



**Editor**

Dr. S. Abdul Rahman

**Editorial Board**

- Dr. Robin Yarrow
- Dr. Bert Stevenson
- Dr. W.J. Pryor
- Dr. (Mrs.) HMSP Herath
- Dr. Jeff Cave
- Dr. Collin Boyle
- Dr. G.F. Bath
- Dr. Richard D. Suu-Ire
- Dr. Charalambos Kakoyiannis

All communications for the editorial department should be addressed to

The Editor, Journal of Commonwealth Veterinary Association, 123, 7th 'B' Main Road, 4th Block (West), Jayanagar, Bangalore 560011 INDIA  
Tel/Fax. 91 80 2663 5210  
Email. shireen@blr.vsnl.net.in

Further information about the *Journal of Commonwealth Veterinary Association* can be found on website at: [www.commonwealthvetassoc.org](http://www.commonwealthvetassoc.org)

Advertisement should be sent to Secretary at: [shireen@blr.vsnl.net.in](mailto:shireen@blr.vsnl.net.in)

**Printed by**

Mrs. Shireen Rahman  
Intervet Publishers  
123, 7th 'B' Main Road  
4th Block (West), Jayanagar  
Bangalore 560011 INDIA

**Typesetting**

Mr. K.K. Anubhavi  
#379, 12th 'A' Main, Sector-A  
Yelahanka Newtown  
Bangalore 560064, INDIA.

One of many Commonwealth Professional Associations supported by the



Cover Photograph :  
Courtesy - ILRI Annual Report 2004

## CONTENTS

	Page
President's Column	3
General Articles	
Commercial Beef Production Using Tethered Cattle In Vanuatu - <a href="#">Peter Hoyle F.</a>	5
Improving Food Safety At The Broiler Farm – A HAACP Approach - <a href="#">Veronica E. Burnham</a>	7
Biosecurity And Island States - The Pacific Perspective - <a href="#">Peter Saville</a>	11
Adaptive Strategies For Climate Change And Disaster Management in the Commonwealth - A Pacific Islands Perspective - <a href="#">Kenneth Cokanasiga</a>	14
Pig Production In Samoa - <a href="#">Sina Taulealo</a>	19
Abstracts	21
Commonwealth News	23
CVA News	25
Book & Journal Programme	29
Regional News	31
Asia	31
Australasia/Oceania	34
Canada Caribbean	38
East, Central and Southern Africa	40
West Africa	43
U.K. Mediterranean	44
Calendar of Events	48



## COMMONWEALTH VETERINARY ASSOCIATION

- Patron** : **Sir Dawda Jawara**  
Former President, Republic of The Gambia.
- President** : **Dr. Robin Yarrow**  
GPO Box 15411  
Suva, FIJI.  
Fax: (679) 3384980  
Email: yarrow@connect.com.fj
- Secretary** : **Dr. S. Abdul Rahman**  
123, 7th 'B' Main Road, 4th Block (West),  
Jayanagar, Bangalore 560 011, INDIA.  
Tel/Fax: (91 80) 26635210  
Email: shireen@blr.vsnl.net.in; drwahaj@hotmail.com
- Treasurer** : **Dr. W.J. Pryor AO**  
Galwiji, 309 Pryor's Road, Scotsburn  
Victoria, AUSTRALIA 3352  
Tel/Fax: (61 3) 53 413397  
Email: commvet@netconnect.com.au
- Immediate Past President** : **Dr. Bert Stevenson**  
99 Celtic Lane E, Keppoch-Kinloch, Stratford  
Prince Edward Island C1B 1L4, CANADA  
Tel: (1 902) 5692894  
Email: bertstevenson@gmail.com

## REGIONAL REPRESENTATIVES

- |                                 |  |   |   |
|---------------------------------|--|---|---|
| <b>ASIA</b>                     | <b>Dr. H.M.S.P. Herath</b><br>15/4 Sudharmarama Mawatha<br>Bowela, Kandy<br>SRI LANKA<br>Tel/Fax: (94 1) 505799<br>Email: hmspherath@hotmail.com   | <b>EAST/ CENTRAL/<br/>SOUTHERN AFRICA</b> | <b>Dr G.F. Bath</b><br>CVA Councillor, South Africa<br>PO Box 25033, Monument Park<br>Pretoria 0181<br>REPUBLIC OF SOUTH AFRICA<br>Tel: (27 12) 346 1150<br>Fax: (27 12) 346 2929<br>Email: gfbath@op.up.ac.za                      |
| <b>AUSTRALASIA/<br/>OCEANIA</b> | <b>Dr. Jeff Cave</b><br>Department of Primary Industries<br>PO Box 59, Wodonga<br>Victoria 3689, AUSTRALIA<br>Tel: (612) 60437958 (W)<br>(612) 6020 8348 (H)<br>Fax: (612) 6043 7912<br>Mobile: 0418 583654<br>Email: jeff.cave@dpi.vic.gov.au | <b>WEST AFRICA</b>                        | <b>Dr. Richard D Suu-Ire</b><br>PO Box 143<br>Legon, GHANA<br>Tel : (233 21) 772553 (O); 782177 (R)<br>Fax : (233 21) 776021<br>Email: suuire@hotmail.com   |
| <b>CANADA<br/>CARIBBEAN</b>     | <b>Dr Collin Boyle</b><br>CVA Councillor, St. Vincent<br>PO Box 1135, Kingstown<br>ST. VINCENT, West Indies<br>Tel: 784 4564981; Fax: 784 4565964<br>E-mail: menzo@caribsurf.com   | <b>U.K. /<br/>MEDITERRANEAN</b>           | <b>Dr Charalambos Kakoyiannis</b><br>CVA Councillor, Cyprus<br>Head of Central Veterinary Laboratories<br>Veterinary Services<br>1417, Nicosia, CYPRUS<br>Tel: 357 22 805187; Fax: 357 22 332803<br>E-mail: cacoyiannis@hotmail.com |

## President's Column



*As we commence the 40th Anniversary year of the Commonwealth Veterinary Association, it is significant that our 4th Pan Commonwealth Veterinary Conference [PCVC] will also take place this year, from 4 - 8 November, 2007 at St. Michael in Barbados in the Caribbean. Pan Commonwealth Conferences are held every 4 - 5 years and are our 'blue ribbon' events, when representatives of the entire veterinary Commonwealth [which comprises over 100,000 veterinarians] are able to meet in one venue*

