animals reported treated - 231 in 1982, 187 in 1983, 175 in 1984, 124 in 1985, 346 in 1986, 412 in 1987).

Although figures, reporting cases in

Dermatophilosis in Antigua

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cases, 75 percent occur during the three months of July, August and September, while only 25 percent occur during the remaining nine months. More than 90 percent of the cases are reported from the parishes of St. John's, St. Georges, and St. Phillips, where the livestock population is high. In other words, more cases are seen and reported in the central eastern and northeastern parts of the island.

Susceptibility: The incidence of the disease is influenced by husbandry and age. Although young animals may be infected, most reported cases are in yearling or older cattle. Red poll, holstein and indigenous breeds are found to be equally susceptible to dermatophilosis.

Transmission: Infection occurs in carrier animals, either without any clinical lesions or lesions so mild that they are not readily detected. That may be the reason that about 60 percent of the animals treated are the same ones which were treated in the previous year, or at least are animals from the same farms.

Humidity does not appear to be a factor in the spread of the lesions (Macadam). Although 94 percent of reported cases are in the rainy season (June to November), dermatophilosis is seen throughout the year. In 1983/84, during Antigua's worst drought when about 30 percent of the cattle perished, the incidence of the disease did not decrease at all.

Too much attention is given to the connection between acacia (a plant/tree) and the incidence of dermatophilosis. The disease is reported on acacia-free farms and in animals tethered in acacia-free areas. Acacia became widespread on the Island only since the decline of the sugar industry about 20 years ago. The disease was prevalent in Antigua long before that.

Biting insects are considered important in initiating the skin lesions (Macadam). There is an association between tick infestation and the development of clinical bovine dermatophilosis (Polwright 1956). *Amblyomma variegatum* (St. Kitt's tick or stinking ticks) are seen from May to September. *Boophilus* (Creole ticks) horn flies (*Lyperosia*) are seen year-round. Farmers, reporting senkobo, invariably admit either a breakdown in regular dipping or a breakdown in spraying prior to the occurrence of the disease, or else spraying with a weak solution of a plant insecticide or a simple disinfectant or an acaricide. In one

LDU farm, where not more than 6 percent of the animals had been reported infected per year since 1982, about 80 percent of the animals were found, in July and August of 1987, to have dermatophilosis. The spraying had been disrupted in May and June of that year due to illness of the owner.

Acaricides are bacterial in culture and in exudates (Vanbreuseghem et al 1976). From 1982 to 1986, 30-50 percent of cases of senkobo in Antigua had been using one of four communal dip tanks. Actually only about 7 percent of the total cattle population are dipped. The only private dip, in Antigua, reported no infection for the last five years. The remaining 93 percent of the cattle are either hand-sprayed or sprayed by two private spray-races. In 1986, 24 percent of the cattle from a farm (Payners), using a communal dip tank, were infected. From 1982 to 1985 that figure in Payners' herd remained about 20 percent. Live engorged amblyomma ticks were removed from animals about 12 hours after dipping in that dip tank.

The single most important factor of the following, acacia, rain and ectoparasites, including ticks initiating the skin lesions of the disease, in Antigua is the tick.

Lesions: In most cases lesions start on the neck or back and spread over the entire body. Ulcerous foot lesions and mouth lesions are less common but they are seen, during the rainy season, in chronic untreated cases. Lesions start as small papules, but in the advanced stage cover the whole body with an accumulation of hard crusts.

Treatment: So far treatment in Antigua has been successful. Penicillin, ampicillin, oxytetracycline, and a combination of penicillin and streptomycin have all been used with good results. Resistance to these antibiotics has been noted, this is attributed to the indiscriminate use of the drugs by laymen. From 1982 to 1987, 89 percent of the cattle treated recovered fully with a single treatment. Only 11 percent either suffered recurrences during the same year or needed a second treatment, most of these had ulcerous lesions on the lower extremities. Topical treatment, with vaseline and sulfur or vaseline and iodine, is found to be effective especially with the 'paint brush' lesions of early infections, however recurrence is very common. Biweekly treatment with either of those two concoctions, or with used engine or used diesel oil, with or without antibiotic injection was successful. Systemic treatment, when ulcerous lesions were pre-

sented around the mouth and on the extremities, was found less effective.

Control: Year-round control of ectoparasites and the prompt slaughter of recovered animals may reduce the incidence of the disease in Antigua. The 'Tick Eradication Program', sponsored by USAID and the USDA, may reduce dermatophilosis in Antigua. Recovered animals, in apparent good health, can act as carriers (Graber 1969). *Dermatophilus congolensis* is found not to survive in the soil (Roberts). Burning of pasture to reduce senkobo can only cause soil erosion, loss of valuable fodder and uncontrollable fires.

Agriculture Canada's mandate

Agriculture Canada's Food Production and Inspection Branch defines its mandate as follows: to protect the marketability of agricultural, food and forest products. This statement recognizes that industry is ultimately responsible for the health, safety and quality of products. The federal government (of Canada) is responsible for setting and enforcing standards to safeguard human, animal and plant health and to facilitate national and international trade. Their priorities consist of preventing, controlling, removing and eradicating exotic disease, dangerous insects and weeds, domestic animal and plant diseases of economic or human health significance, to provide inspection and certification of exported goods, and to ensure the certification of agricultural and food products for quality.

Source: Can Vet J Nov/87

Mission Statement

The Canadian Veterinary Medical Association (CVMA) Mission Statement, which was adopted by the Annual General assembly at its August 1987 meeting reads as follows:-

"The Canadian Veterinary Medical Association is the national body representing and serving the interests of the veterinary profession in Canada. The Association is committed to excellence within the profession and to the well-being of animals. It shall promote public awareness of the contributions of animals and veterinarians to society."

A mission statement sets the basis for determining goals and objectives of the Association in a manner which is consistent with the needs of membership.

Source: Can Vet J Oct/87

Stevenson heads study

At its November 1987 meeting, it was moved by the Canadian Veterinary Medical Association Council that: "Dr. Bert Stevenson be appointed to head a one-person steering committee to collect information, review the possibilities and opportunities, revise the terms of reference and list the possible tasks of the Association's International Development Committee."

In a brief interview, Dr. Stevenson stated that he intended to go over the previous terms of reference for some insight and direction. He also has on hand a list of resource people who have had some experience working in Third World countries, "I would like to get as much input as possible at this stage," says Dr. Stevenson. He plans to establish some general terms of reference which could apply to most situations, as well as more specific terms of reference. His main goal is to set a realistic work plan which would define the direction and limitations of the committee. Dr. Stevenson believes that Canadian veterinarians have a role in international development. "We have a lot of expertise and a lot of manpower. Our role in international affairs is for our own good as well as for the

good of others." Dr. Stevenson welcomes any input in this matter. If you have suggestions or comments, please forward them to Dr. Bert Stevenson, P.O. Box 1410, Sackville, N.B. E0A 3C0, or call him at 506-536-0135.

Source: Can Vet Jour. Jan/88

Local associations can make enquiries

Veterinarians, in the Edmonton area of Alberta, can get first hand information about CwVA's 'Book & Journal' programme by asking Dr. K.L. Keeler of the Delton Veterinary Hospital in Edmonton. For this same first hand information, veterinarians, in the Bruce county region of Ontario, can ask Dr. Roger Thomson of Kincardine Veterinary Services in Kincardine. Drs. Keeler and Thomson are two of the Canadian veterinarians actively involved in this important programme of cooperative assistance to veterinarians and animal health workers in many parts of the developing Commonwealth.

XVI Biennial Caribbean/Canada/CwVA Convention

The Guyana Branch of the Caribbean Veterinary Association will host the XVIth Car/Can/CwVA Convention in Georgetown, Guyana, Nov. 20-23, 1988. Included in topics for discussion are food producing animals, small animals, horses, poultry, zoo animals, fish, laboratory animals, regulatory medicine, public health, nutrition and epidemiology.

Guyana Veterinary Association, P.O. Box 10851, Georgetown, Guyana.

Megaproject

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these conditions in Nicaragua. The Projecto Chiltepe will still remain a massive world venture by any standard but it is unfortunate that the full potential for dairy production in these quality Canadian Holsteins will never be realized. Nature provides us with all the raw materials. Alas, the management is left to the people.