*This historic first PCVC to be held in the Caribbean/Canada region, will take place at time of great challenge and also change, both for the profession and also more generally. Some would even argue that the threats imposed by emerging zoonotic diseases such as Avian Influenza, are unprecedented, certainly in our lifetimes. Therefore, the Conference theme, 'Animal Health and Welfare; Constant Challenges for Veterinarians' is a most relevant one.*

*In addition to the many current issues which the Fourth PCVC will address, and these include recent advances in veterinary medicine, veterinary education, privatisation of veterinary services and animal welfare, there will be opportunities to take stock of developments in expanding/new areas such as aquaculture and food safety, in which veterinarians are well qualified to play major roles.*

*While communications between often highly-scattered veterinarians is now very much easier than previously, particularly as a result of improved Information Technology, there is still no substitute for face-to-face engagement. PCVC 4 will enable veterinarians from our smallest and most isolated member countries to meet with their colleagues from the wider Commonwealth, including much larger states, both developing and developed. A great deal of experience and knowledge exchange takes place and valuable friendships are made in the process, many of which are lasting ones.*

*That PCVC 4 is being held in a predominantly small island region is of special significance for other island Commonwealth states in particular, given the special constraints which these countries face. These difficulties include relative freedom from many serious animal diseases as a consequence of their isolation and a low capacity to restrict the entry of, and respond to, new disease introductions.*

*PCVC 4 will have a special focus on this subject and strategies/approaches from various regions will be shared. Among these experiences will be the recently-formulated Pacific Regional Influenza Pandemic Preparedness Project [PRIPPP] an exciting 4 year initiative, which is managed by the 22-member inter-governmental Secretariat of the Pacific Community [SPC] and implemented in partnership with the World Health Organisation, Food and Agriculture Organisation and the World Animal Health Organisation [OIE], with funding support from both Australia and NZ. A very special feature of this project is that it is a joint human and animal health undertaking. Animal welfare, which is progressively assuming greater priority in the developing world, will also be a focus area, as will also be poverty alleviation.*

*The Barbados Conference will therefore also enable us to reflect on the bigger, global picture, including the Millennium Development Goals, [MDGs] and on the contribution which we veterinarians must collectively endeavour to make toward attaining these laudable goals. Within the framework of MDG 7, which relates to sustainable development, it will be important for us to take stock of trends and especially of the likely implications of a rapidly-growing world urban population and of the associated [and often adjacent] intensification of livestock production, on natural resources and the environment.*

*A closely related area is that of human-induced climate change. Higher overall temperatures and major changes in precipitation appear inevitable and it is imperative that we take steps to develop strategies to adapt livestock farming systems to these impending variations and to the changes in livestock pastures/feeds as well as livestock pests and diseases, that are likely to result. It is pleasing that this broad subject of climate change is now high on the agenda of the Commonwealth, driven to a major degree by the Commonwealth Foundation, a valued sponsor of our core activities. A Commonwealth-wide consultation is currently in progress, aimed at developing a plan of action for submission to and adoption by the Commonwealth Heads of Government Meeting [CHOGM] later in 2007 in Kampala. We hope to be updated on this process in Barbados and at the same time provide useful inputs from our veterinary stakeholder perspective.*

*Lastly but certainly not least, I wish to make reference to another important milestone which takes effect this year - that is the acquisition as a new principal commercial sponsor, the UK firm of Norbrook Laboratories, one of the worlds leading pharmaceutical companies. Norbrook has major production facilities in Ireland, both North and South, and marketing offices in over 30 countries, with exports to more than 120 countries. We are very proud of our new association with Norbrook and we look forward to a long and mutually beneficial relationship. This subject is covered in greater detail on page 25.*

*In closing, may I extend cordial season's greetings to all readers of our Journal? I also express the wish that 2007 will be a rewarding year for each of you and your families.*

*I further wish the Barbados Veterinary Association's hard working Organising Committee for the PCVC4 every success in its efforts!*

January 2007

**Robin Yarrow**  
President

***Wish you A Happy and Prosperous New Year 2007***

## General Articles

### Commercial Beef Production Using Tethered Cattle In Vanuatu

*Peter Hoyle F.*  
*CVA Councillor Vanuatu*  
*P.O. Box 271, Luganville, Santo*  
*Vanuatu*

#### Introduction

The use of livestock in poverty alleviation is of constant interest to CVA and like bodies. Experience in Vanuatu with a system using tethered cattle points to one approach with very encouraging results.

Vanuatu is unique among the Pacific island countries, in that it has both a strong export as well as a domestic beef production industry. Beef is the fourth, in value terms, as a commodity export earner. There are two licensed abattoirs, one on the island of Espiritu Santo, trading as Santo Meat Packers ( SMP ), the other on the island of Efate trading as Vanuatu Abattoirs Limited (VAL). Both abattoirs are licensed to export beef with SMP exporting mainly to Japan and to other Pacific island countries, while VAL exports some of the output as organic certified beef to Australia and New Zealand and non- organic to other Pacific island countries. Both abattoirs supply the urban butcheries and restaurants. The urban markets of Port Vila and Luganville are controlled by regulation so that it is illegal to sell beef produced, other than through a licensed abattoir, within the urban areas.

From the Vanuatu Livestock Data Base of 2005 (VLDB) information, the beef industry can be seen to be based on a national herd of 130,000 cattle with 68000 owned by expatriate farmers in herds ranging in size from 10 to 10,000. The remainder of the herd is owned by indigenous Vanuatu citizens ( Ni-Vanuatu ) with herds ranging in size from one animal to 1500 head. Closer analysis of the VLDB data reveals 52 Ni-Vanuatu farmers with herds of more than 100 head, 809 farmers with between 15 and 100 head and 1242 farmers with less than 15 head of cattle each and this latter group is often using tethered cattle as a management tool. Farmers on the Islands of Espiritu Santo, Aore, Malo, Malekula and Efate have regular access to the commercial markets. Forty percent of the total Ni Vanuatu owned herd is located on these islands in areas with easy regular access to commercial markets.

Within this group there are 526 farmers owning less than 15 cattle, likely to be using a tethered animal system of management and with access, directly or indirectly, to a

commercial market through the abattoirs. ( VLDB 2005)

The other commercial market is indirect through the sale of feeder cattle to farmers on Efate and Espiritu Santo. This market is infrequent but becoming more important of late as the demand for cattle on Efate grows due to increased investment by expatriate farmers, spurred by demand for exported organic beef. These cattle are collected and transported from the less accessible parts of Malekula, Espiritu Santo, and the islands of Epi, Pentecost and Maewo.

#### The Tethered Cattle System Cattle acquisition

Cattle for tethering are purchased as weaned calves. This is an informal market as there is no regular organized live cattle market in Vanuatu. In most cases the calves are purchased from other Ni-Vanuatu farmers owning herds in the 15 head plus category and there is very little involvement of expatriate farmers. The price paid is 5000vt (\$US50 ) or less. In some cases the larger herds have a free range breeding herd and raise some young stock as tethered cattle.

#### Breeds used

Charolais, Simmental, Limousine, and Brahman genes have been introduced to Vanuatu through the introductions of imported live cattle, but recently this has been limited to imported semen and embryos. The sale of both male and female crossbred cattle, derived from these four breeds, with varying genetic percentages, as breeding animals to the larger herds owned by Ni-Vanuatu farmers has lifted the genetic merit of cattle used in the tethered animal system. These modern crossbred animals are interbred with a breed commonly called "island cattle" which were produced in the pre-beef export era by the indiscriminate introduction and cross breeding of cattle for the main purpose of vegetation control in coconut plantations. The old "island breed" is suited to local subsistence farming but not suitable for commercial beef production due to poor growth rates and carcass conformation.

## Management



entangled and the rope twisting on the neck causing choke is much greater with longer ropes. Life in the rural areas is centered on a village and in most cases farmers travel from the village daily out to the areas of land being used for farming. In this system of farming the cattle might be tethered to trees or posts on the farmers land or on vacant land along roads and walk ways. Tethered cattle are frequently used to eat weeds and clear land being prepared for planting as a food garden. There are no financial costs associated with land use at this level of farming. Good farmers ensure that shade is available and the animal is moved to a fresh area at least every day with best results from three moves per day. There is a considerable saving in fencing establishment costs at 50000vt (\$US500) per kilometer. Constant handling makes the cattle quiet reducing the need for capital outlay in cattle yards. Cattle are at times led on foot for one to two days to get to market and the quiet nature of the cattle makes loading onto vehicles for transport easy.

## Feeding

Water is not usually made available but because of the high water content of the forage cattle thrive with acceptable growth rates reaching 0.5kg live weight per day.(Evans et al, 1994) Cattle are grazed on a variable mixture of garden weed species intermixed with some grasses. Improved pasture is rarely used under this system. 'Cut and carry' is rarely practised except in drought periods affecting available feed supplies and when water availability becomes critical. Vanuatu is relatively lightly populated with an average human population density of 16 per square kilometer, 40% of the total land area is cultivatable and with a high rainfall

on naturally fertile soils, forage production and competition from other forms of agriculture is not a limiting factor to this system of cattle production. ( Vanuatu National Statistics 2002 )

## Marketing



were tethered cattle. This has encouraged other farmers to adopt this system of management.

This demonstrates that one very well grown steer taking 3 years to market at 66000 (minus purchase price of 5000 equals 61000 divide by three) earns the farmer 20333 vatu per year. This is equal to a months pay for an unskilled worker in Vanuatu A farmer with 12 steers of good breeding and well managed as tethered animals can sell four steers each year and have an income from cattle equal to the minimum wage

## Summary

Vanuatu is in the fortunate position of having an export beef market accessible to Ni-Vanuatu farmers. Small holders with less than 15 cattle often rear purchased weaned steer calves and keep them tethered. Calves of improved genetic merit suitable for sale to the export beef trade are now available. Cattle are tethered using an 8 meter long rope to a tree or post in areas of vacant land or pasture and often used to clear land for later food garden planting. Water is usually not provided and a 'cut and carry'"system is not used except during periods of drought. High rainfall, fertile soils and a

lack of competition for land resources allows a ready supply of forage. Water solely from forage is sufficient for growth rates up to 0.5kg live weight per day. The capital outlay for this system is limited to calf purchase and a length of rope. Recent sales of well managed, well bred, tethered steers to the Abattoir have returned a net income equivalent to \$US610 per head. This is equal to three months pay for a worker on the minimum wage in Vanuatu.

com.vu Vanuatu National Statistics 2002

## References

- 1 Evans TR, MacFarlane D, Mullen B, Sustainable Commercial Beef Production in Vanuatu Technical Bulletin No. 4 1994
- 2 Vanuatu Livestock Data Base 2005
- 3 Vanuatu National Statistics Office, www.stats@vanuatu.

## Improving Food Safety At The Broiler Farm – A HACCP Approach \*

*Veronica E. Burnham*

*121 Regent Road, Bourda, Georgetown  
Guyana*

Within recent years, much emphasis has been placed on the implementation of HACCP programmes at poultry processing facilities, in an effort to reduce the incidence of human foodborne illnesses associated with the consumption of poultry products. While these programmes have yielded some measure of success, the level of contamination of poultry carcasses with harmful pathogens remains relatively high due to the inability of processing facilities to fully address the problem. If poultry meat with little or no foodborne pathogens is to be produced, then more emphasis has to be placed at the pre-harvest level, where many of the problems originate.

Foodborne infections remain a major public health concern and also have major socio-economic implications because of the associated deaths, illnesses, high medical costs and low productivity. Lowering the incidence of foodborne illnesses would reduce costs that poultry producers suffer as a result of tainted food products being recalled, and while the source of the problem is being isolated and eliminated.

### Foodborne Pathogens in Poultry

The largest number of human foodborne illnesses are caused by *Campylobacter jejuni*, *Campylobacter coli* and paratyphoid serotypes of *Salmonella*. Poultry products have been blamed for many of these.

*Campylobacters* are regarded as the most common bacterial cause of gastroenteritis worldwide, causing more cases of diarrhea than foodborne *Salmonella* bacteria. It is believed that they can cause disease as severe as that caused by *Salmonella*, although fewer people die. According to the World Health Organisation (WHO), the incidence of human *campylobacter* infections in most developed countries has been steadily increasing for several years. It is estimated that *Campylobacter* infects as many as 70 - 90% of all chickens. The threat of these bacteria remains little known because there is no simple laboratory test to identify them. In addition, their widespread occurrence hinders the development of strategies to control them in the food chain.

*Salmonella* is considered the second leading cause of foodborne illnesses, and is responsible for more deaths than any other foodborne pathogen. Recent studies suggest that as few as one to ten *Salmonella* cells can cause infection in humans.