Source: CVJ Nov/86. Reprinted with permission of the Canadian Veterinary Journal.



Faculty of Veterinary Medicine University of Prince Edward Island Canada Atlantic Veterinary College welcomes International Students

The Atlantic Veterinary College, a Faculty of the University of Prince Edward Island, opened to students in September 1986, becoming the fourth veterinary college in Canada, and one of thirty in North America.

Fifty seats are available each year in the four-year program leading to the Doctor of Veterinary Medicine Degree.

The Atlantic Veterinary College serves primarily the educational needs in veterinary medicine of the Atlantic Provinces (New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island) with 41 seats available annually for the region. The remaining nine are held for International Students.

Admission requirements are 30 semester courses including: genetics; microbiology; comparative anatomy; 2 physics including biophysics; calculus; computer science; 2 English including one with a strong writing requirement; 5 additional humanities and social sciences. Normally meeting these requirements takes 3 years.

Evaluation includes academic achievement, quality of courses, personal achievements, experience with and knowledge of animals.

Further information and application forms are available from The Registrar's Office, University of Prince Edward Island, 550 University Avenue, Charlottetown, P.E.I., C1A 4P3.

Application deadline: January 1.

A tale of a megaproject

This article was written in 1986 by Phillip S. Robichaud, at that time a third year student at the Ontario Veterinary College in Canada. It deals with his experience while on a development project during the summer of 1986. The last two sections, 'Numerous Obstacles' and 'Obvious Question' certainly merit being reread.

"Canadian Holsteins in Nicaragua"

Some 25 kilometers north of Managua, Nicaragua in Central America, lies one of the world's single largest dairy installations. The Proyecto Chiltepe, as it is called in Spanish, is located on the picturesque tropical peninsula of Chiltepe on the murky shores of Lake Managua.

The Chiltepe Project was born in 1980, the brainchild of Senor Heimi Weidlock, now Executive Director of Agricultural Development for the Sandinista regime. The project currently houses approximately 11,000 dairy cows and aspires to provide 50 percent of the total dairy needs of Nicaragua by the year 1990, with a projected herd population of 18,000 cattle by that year.

An inactive volcano lies at the geographical centre of the peninsula and is bordered by approximately 50 square kilometers of rich volcanic pastureland which descend from the foothills of the interior to the shores of Lake Managua.

Due to its enormous size and the vast national importance of its endeavors, the project is heavily protected by security forces. At both entrances to the project sit a guardhouse and roadblock, each manned by two security police equipped with M-16 machine-guns and radiocommunications. A large armed military base is located a mere three kilometers away. There is justifiable fear that the Contra forces may, in the future, attempt to thwart this massive industry by either launching an offensive attack on the installation itself or by incorporating undercover personnel within the project for purposes of sabotage.

Chiltepe has inspired much international interest over the past five years, attracting resource, technical, and managerial assistance from countries such as Spain, Cuba, the USSR, Italy, Sweden, and Canada. There are currently 40 individual units or "ciclos" in Chiltepe, each housing approximately 300 cattle. The units are of Cuban design and origin and were a gift from

Cuba to Nicaragua in 1981. Each ciclo consists of three separate, open-pole structures, a six-stall infirmary, calf penning for 14 calves, and a milking unit which is centrally located between the free-stall areas. The milking parlor is of a four by four walk-through design with the milking equipment and machinery for all centres donated by Alfa Laval of Switzerland.

The entire Chiltepe herd at present is comprised of approximately 3,000 Brown Swiss cows, 4,500 Nicaraguan-cross Holsteins, and 3,300 Canadian Holsteins. In 1981, the Canadian International Development Agency (CIDA) signed an agreement with the government of Nicaragua to provide them with 3,000 prime Canadian Holstein heifers. These cattle were selected from Eastern and Atlantic Canada, the heartland of the Canadian dairy industry, and were flown to Nicaragua as finer calves from some of Canada's finest producers. Beginning in 1984 with shipments of 500 at a time, these heifers arrived in Managua, were transported under armed guard to Proyecto Chiltepe, grown out to approximately 350 kg and bred to registered American and Canadian sires. The first Canadian Holsteins to calve in Nicaragua began in April of 1986 and as of August 1, 1986, nearly 300 of these cattle had calved and were in lactation.

There are currently three resident veterinarians in the project to care for the needs of the nearly 8,000 non-Canadian cattle. Two of the veterinarians are from Cuba and the third is from Finland. All share accommodation in one of the better-maintained farmhouses at Chiltepe confiscated by the Sandinista government for the benefit of the project. They are paid in Nicaraguan currency and were given old Czechoslovakian motorcycles for onproject use only. An Argentinian veterinarian is employed by the government of Canada to work exclusively with the Canadian cows. He is paid in dollars, was given a new Toyota Landrover, and lives in Managua's posh neighborhood.

A Different Lifestyle

I was contracted by CIDA in May of 1986 to go to Nicaragua for a period of four months and implement a standard dairy management program for the Canadian Holsteins in Nicaragua and to train and instruct the various unit management teams at the project to adapt their present work system to the new program. My accommodations within the project were at the former summer residence of the ousted dic-

tator Anastasia Somoza. The house was undoubtedly quite elegant in the days of its former owner but has been left in a general state of disrepair for several years. The roof proved quite permeable to the torrential tropical rains of Nicaragua, plumbing was non-functional and the only inhabitants of the house for the past eight years were the rats, mice, lizards, and scorpions with which I shared accommodations. The ten-acre property is bounded by a barbed-wire and chain-link fence and comes complete with mango trees, coconut trees, swimming pool, maid, and a 24 hour-a-day, seven days-a-week armed guard.

Security at the house was presumably for my benefit but seemed unnecessary, for the only dangers I encountered in Nicaragua were of Mother Nature's design. One morning I was stopped between the front door and my motorcycle by a five-foot long diamond-back rattlesnake which quickly succumbed to my eight-foot long two-by-four. I regretted killing the snake afterwards, for it had a large rat still in its digestive tract and I hadn't thought of Nature's delicate ecological balance while clubbing it to death. I soon righted the situation by killing three rats in my bedroom. On one other occasion I instinctively emptied my boot before putting it on my foot and discovered a plump scorpion intent on making a cozy little nest in my insole.

My diet for the two months I was at the project consisted solely of rice, beans, and tortilla for every meal. Meat and eggs were a rare commodity and of dubious nutritive value when present. Refrigeration for such perishable foods was functionally nonexistent and the fly population always prospered whenever either of the two were available. As a third year veterinary student I should have been keenly aware of the nature and dangers of zoonotic infection. Within two months, however, I had contracted both Campylobacter and Salmonella infections, lost 30 pounds of body weight, and was forced to return to Canada for immediate treatment. The sad part of this story is that the Canadian cattle at Chiltepe were faring little better than I.

Numerous Obstacles

Nicaragua is experiencing severe difficulties at present in maintaining essential services and in providing necessary or sufficient supplies required to raise such large ventures as the Chiltepe Project to their maturity. Obviously enough, the current war in

A tale of a megaproject

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Nicaragua lies at the heart of the dilemma. At present, 50 percent of the Nicaraguan economy is diverted to the military defence against the Contra counter-revolution. An import/export embargo is still in effect for Nicaragua and what this functionally means is that Nicaragua is limited in its trading to very few countries indeed. I spoke with the Executive Director for Agricultural Development of the general shortcomings of the project and was told: "We (the Sandinistas) budgeted for agro-industry; we budgeted for imports and exports; we didn't budget for a counter-revolution."