### Processing Plant

At the processing plant, good hygienic slaughtering practices alone, will reduce cross contamination of carcasses by feces, but will not guarantee the absence of *Campylobacter* or *Salmonella* from poultry carcasses, since:

1. Methods that help to control *Salmonella* and *E.*

\* Paper presented at, and published in the Proceedings of the Third Pan Commonwealth Veterinary Conference, 27th - 30th June, 2003 Wellington, New Zealand, pp. 81-88, Editor; S. Abdul Rahman

Coli, such as dipping raw chicken in chlorinated water and other antibacterial washes, are not as effective against *Campylobacter*. *Campylobacter* is present on poultry carcasses in such high numbers that they overwhelm the chlorinating system, making it difficult to destroy these pathogens. There are currently no practical or effective methods for addressing this food-safety problem at the processing plant.

2. The implementation of HACCP programmes at processing plants has resulted in a significant reduction of surface contamination of poultry carcasses, but has not been as effective in reducing the percentage of positive carcasses that result from contamination of feather follicles. When dirty birds enter the processing plant, it increases the possibility of contaminated water from the scalding being driven into feather follicles during picking. When the carcasses move to the chiller, the follicles contract, retaining the contaminated water. This makes it difficult for pathogenic bacteria to be eliminated from the follicles by simply adding chlorine or other antimicrobials to the chiller. Fat globules in the chiller can also protect bacteria, resulting in the spread of pathogens from one carcass to another.

### Pre-Harvest Food Safety

Preharvest food safety is an important aspect of assuring overall quality and safety of poultry products entering the human food chain. Food safety on the farm addresses the issues of chemical, microbiological and physical residues in food products of livestock origin. While many public opinion studies report that consumers are primarily concerned about chemical residues such as antibiotics, feed additives and pesticides, these hazards are nearly non-existent. Many pharmaceutical products are routinely used in poultry rearing, but once drug withdrawal times are firmly adhered to, chemical residues in the birds should be within set limits. The most significant hazards facing the food industry today are microbiological contaminants.

There are several reasons to support pre-harvest control of foodborne disease agents in poultry.

1. Poultry is a reservoir for two major foodborne disease agents namely *Salmonella* and *Campylobacter*. In controlling any infectious disease, control at the reservoir level must be considered, if possible.

2. The major foodborne agents harbored by poultry seldom produce signs of disease, which would be noted on inspection. Though *Salmonella* and *Campylobacter* do occasionally produce disease signs, disease is rare compared to the frequency of gastrointestinal colonization. Inspection therefore is of little use in trying to control these agents.

3. Pathogen reduction strategies at the processing plant cannot by themselves adequately prevent or control foodborne disease agents from contaminating poultry products.

Any effective control strategies at the pre-harvest level may therefore be expected to have a significant effect on reducing foodborne illnesses.

### Sources of Contamination

*Campylobacter* and *Salmonella* are commonly found in the intestinal tract of poultry, wild birds, flies, rodents, contaminated water and contaminated equipment. It was previously thought that intestinal colonization of poultry with *Campylobacter* came only from the environment. Recent evidence however suggests that transmission from parent to offspring also occurs (Cox et al., 1999). Once a broiler in a house is found to be positive for *Campylobacter*, all broilers in that house will be contaminated within one week, with counts remaining high until slaughter (Jacobs-Reitsma 1997) probably due to the spread of the organisms through the use of common waterers and feeders.

Important sources of *Salmonella* include the breeder farm and hatchery, with the hatchery probably being the most important source of contamination. Studies have demonstrated high levels of contamination at the hatchery, with as much as 71% of eggshell fragments, 80% of chick conveyor belt swabs and 74% of pad samples placed under newly hatched chicks found to contain *Salmonella* spp. (Cox et al., 1990). In addition, a single *Salmonella* contaminated egg could substantially contaminate other eggs and chicks in a hatching cabinet (Bailey and co-workers 1994). Evidence of this can be seen in the high number of salmonella positive chicks leaving the hatchery, compared to the low number of contaminated eggs entering the hatchery. This suggests that most chicks become positive through exposure in the hatchery.

### Control

The successful implementation of measures to control these foodborne pathogens requires a thorough understanding of how poultry flocks become infected in the first place.

1. At the breeder farm, some *Salmonella* strains, notable *Salmonella enteritidis* and *Salmonella typhimurium* may be vertically transmitted from hens to their progeny. Pathogen reduction strategies at the breeder farm must therefore be aimed at reducing the number of *Salmonella* positive eggs reaching the hatchery.

2. At the hatchery, cross contamination of eggs



and chicks must be minimized. Newly hatched chicks are susceptible to Salmonella by way of the respiratory route. The strong air needed to move warmth throughout the hatching cabinet also moves dust. Germs can hitchhike on dust and find their way into the chicks' lungs, resulting in the potential spread of infection from one infected chick to the entire cabinet. Cross contamination can be significantly reduced if eggs are disinfected prior to placement in the setting cabinet. This should be followed by the use of effective sanitizers during the last three days of hatch. Application of competitive exclusion products at the hatchery has also been shown to have some effect in controlling Salmonella. Much research has been done on Competitive Exclusion (CE) in chickens over a number of years (Nurmi et al., 1992). Competitive Exclusion involves the introduction of microflora from the gastrointestinal tract of an adult bird that is free from Salmonella, into a newly hatched chick. Newly hatched chicks can be colonized by less than five cells of Salmonella (Milner and Shaffer 1952), whereas two week old chicks have a mature gut microflora (Barnes et al., 1972) and are thus more resistant to gastrointestinal colonization. When microflora from an adult bird is introduced into a day-old chick, it speeds the maturation process of the gastrointestinal microflora, causing the chick to become more resistant to colonization by Salmonella.

3. In the grow-out house, poor litter conditions lead to caking of wet litter on birds. This gets into feather follicles, significantly increasing carcass bacterial counts. Maintaining proper litter conditions is essential to minimizing the number of pathogens on carcasses entering the processing plant.

4. Ammonia levels in excess of 25ppm are known to irritate the respiratory system of birds, predisposing them to diseases such as Air Sacculitis and Infectious Process, which increase susceptibility and makes skin easier for bacteria to adhere to. This increases the levels of bacteria on carcasses, making it almost impossible for the processing facility to control. Proper ventilation and good litter conditions help to keep ammonia levels within acceptable limits.

5. Salmonella enteritidis and Salmonella typhimurium are able to live in affected rodents, which can contaminate poultry through contact with feed ingredients and bedding. Rodent control programmes at the feedmill and feed storage facilities at the farm are important means of controlling these pathogens.

6. Farm personnel, visitors, vehicles and equipment are also potential sources of contamination, especially in relation to the movement of infection from site to site. The implementation of strict sanitation measures for people, vehicles and equipment are essential in controlling spread

of contamination from one location to another.

7. The residual biofilm in water systems harbours potentially harmful bacteria, including Campylobacter and Salmonella, which may then persist from flock to flock. Header tanks should be properly cleaned between flocks, and water sanitized with chlorine and / or iodine, especially if open water systems are used. The goal should be zero coliforms.

8. A combination of regular replenishment of foot dip disinfectant, thorough cleaning of the poultry house between flocks and daily sanitizing of the water supply have been shown to reduce the incidence of Campylobacter in poultry by at least 50%. Implementation of these measures will also reduce the incidence of other poultry pathogens.

9. Birds entering the processing plant have high levels of bacteria in their crops as a result of litter picking (Byrd et al., 2001) following feed withdrawal. The use of lactic, acetic or citric acid in waterers two days prior to slaughter, lowers the pH of the crop and kills Salmonella and Campylobacter located there. Of the three, lactic acid was found to be the most effective, reducing Salmonella by 80% when used at a concentration of 0.4% (Byrd et al. 2001).

10. Transport cages should be properly cleaned and sanitized since fecal matter can contribute to cross contamination with Salmonella and Campylobacter and will increase E. coli levels.

## HACCP

HACCP, or the Hazard Analysis Critical Control Point System identifies where hazards might occur in the food production process and puts into place action to be taken in order to prevent the hazards from occurring. This is done by strictly monitoring and controlling each step of the process. If growing chickens with little or no Salmonella or Campylobacter is to be accomplished, then the implementation of good manufacturing practices using HACCP principles is essential.

The California poultry industry explored whether a rigid HACCP programme could be fully adapted on the farm. With the technology available today, it was determined that a strict HACCP plan is not possible. It is possible however to adapt husbandry practices to hazard analysis concepts in order to meet the ultimate goal of reducing bacterial hazards, identifying control points and developing strategies that would ensure that the problem can be prevented or controlled. One Agricultural Committee Food Report stated that "in poultry production, [HACCP] intervention is more effective at the farm level than during slaughter."

HAACP consists of seven principles, which serve as a seven-point approach to food safety.

### Principle 1 - Conduct A Hazard Analysis

Under this principle, microbiological, chemical and physical hazards that can occur at each step in the food production process are identified. The main hazards in poultry production are biological hazards, namely Salmonella and Campylobacter. They can be transmitted around the farm by vectors and fomites, and can multiply within birds in the flock.

### Principle 2 - Identify Critical Control Points (CCP's)

CCP's are points in the process where potential hazards could occur. At these points action can be taken to reduce or eliminate the hazard. At the broiler farm there are several control points at which pathogens can be prevented or controlled. These include:

### Principle 3 - Establish Critical Limits

Critical limits are set limits to which a hazard must be reduced. If specified cleaning and disinfecting procedures are followed, this should ensure that pathogens do not exceed set limits.

### Principle 4 - Establish Monitoring Procedures

Monitoring may require devices to measure or otherwise evaluate the process at each CCP to ensure that the critical limits are met at each step. Monitoring usually requires the use of "rapid methods", and the resulting data used as the basis for adjusting the process in order to ensure that critical limits are achieved continuously.

### Principle 5 - Establish Corrective Action

This is action that must be taken if critical limits are not met at each step. In case a problem occurs, corrective action must be in place to ensure no public health hazard occurs. For example, if there is not an acceptable reduction in organisms, action must be taken to ensure that cleaning and disinfecting is in accordance with specified guidelines.

### Principle 6 - Establish record keeping procedures

Records must indicate that the biosecurity programme is being implemented correctly and on a continuous basis. Records should be kept of all procedures, as well as any corrective action taken in the event of a deviation. This provides a detailed account for monitoring and review purposes.

### Principle 7 - Establish procedures for Verification

This involves procedures to verify that the HACCP

plan is being implemented correctly. It may include third party verification of bacteriology tests, monitoring records for each CCP, and the reviewing of records for deviations and corrective action.

### Conclusion

If success is to be achieved in reducing the number of Salmonella and Campylobacter positive birds entering the processing plant, then pathogen reduction strategies must be implemented at all phases of pre harvest. This, combined with effective control measures at the processing plant, should significantly reduce the level of foodborne pathogens in or on poultry, and should ultimately decrease the prevalence of foodborne illnesses in the population.

### References

Bailey, J. S., N. A. Cox, and M. E. Berrang. 1994. Hatchery-acquired Salmonella in broiler chicks. *Poultry Sci.* 73:1153-1157.

Barnes, E. M., G. C. Mead, D. A. Barnum and E. G. Harry. 1972. The intestinal flora of the chicken in the period 2 to 6 weeks of age with particular reference to the anaerobic bacteria. *Brit. Poultry Sci.* 13: 311-326.

Byrd, J. A., B. M. Hargis, D. J. Cadwell, R. H. Bailey, K. L., Herron, J. L. Brewer, R. C. Anderson, K. M. Bischoff, T. R. Callaway, and L. F. Kubena. 2001. Effect of lactic acid administration in the drinking water during preslaughter feed withdrawal on Salmonella and Campylobacter contamination of broilers. *Poultry Sci.* 80:278-283.

Cox, N. A., N. J. Stern, K. L. Hiett, and M. E. Berrang, 1999. Transmission of Campylobacter jejuni from breeders to commercial broiler chickens. Proceedings of the 10th annual meeting of Campylobacter, Halobacter and Related Organisms. Baltimore, Maryland, September.

Cox, N.A., J. S. Bailey, J. M. Mauldin, and L. C. Blankenship. 1990. Presence and impact of Salmonella contamination in commercial broiler hatcheries. *Poultry Sci.* 69:1606-1609.

Jacobs-Reitsma, W. F., 1997. Aspects of epidemiology of Campylobacter in poultry. *Vet Quart* 19:113-117.

Milner, K. C. and M. F. Shaffer. 1952. Bacteriologic studies of experimental Salmonella infections in chicks. *J. Infect. Dis.* 90:81-96.

Nurmi E, Nuotio L, Schneitz C. 1992. The Competitive exclusion concept: development and future. *Int. J. Food Microbiol.* 15:237-240.

## Biosecurity And Island States - The Pacific Perspective\*

*Peter Saville*

*Animal Health Adviser  
Regional Animal Health Service  
Secretariat of the Pacific Community  
Private Mail Bag, Suva  
Fiji*

### Introduction

The geographical isolation of the Pacific Island countries and Territories (PICT's) has provided protection from the introduction of exotic disease. The first domesticated animals to be introduced into the region, pigs and poultry, accompanied the first colonists some three thousand years ago, on their exploratory voyages between the islands. The weaker animals were most likely consumed as food before they died ensuring that only the healthiest remained to establish in the newly discovered islands.