Hence, there is presently a paucity of appropriate services and goods necessary to operate a dairy unit in optimal form. General maintenance within the project is quite lacking due to shortages of both tools and replacement parts for the myriad objects of machinery which are constantly breaking down. Electricity was often absent at the project and caused great losses in milk production through milk spoilage and interruption of milking procedures. All of the milking units in Chiltepe are capable of being driven by a tractor power-takeoff, but there are far more milking parlors on the project than available tractors. Another of the many problems to be encountered, and certainly one of the most vital, was that of limited feed availability. Much of Nicaragua is without rainfall for 4 to 6 months of every year, therefore irrigation systems are essential for the adequate production of feed for the 11,000 cattle of the project. The irrigation system at Chiltepe primarily consists of nine centre-pivot irrigators, each capable of providing water to an area of 1.2 by 10⁶ square feet. This system was a gift from Spain and, when operating, was quite impressive to view. Upon my arrival, only three of the nine centre-pivots had been in working condition and the majority of the cattle were receiving only a mixture of cotton-seed hulls and molasses, with sparing amounts of concentrate. The only forage crop grown in Chiltepe is Taiwan Grass, a rich, tropical, broadleaf grass which will grow to a height of one metre in forty days. The lactating and pregnant cows in the Chiltepe herd were given forage priority whenever the Taiwan Grass was available.

This shortage of adequate forage not only predicated lower milk yields but is of deeper-reaching consequence, in that many of the open heifers will fail to thrive and will present difficulties in becoming pregnant at their appropriate

weights. This is evidenced by the rather high service to conception ratios we are experiencing, which at July 1, 1986, stood at 3.8:1, with 15 percent of the Canadian heifers requiring five or more services. Our first milk weighing showed the first-calf heifers to be yielding on average 22 litres per day at 30 days lactation. This came as a pleasant surprise because the daily milk production average for the non-Canadian cows in Chiltepe was, at that time, a mere nine litres per day. The Canadian cattle were soon recognized to be the superior animals but it is my belief that this distinction will be relatively short-lived. Veterinary supplies and medicines are in very short supply in Nicaragua and it is oftentimes not possible to adequately treat diseases such as mastitis, metritis, and footrot.

California Mastitis Test

Our mastitis program consisted of a California Mastitis Test (CMT) once weekly on all lactating cows with treatment of the infected quarters for three consecutive days with intramammary antibiotic creams. We had sufficient antibiotic cream to treat only the infected quarters of mastitic cows, and the bacteria seemed to find little difficulty in locating a more hospitable gland quarter in which to proceed with their binary fission magic. Eighty percent of the cows with mastitis were repeat positives with the CMT for two or more consecutive weeks. Our weekly quarter infection rate for the Canadian cows was 25 plus or minus 5 percent for the eight weeks I was present at the project. Systemic antibiotic therapy was reserved solely for cows with metritis and other systemic disorders, as both antibiotics and needles were in short supply. It is only a matter of time before these fine Canadian cows lose their genetic potential for copious milk production through chronic mastitis and infertility. After only four weeks of milking at Chiltepe the daily milk production average for the Canadian cattle fell to 14 litres per day. The condition score average for the cows in lactation was likewise quite low after only 30 days lactation and will result in earlier drying-off with concomitant loss in milk production. Reproduction is an expendable phenomenon and when health of the animal is compromised, will be manifested in chronic infertility and poor dairy efficiency. The mean open interval at present for the entire Chiltepe herd is 170 days. It is expected that the Canadian heifers will follow suit and experience abnormally long open intervals as well.

Obvious Question

Administration for the project lacks the power and muscle necessary to initiate any real change in conditions or generally ameliorate the current state of operations in Chiltepe. Directorship and administrative officials have had little or no training in basic agricultural production prior to or during their appointments at the project and nepotism and political patronage appointments are commonplace. At the farm level I found a general lack of care, conscience and intelligence among the workers and this, in due course, will be reflected in the general performance of the Canadian Holsteins in Nicaragua. The worker's lot though is not an easy one, working 14 hours per day with only two days leave per month for a salary the equivalent of \$15 U.S. per month. At each ciclo, the six or seven workers live in one small, open room and eat their rice, beans, and tortilla out of one common plastic pail. Spent plastic disinfectant bottles are cut in half and quickly find use as drinking vessels and the frisbee which I brought to Nicaragua for the worker's recreation is, and forever will be, used as a plate by the farm foreman. The living conditions for the workers in Chiltepe are, in a word, squalid and help contribute to the general feeling of being overworked, underpaid, and ill-treated. They have little patience or incentive to pay much attention to detail and many of the programs which I initiated were not met with great enthusiasm. I am not optimistic that any of my management procedures and practices will be long-lived in Chiltepe and even many of the workers that I trained at the various facilities will be transferred to other centres or will leave the project completely within six months. The new personnel will likely receive no knowledge or training of previous programs and routines, and in time these programs will likely disappear.

The obvious question arises as to whether or not the establishment of such a megaproject, especially in a country like Nicaragua, is more advisable than assimilating many smaller-scale, owner-operated dairy farms in areas throughout the small country. There are advantages and disadvantages to each argument, but the Proyecto Chiltepe has already achieved such a massive stance in Nicaragua as to preclude any question of meritability and renders such an argument merely academic.

One can be grateful that no more Canadian cattle will be subjected to

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CANADIAN VETERINARY COLLEGES

A. There are four veterinary colleges in Canada.

1. The Atlantic Veterinary College
University of Prince Edward Island
Charlottetown, P.E.I.
2. Faculte de Medecine Veterinaire
Universite de Montreal
St. Hyacinthe, P.Q.
3. Ontario Veterinary College
University of Guelph
Guelph, Ontario
4. Western College of Veterinary Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

B. Student Enrolments:

COLLEGE	UNDERGRADUATE		GRADUATE			PhD
	DVM/Yr	Diploma	MSc	(1987-88) MVSc	DVSc	
AVC*	50		11			
St. Hyacinthe**	74	3	65			10
OVC***	100	7	55		31	31
WCVM****	72	1	24	26		20
TOTALS	296	11	155	26	31	61

*Atlantic Veterinary College

**Faculte de medecine veterinaire, Univ. de Montreal

***Ontario Veterinary College

****Western College of Veterinary Medicine

C. Applicants for each position in the DVM program:

OVC	5.5 — 6.0
WCVM	3.5
St. Hyacinthe	7.9
AVC	Data not provided

Classes are at least 50% women.

D. Employment opportunities:

The comparatively strong livestock industry has resulted in increased demands for farm animal veterinarians. Higher salaries will attract more graduates into that area but there is a concern that a high proportion of graduates have grown up in an urban setting. However, with dedication and experience these graduates certainly can and do serve the livestock industry with distinction.

Overall job opportunities are good to excellent.

E. New facilities:

- | | |
|----------------|--|
| OVC: | -a research station for large animals and another for aquaculture under construction.
-clinical facility opened in 1987.
-new and renovated space for Biomedical Sciences. |
| St. Hyacinthe: | -research facility of 66,000 sq. ft. including laboratories, offices, teaching barn and embryo research laboratory. |
| AVC: | -recently completed facility. |
| WCVM: | -contract let to demolish Fulton Laboratory and add an equivalent amount of space to the WCVM building. |

F. Research activities:

The past number of years has been a substantial increase in various aspects of research in Veterinary Colleges. Some departments which are well positioned in respect to biotechnology, are making a very significant impact in agricultural related areas (eg. designing new vaccines based on recombinant DNA peptide synthesis etc.).

The established Colleges (OVC, St. Hyacinthe & WCVM) have broadly based research programs. AVC is developing its research and graduate programs and is emphasizing aquaculture.

Sri Lanka battled Classical Swine Fever

The Sri Lanka Veterinary Journal (Vol. 32 Nos. 1 & 2, Jan-Dec 1984) contains a very informative article by Dr. D.D. Wanasinghe about the 1982/83 hog cholera outbreak in Sri Lanka. The CwVA News is pleased to reproduce just a portion of that article, the summary and the introduction.

"Investigations were carried out (by the Veterinary Research Laboratory at Gannoruwa, Peradeniya) into an outbreak of a disease in a piggery, housing about 1200 pigs, in the west coast region of Sri Lanka in March of 1983. The condition was diagnosed as Classical Swine Fever* (hog cholera) on the clinical signs and postmortem lesions. The diagnosis was confirmed by the Central Veterinary laboratory in the Netherlands.