With the arrival of the first Europeans, travel between islands necessitated long sea journeys, which provided a quarantine period for new introductions of livestock and plants. Animals exhibiting signs of disease could be destroyed during the voyage or would recover without developing carrier status. Confinement on board a vessel also served to break the life cycle of many parasites, principally those requiring an intermediate host.

Although the outbreak of measles in the 19th century had a devastating impact on the human populations in many countries and demonstrated the vulnerability of small island communities, it was the advent of the aeroplane, which provided the first reported case of an exotic livestock disease in the region when rabies was first detected in Guam in 1965. Eradication was successful and to date there have been no further reported rabies outbreaks.

The outbreaks of hog cholera which were recorded in French Polynesia (1972) and Kosrae in the Federated States

*\* Paper presented at, and published in the Proceedings of the Third Pan Commonwealth Veterinary Conference, 27th - 30th June, 2003 Wellington, New Zealand, pp. 126-130, Editor, S. Abdul Rahman*

of Micronesia (1975) reflect the increase in the movement of animal products, which was occurring as the region gained importance as a source of fish for South East Asian countries and Pacific Islanders began to seek employment in other countries.

Quarantine services were developed to fill the traditional role of a border agency in order to protect the environment, agriculture and public health from introduced pests and diseases. The liberalisation of world trade is providing a new challenge in a changing environment and has meant that quarantine and bio-security services have had to assume a new role in order to facilitate trade.

### The Livestock Sector

The 22 PICT's contain approximately 7.1 million people (mid 1998 Secretariat of the Pacific Community (SPC) estimate) scattered over some thirty million square kilometres. Less than two per cent of this area is land and only one country shares a land border namely Papua New Guinea. Of the 22 PICT's, 13 are members of the Commonwealth.

These communities depend on the productivity of approximately 2.75 - 3.75 million pigs (approximately 66% are in PNG), 17 million poultry (approximately 66% are in PNG) and about 690,000 head of cattle (41% Fiji, 22% Vanuatu) as an important component of food security and human nutrition. Assuming an average household size of 6 persons and 80% of the population living rurally, there are

an estimated 960,000 rural households.

In the Southwest Pacific 59% of households raise pigs, 40% raise poultry, 9% raise cattle, 4.7% raise goats and 0.4% raise sheep (Macfarlane, 1998) but there is considerable variability between countries. In the North Pacific, participation in ruminant enterprises is low but average household participation in pig and poultry production can reach 80%. Including peri-urban households with livestock, it is estimated there are over 700,000 households (approximately 75%) in the region raising livestock for domestic consumption and income generation.

Livestock farming is an important and frequently underestimated activity in the region and contributes to nutrition, income generation and the culture of the Pacific Island communities.

## Vulnerability

Over recent years, the need for rapid economic development coupled with the liberalisation of world trade has increased the vulnerability of many small countries. Most countries have adopted but not applied the principals of the Sanitary / Phytosanitary Agreement (SPS) and are now obliged to carry out import risk analysis on proposed imports. In practice few countries have the capacity to accurately evaluate potential risk.

The standard of disease monitoring in PICT's as a general preventative practice and surveillance in suspect areas and veterinary diagnostic capability varies from nil to comprehensive. A small number of countries including Fiji and Papua New Guinea have well developed diagnostic systems and Vanuatu, the only significant exporter of beef has an established disease monitoring and surveillance programme. Vanuatu has also developed an outbreak response or contingency plan for outbreaks of endemic and exotic disease.

In virtually all countries in the region, adequate surveillance for the introduction of exotic disease is severely restricted by the geography of the country and the difficulty "policing" potential points of entry. This is apparent from the limited control over the movements of fishing boats from S.E. Asia of which many are known to carry animals, primarily dogs plus the ubiquitous rodents. In countries primarily composed of small islands with limited resources to police vessel movements, it is frequently very difficult to prevent such animals going on shore.

The main pathways by which exotic diseases could enter the region or move from one PICT to another are:

- o in infected imported livestock products especially in PICT's which have high human traffic with high disease risk countries;
- o from infected animals on board yachts and fishing boats;
- o from movements across major land borders for example Papua New Guinea and Iryan Jaya and movements between islands such as Bougainville in Papua New Guinea to Choiseul in the Solomon Islands;
- o from normal migration of insects such as screw worm fly or *Culicoides* sp. under ideal atmospheric conditions or from insect pests entering on arriving animals and from illegal or natural cross border movements.

## Technical Capacity

Despite attempts to improve technical capacity, both through donor funded training programmes and national human resource development programmes, many countries in the region lack the technical resources necessary to provide adequate bio-security.

Of particular concern is the decline in veterinary capacity among many countries in the region. Although the total number of veterinarians employed within PICT's has increased over recent years, the number of countries with access to a qualified veterinarian has declined to 12 from a peak of 16 in 1998, following the completion of a number of donor funded projects. The situation in the Commonwealth countries is worse than the rest of the region with only 6 countries with veterinarians and only 4 of these countries have Government veterinarians in post. This reduction in capacity has come at a time when countries are increasingly vulnerable to illegal imports and are being encouraged to liberalise trade

The lack of technical capacity has meant that most PICT's have limited or non-existent veterinary capacity to meet the requirements for trade liberalisation and to deal with both import related risk analyses and export market submissions (Landos, 1999). The immediate prospect of raising technical capacity is very small and will need substantial national investment in human resource development (Walton, 2001).

## The Impact of Trading Agreements

A number of countries in the region have acceded to, or are in the process of acceding to the World Trade Organisation (WTO). In addition, the ratification of the Pacific Agreement on Closer Economic Relations (PACER) earlier this year and the development of Pacific Island Countries Trade Agreement (PICTA) provides for the

development of free trade between the member countries of the Pacific Islands Forum. As with the WTO requirements, under PACER and PICTA, it will be necessary for countries to satisfy destination countries that exports comply with their import specifications based on market access import risk analysis. PICT's are also required to be able to justify technically, any restrictions placed on imports, that are considered to be a threat to the environment, agriculture, animal and human health based on import risk analysis. Although this is a regional trade agreement for the Pacific, global standards will primarily be the basis for trade between regional countries and as the destinations for many exports outside the region will be to WTO members, access to such destinations will also be dependant upon meeting the specifications of global standards.