Epizootiological investigations revealed that the disease had originated five months earlier in a piggery which used swill, from the kitchen of the Colombo International Airport at Katunayake, which contained pork and pork products imported from countries where swine fever was endemic. A series of secondary outbreaks had occurred during the interim period in several neighbouring piggeries. The practice of salvage-slaughtering of pigs from diseased herds and feeding other pigs the swill from hotels which used processed meat from salvaged carcasses was identified as the chief cause of the spread of the disease among the organized piggeries. The free range pig population presumably had got infected by feeding on domestic kitchen leftovers and water, used to wash the meat of salvaged animals. It was estimated that the disease wiped out 40% to 50% of the country's pig population.

Sri Lanka was free from all disastrous contagious swine diseases until the epizootic of swine fever (hog cholera) which occurred in 1982/83. Although swine fever was prevalent in the neighbouring countries; Burma, India, Thailand, etc., Sri Lanka managed to remain free because of her oceanic boundaries.

In Sri Lanka pig rearing is mostly confined to the coastal belt, extending from the western to the southern coast, covering the districts of Puttalam, Colombo, Kalutara and Galle, and spreading slightly inland to the Gam-

paha district. With reference to the pig industry this area is referred to as the 'Pig Belt' of Sri Lanka.

The pig husbandry practices in Sri Lanka could be broadly divided into two systems: -

(a) The Free Range System (backyard pigs). - About 60% of the island's pig population belong to this category (1983). The majority of these pigs are of the indigenous breeds or their crosses with exotic breeds. These backyard production units have from 5 to 20 pigs. These pigs are free to roam about scavenging in the backyards, at night they find shelter within the owners' premises. They thrive on kitchen waste and domestic leftovers.

(b) The Intensive System. - This system of management is practised in units of 20 to 2000 pigs. These pigs are confined to pens and almost all of them belong to the exotic breeds. The average size of a holding is about 500 pigs. There are however a few large scale operations, stocking 1500 to 2000 pigs. Almost all of these are used in the processed meat industry.

Since pig rearing on compound rations is not profitable (1983) these piggeries depend largely on swill. If this swill gets contaminated with some disease producing organism then that organism could easily enter the food chain and in a few cycles could infect all these piggeries."

Modified breeding policies

In the State of Karnataka, India, livestock breeding policies are being modified in order to meet an increasing demand for quality meat and meat products. Moves are being made to augment milk, egg and meat production.

Among the various farmings the pig industry holds great potential as a source of much needed protein. The pig

has long been valued for its prolific nature, its rapid growth, early maturity, large litter-size, feed conversion efficiency, and its yield of a high percentage of dressed carcass.

Pig breeding has long been one of the major animal husbandry activities practised by the poorest of the poor in

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The Bangladesh Veterinary Association

The head office of the BVA is at 48 Kazi Alauddin Road, Dhaka, Bangladesh.

Members of the 1987-1988 executive committee are: -

President	- Dr. Mirza Abdul Jalil
Vice Presidents	- Prof. M.L. Dewan - Dr. Manjurul Haque Bhuyan - Dr. Idris Ali
Secretary General	- Dr. Md. Faziul Hoque
Asstt. Sec. Gen.	- Dr. Md. Wazed Ali Khan - Dr. Sardar Abul Bashar - Dr. Md. Sultan Mohiuddin
Treasurer	- Dr. Md. Nazlar Rahman
Cultural Secretary	- Dr. Md. Mahub Ali
Press & Publication Secretary	- Dr. Moinuddin Ahmed
Organizing Sec.	- Dr. M.A. Samad - Dr. Abul Bashar - Dr. Shahid Motahar Hossain - Dr. A.K.M. Yusuf Zai - Dr. Mohsin Ali
Members	- Prof. M.U. Ahmed Chowdhury - Managing Editor of the Bangladesh Veterinary Journal
Ex-Officio Mbrs.	

Source: Bangladesh Vet J July-Dec/86.

Asia council members

Bangladesh - Monjurul Huq Bhuiyan,
India - S. Abdul Rahman, Sri Lanka -
D.D. Wanasinghe.

Modified breeding policies - Karnataka

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Karnataka. Now, with encouragement and help from the Animal Husbandry Department, more and more people are coming forward to take up the rearing of exotic pigs. Financial assistance from banks is becoming available and modern methods of swine husbandry are being adopted. In Karnataka the crossbred pig population has risen from 2% in 1976 to 20% in 1986. With these crossbred pigs there has been an average increase of pork per pig of 35 kilograms.

Many of these crossbred pigs are in the districts of Bangalore, Kolar, Kodagu and Dakshina Kannada. There are now (1986) some 200 private farms, having a strength of 20 to 200 pigs each (this includes both purebreds and crossbreds). It has been observed that

the rearing of these improved pigs is more successful when garbage is available to feed the pigs. Army and airforce installations, educational institutions run by missionaries, and convent schools are doing good work in the production of quality pigs. The pigs in these institutions are fed table leftovers.

There are three government pig breeding stations. One, established in 1966 at Hessarghatta in the Bangalore district, has yorkshire, landrace, hamshire and saddleback breeds. Another, started in 1970 at Kudige in the Kodagu district, has yorkshire and hamshire breeds. These same two breeds are found at the third station, which was established in 1962 at Koila in the Dakshina Kannada district. These stations had by the end of 1986

produced 15,000 piglets. Many of these were sold, at reasonable prices, as breeding stock to progressive farmers. Others were distributed to beneficiaries of various government socio-economic schemes.

These stations became training centres in 1980 and courses in methods of pig rearing were given. As of 1986 more than 1200 farmers had attended these 15-day courses. Interested unemployed and welfare recipients have also taken advantage of this training.

In 1971 a Pork Marketing Centre was established at Bangalore. Its objective is the selling of clean hygienic pork at reasonable prices. In 1983 another pork marketing centre was opened at Kushainagar in the Kodagu district and it is expected that more will follow.

Source: The Veterinarian Dec/86. Article by Dr. A.W. Subbaiah.

Buffalo play role in dairy development

In the State of Karnataka, India, there are large numbers of buffalo. These buffalo play a very important role in Karnataka's 'Dairy Development Program', contributing nearly 60% of the milk produced there. This buffalo milk is rich in total solids and has an average butterfat of 7%. Local buffalo produce about 600 kg per lactation.

These buffalo are a triple purpose animal, converting coarse fodder (some of which will be agricultural byproducts) into milk, meat and energy for draft purposes. India is known throughout the world for its germ plasma of the buffalo, Karnataka has a

pride of place in this field. The Indian Council of Agricultural Research has started the All India Coordinated Research Project on Buffaloes. There are two buffalo research centres with murrah and niliravi breeds. These are Karnal and Ludhiana. Two other centres, with the surthi breed, are at Udaipur and Dharwad.

These surthi are exceptionally good milkers. The herd average at these centres is about 1300 kgs per lactation, with top producers reaching 1800 kgs. The male calves from these elite animals are identified and reared separately as future breeding bulls. Some of these young bulls are tested for growth, rate

of maturity and semen quality. The most promising of these are used for large scale frozen semen production.

Calf mortality has been considerably reduced by feeding colostrum to newborn calves within the first 15 minutes of life. At 15 days of age the calves are given calf starter and the best available fodder. Regular monthly deworming is carried out. When this package of practices is followed it is found that the surthi buffalo heifers, even in the farmers' herds, mature well and can be bred as early as two years of age.

Source: The Veterinarian Dec/86. Article by Dr. P. Basavaiah.

Warning on moldy biscuit poisoning

The following unfortunate incident in Bangladesh is related here because it carries a warning. The St. Michael's Adoration Monastery at Mymensingh town was given several cartons of biscuits, which had been condemned for human consumption. They were high protein biscuits and it was thought that they would be good for the rabbits, that the monastery raised in their backyard rabbitry.

In a little over two weeks, after the incorporation of the moldy biscuits into the rabbit ration, trouble started. Many of the rabbits suffered a rapid loss of appetite and weight, followed by weakness, coma and finally death. Thirty of the monastery's 69 rabbits died. The survivors were anemic and

cachetic with very rough coats. Autopsy showed subcutaneous hemorrhages, dehydration, and a slightly swollen, pale, fatty liver. Aflatoxicosis was suspected.

In Bangladesh white rabbits are important laboratory animals and quite popular as pets. It is also noted that

Did you know that:

Swaziland, a nation of seven hundred and thirty thousand (730,000) people, is bordered on three (3) sides by South Africa.

There are now twenty-five Indian states. During December, 1986, Arunachal Pradesh became India's 24th

states made important contributions to the family meat supply of low income and marginal farmers. They are raised under low input backyard systems. For these families an incident, such as the one at St. Michael's Monastery, is most disheartening.

Source: Bangladesh Vet J July-Dec/86. Authors M.H. Rahman & M.I. Hossain.

State. Arunachal Pradesh is located on India's disputed northeast border. The dispute is with China. During May, 1987, the west coast territory of Goa, Daman and Diu became India's 25th state.

Source: Parliamentary Newsletters No. 46 & 48.

Indian Veterinary Journal has new editor

Dr. V.S. Alwar, who has taken over the editorship of the Indian Veterinary Journal from Dr. K. Krishnamurti, is known to many Commonwealth veterinarians. Dr. Alwar was India's CwVA council member and Asia's CwVA regional representative from 1967 to 1979.

From a message of welcome and official introduction by the staff of the Indian Veterinary Journal in their June/87 issue we quote the following remarks:-

"Dr. Alwar was born in 1920 and graduated from the Madras Veterinary College in 1943, belonging to the first batch of the five year degree course. Soon after graduation he joined his alma mater as a member of the staff of the Department of Parasitology. There he served for nearly three decades before retiring in 1975 as Professor of Parasitology. As a teacher, he earned the admiration of the staff and students alike. As a research scientist, he contributed more than a hundred papers. His research papers pertaining to *Trypanosoma evansi*, *Schistosoma nasale* and feather mites

earned for him international recognition as an eminent parasitologist. He was elected a Fellow of the Indian Society of Parasitologists and as an Honorary Member of the Indian Association for the Advancement of Veterinary Parasitology. He made significant contributions as secretary of the Research Council of Madras Veterinary College and as editor of 'Cherion', the journal of the Research Council.

Right from the beginning of his service, Dr. Alwar was evincing keen interest in the activities of the State Associations in Madras, holding important posts. He was elected General-Secretary of the Indian Veterinary Association in 1960 and continued in that post till 1982. During his long tenure, over twenty-three years, placing profession before self he laboured hard for the progress of the profession, with particular reference to raising the status and emoluments of the members of the profession, appointment of veterinarians to top posts in the States and at the Centre, and for the enactment of the Indian Veterinary Council

Act. Very few are aware of the untiring efforts he has put in since 1965, running from pillar to post to secure a site for housing the Indian Veterinary Journal in its own premises. The profession is indeed indebted to him for all that he has done.

Dr. Alwar represented India on the Permanent Committee of the World Veterinary Association during 1976-78. As a representative of the profession at the Animal Welfare Board of India for over a decade since 1962, he made significant contributions to that Board's activities and earned the admiration and affection of the late Smt Rukmani Devi Arundel, the then Chairman of the Board.

As associate editor on the staff of the Indian Veterinary Journal, Dr. Alwar spared no efforts in helping Dr. Krishnamurti in the efficient running of the journal, particularly in writing editorials. With his rich academic and journalistic background he takes over the editorship as a worthy successor of Dr. Krishnamurti. We are confident that he will take the journal to greater heights of glory and we, all, wish him success in his new responsibility."

Afterthoughts on The Gambia meetings

S. Abdul Rahman (Reg Rep-Asia & Council Mbr-India):-

-This was the first time that such a gathering of representatives from those developing countries had the opportunity to discuss and exchange information with representatives of developed countries. This interchange, of ideas, was of substantial benefit to all Commonwealth member associations, who were represented.

-Problems facing the CwVA were discussed frankly and openly, all members expressed their views and constructive criticism and practical suggestions resulted. Plans for strengthening the CwVA were formulated, regional targets were set, and there will be opportunities for all member associations to play a full and active role in the CwVA.

-Budgeting was discussed at length. Plans, not only to make the best possible use of available supporting funds, but to merit additional support from various parties and development agencies concerned about problems in the livestock sector of the developing Commonwealth.

-The Animal Health Seminar was, in my opinion, the highlight of the Gambia meetings. It was a fascinating and

exhilarating experience, while at a Pan-African meeting, to hear from colleagues representing countries as far apart as Guyana on one hand and Australia on the other hand, with India somewhere in between.

-Those discussions will bear fruit. There will be changes and improvements and a trend toward standardization in the training of animal health assistants within the developing Commonwealth. The situation in India accentuates the importance of this. In India, with a shortage of veterinarians and more than 70% of its population living in rural areas and largely dependent on agriculture for a livelihood, it is the animal health assistants who play a very major role in the livestock economy.

-Very gratifying was the enthusiastic participation and positive contributions of the many Gambian animal health assistants who attended the seminar.

-All aspects of our stay in The Gambia were most pleasant. The hospitality and concern of the Gambian veterinarians and of all who were concerned with local arrangements will long be remembered by all of us who were there.

Dr. P. Gomwe (Zimbabwe):-

-An emphasis will be placed on increasing the flow of information between national veterinary associations. These associations will be submitting information, on their membership, national legislation governing veterinary practice, codes of professional conduct, veterinary schools, animal health training centres, and extension programmes for livestock owners, to the CwVA Executive.

India joins WVA

The Permanent Committee of the WVA has agreed to India's admission to the WVA on the basis of a membership fee of \$1000 US. This is reported to be the first time that the WVA has relaxed the membership fee of \$5 US for each veterinarian in a member country. In the case of India, with some 30,000 veterinarians, this would have meant the prohibitive sum of \$150,000 US as an annual membership fee.

Dr. S. Abdul Rahman, General-Secretary of the Indian Veterinary Association, negotiated this arrange-

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Veterinarians' role

In India's determined efforts to raise the nutritional level of her teeming population the veterinarian plays a very active and important role. Veterinarians in all regions of India meet this challenge with wholehearted determination. The month of July '87 was no exception to their yearlong efforts throughout rural areas of this great land.

During that month, in addition to their regular activities, veterinarians worked at animal-camps at Byalya, Hosahalli, Nallur and Sorahunge; at livestock infertility camps at Chikballapura and Hosakote; and at a dairy seminar at Vemgal. A new veterinary dispensary was opened at Domlur and a new book, of very considerable significance, was released. This book, on the Buffalo Pox Virus, was written by Dr. (Mrs.) Thankam Mathew. A veterinarian, Dr. H.K. Kantharaju, has been elected a Managing Committee Member of the Institution of

Agricultural Technologists. Dr. Kantharaju is also managing director of Karnataka Sheep Board.

Source: Communication from India's CWVA Council Member.

Bangladesh statistics

Records of clinical cases attended at the veterinary hospital of the Bangladesh Agricultural University at Mymensingh, from 1980-84, reveal the following:

- Of 13,694 animals treated 97% were cattle.
- 25% (3484) were surgical or obstetrical cases.
- 45% (1072) of the surgical cases were wounds.
- of the wounds 55% were infested with maggots.
- the incidence of maggot infestation was highest in the spring and lowest during autumn.
- repeat breeders made up 63% of reproductive disorders in cattle.
- Lameness was common in cattle.

Muscular rheumatism was the cause in 56% of those cases.

Cerebral oenurosis was one of the fatal surgical diseases, affecting goats, sheep and occasionally cattle. The mortality was 100%. In Bangladesh this disease is found most often in goats.

Source: Bangladesh Vet J July-Dec/86.

India now member

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ment while attending the 1987 WVA meeting in Montreal. Dr. Rahman was there in the capacity of a special observer for the IVA. During his address to members of the Permanent Committee of the WVA, Dr. Rahman pointed out that it was simply impossible for the IVA to contribute the usual membership fee. He expressed the wish of the IVA to become active in WVA affairs and stressed the importance of any country, the size and as populous as India, being represented in any world association.

WEST AFRICA

Letters to the editor

Letters to the editor in the April/87 issue of the Senelaa (The Gambia's Agricultural Extension news-magazine).