To meet these requirements, ideally countries trading in agricultural commodities and applying SPS standards need matching technical and scientific capacity to facilitate trade. In most PICT's, with the possible exception of PNG and Fiji islands, there is no likelihood of substantial changes in the level of national technical support for quarantine by national veterinary services. Further it is unlikely to be cost effective for governments to provide the specialized technical capacity needed to support import - risk analysis and export submissions.

To address this situation, it is considered to be economically justifiable to centralise specialized technical support for trade in a centre such as SPC, that has substantial animal health and plant protection expertise rather than for national governments to build and sustain technically centres in their own countries. SPC has the technical expertise to provide a the basis for assistance to PICT's to facilitate trade related market access and import risk analysis. Whilst PICT's are able to do that at present, it is ad hoc in nature, relatively uncoordinated and not specifically market access orientated. This approach has received the support of the recent Regional Trade Facilitation Forum, which was convened by the Pacific

Islands Forum Secretariat.

## Conclusion

The liberalisation of world trade and the introduction of regional trading agreements has led to a changing role for national namely that of trade facilitation. Unless quarantine and bio-security services can develop the capacity to address the emerging issues associated with increased trade, countries will be at increased risk from exotic disease. In most countries, technical and scientific capacity is inadequate to facilitate imports and exports and there is an urgent need to establish a regional technical support centre possibly complimenting the existing expertise at SPC.

## References

Landos J. Trade facilitation capacities of quarantine and customs services in the Forum Island Countries Region - A study conducted for the Forum secretariat Fiji, 2000.

Macfarlane D. Grazing Livestock in the South-west Pacific: The Benefits of Improved Production, FAO Sub-regional Office for the Pacific, 1998

Walton P. Plant Protection and Quarantine Certificate Course Feasibility Study, Report to the Secretariat of the Pacific Community, 2001

## OBITUARY

### JIM CREES, BVSc, BSc, MRCVS

We have learnt with sadness of the death of Jim Crees on Friday 22nd December 2006.

Jim (Henry James Seward) Crees qualified as a veterinary surgeon from Bristol University in 1968. Most of his professional life was spent in the Tropics, especially East Africa, where his knowledge of animal health, his love for the area and its peoples and the welcome he gave to those from all backgrounds, was legendary. In late 1996, a medical emergency necessitated his evacuation by air from Southern Sudan to Nairobi, Kenya, and thence to St George's Hospital, London. From then on, he made impressive progress despite the severity of his condition, aided in part by the help of his many friends but largely on account of the support of Judy Roberts who nursed and cared for him.

Jim's death will come as a shock to his colleagues in the veterinary profession and the many people in Africa for whom he was a personal friend and advisor.

**John and Margaret Cooper**  
26 December 2006

## Adaptive Strategies For Climate Change And Disaster Management In The Commonwealth - A Pacific Islands Perspective

*Kenneth Cokanasiga*

*CVA Councillor, Fiji  
SPC Animal Health Services  
Secretariat of the Pacific Community  
Nabua, Fiji*

### Background

The Pacific region is characterized by significant geographical contrasts. It contains both Papua New Guinea, whose population of about 5 million occupies 462,000 km<sup>2</sup> land, and its five smallest Pacific Island countries and territories (PICTs), whose combined population of about 43,000 live on 803 km<sup>2</sup> of land. The Pacific Region has a population of around 9.0 million in an area of 531483sq km

Access to and use of land based natural resources in Pacific islands is essential to the health, development and the culture of Pacific island communities, underpinning subsistence and commercial production sectors. In larger countries, indigenous and planted forests are of great economic, socio-cultural and ecological importance. Here, farming and fishing are the predominant occupations of the rural populations, and these Pacific islands either now earn or have the potential to earn significant foreign exchange from agriculture and forestry exports. By contrast, in the smaller Pacific islands, agriculture is mainly subsistence farming, while most activities in their forests and trees sector concern watershed management, coastal forest management and agro forestry development. In addition in the larger Melanesian countries, significant potential exists for mineral resources and hydrocarbons development, which can substantially enhance earning capacity. Natural resources also underpin the growing tourism sector in many Pacific countries.

Pacific islands face a number of social and physical challenges in maintaining the production of their land based natural resources (agricultural, forestry and mineral). There are considerable social and environmental challenges, such as the need to balance the aspirations of developing communities for western style lifestyles, incomes and so forth against fragile ecosystems. Additionally, the drift of youth to urban centres has in many Pacific islands resulted in shortages of labour in the rural areas and of increased social problems at the urban centres. Many Pacific islands face significant challenges

associated with rapidly growing populations. For example, in many of the smaller Pacific islands increasing numbers of humans and animals live in close proximity with concurrent increased risk of zoonoses, pollution (e.g. water lens) and increased build-up of solid and liquid waste (biodegradable and non-biodegradable). The situation is exacerbated by the need for rapid economic growth and the unsustainable exploitation of forests and minerals.

The physical challenges confronting Pacific island land based production sectors reflect, among other things, access to inputs that underpin subsistence and commercial production systems (such as water and fuel), the threat of living and non-living disasters; a tendency for a narrow base of production systems with poor risk diversification due to limited natural and human resources; unsustainable logging; and climate change.

In the last few years, "global warming" or climate change has become one of the hottest topics in international politics, with global treaties discussed at many UN meetings. Scientists too have had their say with countless papers published in journals and heated debates between environmentalists and "climate skeptics", people who do not think global warming is an issue. So who is right? Hardly anyone disputes the basic science, which is that since the industrial revolution the amount of greenhouse gas has increased, trapping more heat and causing a warming of the atmosphere.

The last decade has seen nine of the warmest ten years since records began in 1861. At the same time, increasingly larger amounts of the key greenhouse gas carbon dioxide have been pumped into the atmosphere by the burning of fossil fuels and the destruction of forest cover. There is no doubt that humans are to blame for the increase in atmospheric greenhouse gas concentrations, but does that explain the rise in temperature? The Intergovernmental Panel on Climate Change (IPCC) believes so and stated in a report in 2001 that "most of the observed warming over the last 50 years is likely to have been due to the increase

in greenhouse gas concentrations". In May of this year, the Bush Administration's Climate Change Science Programme found "clear evidence of human influence on the climate system".

So are we already seeing evidence of this increasing temperature? The expected result of an increasing temperature is an increase in extreme weather. More rainfall is now recorded in higher latitudes, while droughts are more profound in the arid sub-tropics. In the coming years the IPCC suggests far more extreme weather events, with regions being affected in different ways, for example, extreme heat in S Europe but an increase in snowfall and rain in N Europe.