Dear Editor LACK OF TECHNICAL KNOWLEDGE FOR OUR FARMERS

Under the traditional system of raising livestock, farmers are not equipped with the right kind of knowledge to enable them to take care of the health of their animals. However they know when an animal appears to be unhealthy and starts to behave abnormally. They can distinguish such an animal from healthy ones, but they cannot tell the probable cause and its control measures. At best, when an animal of a particular farmer gets ill, he recommends it for immediate slaughter without even contacting veterinary officers around. The sick animals are sold to local butchers who, regardless of the nature of the disease, slaughter and sell the meat to the public.

As veterinary staff we should be vigilant about these things. This state of affairs and other management problems usually reduce our animal population, especially if there is an outbreak of an epidemic disease. Farmers should be assisted to identify symptoms for diseases like black quarter,

haemorrhagic septicaemia and anthrax so that prompt veterinary advice can be sought from us when animals show signs of ill health.

For that matter, all extension workers in the Department of Animal Health and Production should try and help livestock owners with modern ways and techniques of improving animal husbandry. All these activities will not be properly carried out if facilities like mobility, enough drugs and proper supervision by senior officers are lacking.

ALHAGI S. CHAM
PAKALIBA VETERINARY STATION
JARRA EAST, LRD

Dear Editor

It is generally accepted by extension workers and farmers that our indigenous Ndama cattle always gain weight during the rainy season due to the availability of adequate forage in the rangelands. But during the dry season there is usually no forage in the range lands to be grazed due to uncontrolled grazing and bush fire. As a result, our cattle lose in body weight.

The body weight of the cattle can be maintained during the dry season especially between April and the first week of July if crop residue can be fed

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Nigerian VMA

The NVMA executive for the 1987/89 period is: - President - Dr. T.O. Coker; 1st Vice President - Dr. Remi Ayeni; 2nd Vice President - Dr. M.M. Shata; General Secretary - Dr. Chidi Ogboso; Assistant General Sec. - Dr. S. Akpa; Treasurer/Fin. Sec. - Dr. A. Atolagbe; Publicity Secretary - Dr. Okoli Promise; Ex Officio Members - Dr. Ita Umo; Dr. Dipo Clopade; Editor-in-Chief - Dr. K.A. Majiyagbe.

Dr. Ita Umo is the NVMA's new CWVA Council Member.

Dr. Coker's mailing address is 15 Adeniyi Jones Ave., Ikeja, Lagos, Nigeria.

Field workers' magazine

Senelaa, a bimonthly magazine published by the Extension Aids Unit of The Gambia's Ministry of Agriculture, is most aptly referred to as the Gambian field workers' magazine. Its editors, Janko Fofana and Baboucar Manneh, are to be congratulated for the multiple responses they evoke from their readers. Letters to the editor express a variety of opinions on several subjects. The 'Action Extension' section carries interesting and informative articles contributed by workers actively involved in a variety of fields, such as forestry, livestock production, conservation etc.

Groundnut hay, good feed for animals

By Dr. Bakary Touray,
Deputy Director I.T.C.

Throughout much of The Gambia harvests are good this year (1987) and there is hope that good rains will continue to come in future years.

As more and more crops are grown and trees planted it is obvious that fewer hectares are left for grazing of cattle, sheep and goats. Already cattle die in May, June and July because there is not enough to eat at that time.

Many of our farmers have over the years made an effort at harvest time to collect and take home some groundnut hay to feed their draught oxen during the long dry months before the ploughing starts. Some farmers even put it on a platform for safe keeping. Others have collected the beautiful

green leaves and small stems and put them into a bag to take home to feed their sheep and goats. In some areas where there is a good market for groundnut hay farmers sell it to people who have horses and donkeys and sometimes to their friends across the border in Senegal.

But when all this has been done, a huge amount of groundnut hay is left lying on the ground after winnowing. The cattle, which are no longer herded, stand watching the farmer winnowing, waiting for their turn, then move in and start to eat the hay in the bush. Much of the hay is spoiled at this time by the cattle trampling on it.

For every hectare of groundnuts planted there is usually three tons of hay. Each ton would keep alive several

animals at the end of the dry season. Just as farmers feed hay to their oxen, they should feed it to the cows to get more milk and to their young growing animals to make them grow faster.

Groundnut hay is the most valuable crop residue farmers have, but they must collect it and keep it for the long hard dry times after March.

Once farmers have saved all the groundnut hay, they can begin to keep the stalks or stovers from maize, millet and sorghum, but groundnut hay must come first because it makes the cattle grow faster.

Our farmers have been collecting groundnut hay for their oxen. The time has come to do it for the other animals as well.

Source: Senelaa Apr/87.

Pastoralism Conference

Notice of the above conference, scheduled to be held in Zaria, Nigeria, this past June (1988), just recently reached the CwVA News Bureau. We regret not knowing in time to include it in the 'coming events' section of the Jan/88 CwVA News.

Entitled 'Pastoralism 88', the theme of this conference was 'Pastoralism in Nigeria: Past, Present and Future'. Its specific purposes were: -

- 1. To provide a forum for dialogue among practitioners of pastoral development in Nigeria.
- 2. To provide for scholarly exchange of information on all aspects of pastoralism.
- 3. To encourage research and development of Nigeria's pastoral production systems.

Pastoralism 88 was organized by the National Animal Production Research Institute of the Ahmadu Bello University in Shika-Zaria, Nigeria. Pastoralism is a vital matter in many developing regions and the CwVA News hopes to carry a report on this important conference in our next issue.

Extension work

Extension workers of the Gambian Ministry of Agriculture conduct some of their work under a 'Training and Visit' system (T & V system). The T & V system was introduced into The Gambia's extension service by the Second Agricultural Development Project (ADP II) as a recommendation from the World Bank. The system calls for a single line of command to teach the

farmers improved technology in a more systematic and efficient way.

General agreement indicates that the T & V system has increased the effectiveness of the extension staff in teaching farmers recommended practices to increase production. It is also noted that the farmers appreciate the system. The constant contact between the extension workers and the farmers, that the system calls for, gives the farmer increased confidence in the extension worker.

Source: Senelaa Apr/87.

An observation

Veterinarians should not allow themselves to be burdened by the tweed-coated stereotype, with few out-

side interests. We (veterinarians) have a great deal to contribute to society if we just take the opportunity.

Source: ZVA News, 1987 Christmas message from Dr. CC Waghorn, Pres. of the Zimbabwe Vet. Assoc.

Did you know that:

Physiological studies of draught cattle have shown that the heart rate (energy expenditure, recovery), respiration rate (heat stress, recovery), ambient temperature and body temperature (heat load), give good indications of the physiological state of cattle when working.

Source: CTVM Newsletter No. 44, 1987.

Letters to the editor

from page 43

to cattle. All extension workers throughout the country should advise cattle owners to collect the available crop residue like maize and sorghum stover and rice straw and store them properly on platforms. It is impressive to see some livestock owners keeping groundnut hay on platforms for the use of their draught animals during the critical period of the dry season. The importance of feeding crop residues to our cattle should be discussed with livestock owners. Without crop residue feeding during critical periods, the cattle undergo severe nutritional stress and lose up to 20-50% of their body weight. In addition, crop residue feeding accelerates the physiologic processes and maturity of the cattle, and allows heifers to drop their calf in the

third year of their lives, rather than the usual four years it takes.

We all know how our draught animals help us in the field. The bull acts like a father tilling our fields to produce cereals for our food and groundnut for the export market to earn us foreign exchange. The cow acts like a mother, giving us milk for nourishment. When we have good harvests from our crops with the energy of our draught animals, we should be grateful and provide them with enough food during the dry season. Let us tell our farmers to make the good use of their residues and advise them to avoid bush fires so as to allow our animals a place to feed in.

SANJALLY CONTEH
ANIMAL HUSBANDRY/
RANGE MANAGEMENT
UNIT, KAUR

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Malaysia hosts Conference of CVO's

The 1000 Conference of Commonwealth CVOs was held, March 8th to 11th, in Kuala Lumpur, Malaysia. It was organized by the Department of Veterinary Services, Ministry of Agriculture, Malaysia and was jointly sponsored by the Commonwealth Secretariat and the Malaysian Ministry of Agriculture. The chairman was Dr. Ahmad Mustafa Babjee of Malaysia and the vice chairman was Dr. W.H.G. Rees of the United Kingdom. Over 30 Commonwealth countries were represented.

It has been described as a very useful conference, with much excellent information being exchanged. It is interesting to note that:

Many delegates reported pressures from treasury personnel to justify state involvement in so many aspects of veterinary diagnostic and other services. A trend towards a 'user pays' policy seemed widespread and 'cost/benefit' thinking seemed to be the order of the day everywhere.

Dr. J. Thomson of Zimbabwe struck a chord with all delegates when, in reviewing the current situation, he said that the main diseases in Africa were a lack of funds to run veterinary services and a lack of will to enforce veterinary law.

The conflict between national needs and graduate aspirations was highlighted. India's delegate, Dr. Chatterjee, had a nice phrase for his country's needs, viz, 'location specific,

needs based veterinary schools'. However, it was pointed out that such a philosophy does not take account of international reciprocal recognition often sought by young graduates.

The spread of disease was highlighted, e.g. rinderpest in Africa, swine fever in Asia, clinical bluetongue in Canada. The broadening of the veterinary role in public health was also highlighted. This included the role in residue administration, an emerging need in many Commonwealth countries.

New technology received attention, examples included the aerial baiting of oral rabies vaccine, with wildlife being the target. An excellent demonstration of the use of the ELISA test, for the differential diagnosis of some calf enteric diseases, was given. This technology places new tools in the hands of the field veterinarian.

There was encouragement at the conference to draw up an inventory of training centres and veterinary schools. The CwVA representative, Dr. Pryor, advised the meeting that that was an activity better able to be done by the CwVA, and that some of this information had already been collected by the CwVA.

Conference resolutions:

To recommend to the governments of member states that:

1. (a) More staff and financial resources should be devoted to disease control.

(b) Resource planning procedures, such as cost-benefit studies, should be implemented both to justify the total use of resources and also to allocate priorities to the various disease control programmes.

2. (a) The strict enforcements of existing legal requirements designed to control the movement of animals and to contain or eliminate the spread of disease.

(b) The maintenance and enhancement of animal disease surveillance.

(c) The development of training programmes designated to provide the skills required to meet the threat of disease epidemics and other natural disasters.

3. An increased effort in training and retraining staff. The training effort should, in the first place, be concentrated on support staff and should be in the form of training programmes for certain selected personnel, who in turn would train their colleagues. Priority areas to be 1.) laboratory technology, with emphasis on rapid diagnostic techniques, and 2.) new technologies in heat hygiene and food inspection, and 3.) disease control viz. sanitation, quarantine management and other veterinary support skills.

4. Veterinary services should have a significant input into such areas, as residue testing of meat, which are connected with the control of disease by the use of medicine.

Source: Communication from Dr. W.J. Pryor, CwVA Australasia Regional Representative.

Successful seminar held in Zimbabwe

A large animal seminar, with "nutritional and disease constraints upon animal production" as the theme, was held under the auspices of the Zimbabwe Veterinary Association and the University of Zimbabwe's Department of Veterinary Studies last February (1988). Dr. D.C. Knottenbelt was the convenor of the two day programme, which was attended by 37 delegates. ZVA's president, Dr. Charles Waghorne, has described it as being an unqualified success.

Papers were presented by Drs. Honbold, Odiawo, Hoyer, M. Knottenbelt, D. Knottenbelt and Prof. Hill, all members of the UZ Vet. Clinical Dept. Other speakers included Dr. Wells, Waghorne, Gilbert-Green, Holness and J. Kelly. The main speaker

was Prof. John Webster, head of the Dept. of Animal Husbandry, University of Bristol, UK.

Professor Webster spoke on farm animal welfare and environmental constraints on ruminant productivity. He also replied to questions raised on nutritional and disease problems in dairy and beef cattle in Zimbabwe. He highlighted the new approach to evaluating farm feeds in terms of their actual digestion and he called on manufacturers and veterinarians to become fully conversant with this system in order to make better use of raw materials and by-products.

Maize gluten was described as being especially useful for dairy cows, being far superior to maize itself, which is better utilized in young maize silage. The lower fertility rates, in both com-

munal and commercial beef herds, and the long calving interval and "high stress syndrome" in dairy cattle were likely to be related to poor nutritional status. This nutritional problem could be improved upon by upgrading low quality forage and by mineral supplementation.

The seminar also covered pigs, goats, game animals and poultry. It was chaired by Dr. Jadaah Ogaa, Chairman of the UZ Clinical Veterinary Dept. Dr. Ogaa also delivered the closing address.

Sponsorship of this important and valuable seminar was provided by Air Zimbabwe, the British Council, Hoechst and Coopers, and Datlabs.

Source: ZVA News Jan-Feb/88.

Report on Syllabus Review Seminar for Technical Officers

Introduction

The Veterinary College at Pong-Tamale was established some 25 years ago to train Technical Officers for Ghana's Livestock industry.

Graduates of this institute have over the years played quite a commendable and remarkable role in our efforts at animal disease prevention, treatment and control, and at increased livestock production.

They have often been referred to as the "Eyes and Ears" of the veterinary department.

In recent times it has been considered necessary to make a number of changes in the course, both in content and emphasis, to reflect the merger of the two former departments, Veterinary Services and Animal Husbandry. It has been felt that a new Technical Officer has to be produced, one who will be competent not only to deal with disease prevention, treatment and control, but one who would be equally capable of undertaking other tasks, including effective extension work to help the illiterate farmer in his efforts at increased livestock production for our ever-increasing human population.

Objectives

To this end a week-long workshop was held at Akosombo (The site of Ghana's famous Akosombo Dam) from the 7th to the 15th of April, 1988 with the following objectives:

- 1) To determine the framework to achieve the above changes.

- 2) To determine the quality profile of the Animal Health and Production Technical Officer.

- 3) To work out guidelines both in qualitative and quantitative terms for each teaching subject to achieve the required knowledge skills and attitude.

Participants

The workshop was organized under the sponsorship of the Ghanaian-German Technical Aid Project and it drew heavily on the experiences of university professors, seasoned veterinary surgeons and diagnosticians, animal husbandry officers, technical personnel, educationists, and agriculturists under the direction of a foreign expert sociologist, with many years of experience in his field of endeavour.

Outcome

The Outcome of the seminar was that a comprehensive syllabus has been produced which incorporates relevant and important elements of animal health, animal production, agricultural extension and general agriculture. A lot more emphasis is to be placed on practical training and acquisition of skills rather than detailed theoretical studies much of which is soon forgotten after graduation. Inevitably, a lot of unnecessary detail that used to be taught in the old syllabuses has been removed and many new subjects introduced - amongst them apiculture, ecology, extension skills, land use planning, veterinary epidemiology and economics, general agriculture and

farm business management.

This, it is believed, will give the student a broader perspective of what the whole business of livestock production and health is about and how it relates to closely associated fields such as crop production and general agriculture.

Armed with this broad training the graduate will be much better placed and informed to deliver the 'goods'.

Conclusion

The implementation of the new syllabus, will mark quite a departure from the old concepts, envisaged in the training programme 25 years ago.

Its successful execution poses a challenge to those who will be charged with the responsibility of making it work.

Dr. K. Quayson
Principal,
Veterinary College,
Pong-Tamale.

Goodbye Eric

from page 2

disciplinary gaps be bridged."

Good-bye, Eric Shortridge. It has been a pleasure corresponding with you.

Signed-
Editor of the CwVA News.

ZVA promotes continuing education

Realizing that self-improvement in the field of animal health and veterinary work is an essential steppingstone in any struggle for increased national livestock productivity, CwVA members throughout the developing Commonwealth make great efforts to promote continuing education. Typical of those Commonwealth associations, determined in promoting continuing education, is the Zimbabwe Veterinary Association.

In his Easter message of 1988, ZVA President, Dr. Charles Waghorn, noted "Continuing education will now become more important and the ZVA will now become more active in this sphere. A fund for this purpose is to be established this year."

In the past, among visiting speakers

at ZVA meetings, was Dr. Paul Sayer from the Kenya Trypanosoma Control Unit. In November of 1987 at the George Hotel in Harare, Dr. Sayer gave a very interesting talk to members of the ZVA. He spoke on all aspects of trypanosomiasis research in dogs and monkeys in Kenya.

Among the Zimbabwe veterinarians, who have spoken at the ZVA meeting, is Dr. Nick Honhold. At a Clinical Evening in Jan/88, at the Harare Holiday Inn, Dr. Honhold gave a most interesting and practical talk on this subject. While ideal solutions for specific therapy are not always available in Zimbabwe, Dr. Honhold demonstrated that most situations can be covered with existing preparations and available administration equipment.

Datlabs, who sponsored the evening, expressed much interest in the specific requirements of fluid therapy in Zimbabwe veterinary practice. Source: ZVA News Jan-Feb/88.

Editor's note: Zimbabwe is a large Commonwealth country. The great majority of small developing Commonwealth countries lack both the infrastructure and support to follow Zimbabwe's lead. For them 'Book & Journal' programs, such as those of the British Veterinary Association and the Commonwealth Veterinary Association, are the basis of continuing education for veterinarians and animal health workers.

WHEREVER YOU ARE AND WHENEVER YOU CAN, PLEASE SUPPORT THESE PROGRAMMES.

Coming Events

ATLANTIC PROV. VETERINARY CONFERENCE
 Aug. 14-16 / Corner Brook, Newfoundland, Canada
 Enquiries: - Dr. Bert Stevenson, PO Box 1410, Sackville, New Brunswick, Canada E0A 3C0

SHEEP CONSULTANCY PRACTICE SYMPOSIUM
 Aug. 19-22 / Laura, Blue Mountains, NSW, Australia
 Enquiries: - The Director, Post Grad. Conf. in Vet Sc., PO Box A561, Sydney South, NSW 2000, Australia

3RD INT. CONGRESS OF VETERINARY ANAESTHESIA
 Aug. 28-Sept. 2 / Univ. of Queensland, St. Lucia
 Enquiries: - Prof. Mike Rex, Uniquet Ltd., Univ. of Queensland, St. Lucia, Qld. 4067, Australia

MANITOBA VET. MED. ASSOC. ANNUAL MEETING
 Sept. 3-5 / Gull Harbour, Prov. of Manitoba
 Enquiries: - Mrs. Araina L. Dowd, 545 Univ. Cres., Winnipeg, Manitoba, Canada R3T 2N2

5TH MEETING OF INT. VETERINARY RADIOLOGY ASSOC.
 Sept. 21-26 / Sydney, Australia
 Enquiries: - Dr. AKW Wood, Dept. of Clin. Studies, Univ. of Sydney, Sydney, NSW 2006, Australia

NEW BRUNSWICK VETERINARY MEDICAL ASSOC. ANNUAL MEETING
 Sept. 24 / Fredericton, Prov. of New Brunswick
 Enquiries: - NBVMA, PO Box 1065, Moncton, New Brunswick, Canada E1C 8P2

AUSTRALIAN SMALL ANIMAL VETERINARY ASSOC. CONFERENCE
 Sept. 26-30 / Perth, Western Australia, Australia
 Enquiries: - ASAVA Secretariat, PO Box 243, Bondi, NSW 2026, Australia

BRITISH VETERINARY ASSOC. CONGRESS
 Stp. 27-30 / Univ. of Lancaster, England
 Enquiries: - Congress Secretary, BVA, 7 Mansfield Street, London, England W1M 0AT

BRISBANE VETERINARY PRACTITIONERS BRANCH CONFERENCE
 Oct. 9-16 / Hamilton Island, Great Barrier Reef, Australia
 Enquiries: - Dr. Clifton Crane, West Chermiside Vet Clinic, 263 Appleby Road, Stafford Heights, Brisbane, Qld 4053, Australia

ONTARIO VETERINARY COLLEGE CONFERENCE
 Oct. 14-15 / Guelph, Prov. of Ontario
 Enquiries: - Dr. Ron S. Downey, c/o OVC, Univ. of Guelph, Guelph, Ontario, Canada N1G 2W1

SIXTH CONGRESS OF THE FEDERATION OF ASIAN VETERINARY ASSOCIATIONS
 Oct. 15-19 / Bali Beach Hotel, Bali
 Enquiries: - Dr. Congress Secretariat, Indonesian Veterinary Assoc., c/o Pt. Vayatur, 38 Jalan Batu Tulis Raya, Jakarta 10120 Indonesia

PRINCE EDWARD ISLAND VET. MED. ASSOC. ANNUAL MEETING
 Oct. 15-16 / Mill River, Prov. of Prince Edward Island
 Enquiries: - PEIVMA, PO Box 1206, Charlottetown, Prince Edward Island, Canada C1A 7M8

CARIBBEAN VETERINARY CONFERENCE & CwVA SEMINAR
 November/Guyana
 Enquiries: - Dr. J. Archibald, CwVA Sec.-Treas., 35 Lynwood Pl., Guelph, Ontario, Canada N1G 2V9

WILDLIFE SOCIETY NZVA ANNUAL SEMINAR
 Nov. 24-27 - Taranaki, New Zealand
 Enquiries: - E.J. Kirk, Dept. of Physiology & Anatomy, Massey Univ., Palmerston North, New Zealand
6TH TANZANIA VETERINARY ASSOC. SCIENTIFIC CONFERENCE
 Dec. 6-8 / Arusha International Conference Centre
 Enquiries: - Chairman, Tanzania Veterinary Assoc., PO Box 3174, Morogoro, Tanzania

1989 - COMING EVENTS IN 1989
MANITOBA VET. MED. ASSOC. MID-WINTER MEETING
 Jan. 13-15 / Winnipeg, Prov. of Manitoba
 Enquiries: - Mrs. Araina L. Dowd, 545 University Cres. Winnipeg, Manitoba, Canada R3T 2N2

WORLD SMALL ANIMAL VETERINARY ASSOC. CONGRESS
 March 30-Apr. 2 / Harrogate Inter. Conf. Centre
 Enquiries: - C. Artingstall, 5 St. Georges Terrace, Cheltenham, Glos., GL50 3PT, England

5TH INTERNATIONAL SYMPOSIUM OF THE WORLD ASSOCIATION OF VETERINARY LABORATORY DIAGNOSTICIANS
 June 26-30, 1989 / Guelph, Prov. of Ontario, Canada
 Sponsored by the CAVP/Hosted by the Univ. of Guelph
 Enquiries: - Dr. Tony van Dreumel, OMAF-Vet Lab Services Box 3612, Guelph, Ontario, Canada N1H 6R8



ZVA Congress Monomatapa Hotel, Harare 6-9 September 1988



Main Speaker: Dr. John David BSc. PhD.

Members of the ZVA and other interested persons are invited to submit Abstracts or Papers for presentation at Congress '88.

For full information write to:

The Congress Convener, Zimbabwe Veterinary Association,
 P.O. Box 8387, Harare.

THE COMMONWEALTH VETERINARY ASSOCIATION

Serving in the Commonwealth for 21 years.

A creative Commonwealth partnership, of small and large veterinary associations, searching for pragmatic responses for the problems of its developing members, large and small.

Working cooperatively so that developing partners may become self-reliant and developing countries self-sufficient.



FROM BERT STEVENSON, COORDINATOR OF CwVA's
BOOK & JOURNAL PROGRAMME

Quote:- "I have received a large number of books which I have been finally able to send out. So far this year over 115 texts have been sent to developing areas of the Commonwealth. I still have a large number, stored in various places, that will be sent as soon as sources of funds to cover postal charges are found."

From the editor:- "Commonwealth Foundation funding, earmarked for this project, is limited. These texts are needed. Help is needed."

MESSAGE TO ALL

WHEN THE OPPORTUNITY TO HELP COMES WITHIN REACH
SEIZE IT AND ACT WITH URGENCY
FOR ON THE PLAINS ON HESITATION
BLEACH THE BONES OF COUNTLESS MILLIONS
WHO, AT THE DAWN OF VICTORY, SAT DOWN TO REST
AND, WHILE RESTING, DIED.

Source: ???