Climate change is not likely to do biodiversity any favours, altering complex ecosystems as species migrate to try and stay within their climate zone. Already there is evidence that climate change has begun to affect the distribution of certain species.

So what is happening in the Pacific? Rising sea levels in Vanuatu have forced the relocation of an entire village, with more than 100 residents of Tegua Island abandoning their settlement for higher ground after continuous major flooding made their village uninhabitable. The main projection for Melanesia, is in fact, for increased rainfall. There are now some 2000 people on the Carteret Islands of Papua New Guinea planning to move to Bougainville Island because of similar flooding problems. For many years the islanders have fought a losing battle against the ocean, building sea walls and trying to plant mangroves. Each year, the waves surge in, destroying vegetable gardens, washing away homes and poisoning freshwater supplies.

The leaders of Tuvalu have made their voice heard at many international meetings, when they tell of what is already happening in their country - lowland flooding, saltwater intrusion and coastal erosion. With a decline in harvests of traditional crops there is an increasing reliance on imported processed food with all the hidden dangers of lifestyle diseases, such as hypertension and diabetes.

The World Bank (World Bank, 2000) has made the following predictions for the Pacific:

- c That the eastern Pacific would experience the largest rise in sea level
- c That Fiji would experience a 100% increase in cyclone damage, a 20-30% increase in dengue fever and a decline in crop yields of up to 15%.
- c That Kiribati could experience rising sea levels of up to 80%

It is not only the atolls that will be affected. Many

communities throughout the Pacific inhabit coastal lowlands - in Fiji, half of the population live within 60kms of the shore and 90% of villages are located at the coast. On Upolu, in Samoa, 70% of churches and 60% of schools are located on the coastal lowlands. Professor Hugh Davies of the University of Papua New Guinea calculates that if the estimates hold true, then a rise of 50-100cms would be sufficient to affect all of PNG's coastal plains and swamplands.

## How does climate change affect food security?

Food production is well adjusted to the mean climatic conditions of the region and can cope with moderate variations. However, the extreme variability resulting from climate change creates problems to which agricultural ecosystems are not well adapted. High temperatures add to the impact of drought (increased evapo-transpiration), damage crops and their establishment, and reduce yields. Warmer temperatures also favour invasive alien plant species and disease-bearing insects. The concentration of rainfall into a smaller number of rainy events with increases in the number of days with heavy rain, will increase erosion and flood risks. Inundation and water-logging of productive land are the result of heavy rainfall and flooding.

Drought directly impacts on agricultural yield by reducing plant growth and animal production. These situations are all compounded by increasing populations and the need therefore for agriculture to expand more and more into marginal land, including those with soils with poor water storage capacity.

Of course changes in the climate also appear to be having an impact on fish stocks - there is increasing evidence that tuna stocks, in particular, are being affected. But for the purpose of this discussion we are only considering food from the land.

Socio-economic issues will also affect how countries and communities can respond to food security problems as a result of climate change. Some groups are particularly vulnerable to climate change, for example, low-income groups in flood-prone areas with poor infrastructure and market distribution systems, and farmers, who may have their land damaged or submerged by a rise in sea-level.

Specific challenges to the Livestock sector include;

- c reduced land area, especially on small islands and in coastal regions, as a consequence of sea level rise
- c closer proximity between livestock and humans and consequential greater threat of exposure by humans to

zoonotic diseases [those that can spread from animals to man]

- c greater 'stresses' in livestock production systems, with possible mutations by viral and other agents to create new 'emerging' diseases [over 60% of such diseases are zoonotic] as well as changing demographics of vector-borne diseases and livestock parasites, through insect spread to new areas as these become warmer
- c changes to and possible losses of established livestock forage species
- c the impact of more frequent extreme climatic events such as typhoons and tsunamis on livestock and on farm infrastructure

### What can we do?

When climate change is discussed people use words like mitigation and adaptation. Mitigation is defined as a human intervention to actively reduce the production of greenhouse gas emissions (reducing energy consumption in transport) or to remove the gases from the atmosphere (sequestration). Adaptation refers to an adjustment in natural or human systems that take place in response to actual or expected impacts of climate change, and intended either to moderate damage/harm or to exploit beneficial opportunities.

The Commonwealth Veterinary Association [CVA] represent over 100,000 veterinarians, a large number of whom live or work in rural areas of the Commonwealth, where they are in regular contact with millions of livestock farmers involved in food production. In promoting the veterinary profession and advancing animal health, productivity and welfare, a major ultimate mission of the CVA is to help improve the quality of life of the farmers, most of whom are in developing countries. The Commonwealth includes a lot of these Pacific islands. The consequences both of climate change and an increasing number of natural disasters must be firmly factored into our collective planning and programming of activities for the future, in order to ensure this objective continues to be effectively facilitated. The development of a framework of strategies aimed at assisting livestock farmers better manage and mitigate against both the short and long term impacts of changes in climate, is very convergent with the thinking and approach of the CVA.

### Mitigation

Many emissions of carbon dioxide that stem from deforestation and land use change are associated with rural poverty and subsistence agriculture. Similarly, emissions in the form of methane and nitrous oxides

constitute losses to farmers, losses of organic matter or losses of fertilizer. No simple or ready-made solutions can be applied in most cases.

The reduction of atmospheric CO<sub>2</sub> is, therefore, often regarded as the most immediate way of alleviating climate change effects. This can be achieved essentially through two mechanisms: the storage of carbon in the form of living (forest) or dead biomass (wood, soil organic matter), and through the substitution of fossil fuels by renewable energies, essentially biomass energy that in practice contributes no additional carbon dioxide to the atmosphere.

Carbon sequestration is a much talked about concept, and is defined as the process of increasing the carbon content of a carbon pool other than in the atmosphere. This is the reason why it has featured prominently during discussions on the Kyoto Protocol.

It is clear that the modification of carbon sinks (a pool or reservoir for atmospheric carbon), for example through agricultural practices, can directly influence the overall carbon emissions of individual countries. Article 3.3 of the Protocol, which sets out the guidelines for using carbon sinks, only refers to forest creation projects, such as afforestation and reforestation as allowable activities. The extent to which this includes other activities, such as the management of existing forests and other carbon-sequestering management practices, for example, reduced tillage, is unclear. There is, however, increasing evidence that carbon sequestration through improved land management (better soil fertility and water management) is a realistic and practical option.

So what mitigation strategies are of relevance in the Pacific?

- Sustainable Land and Forestry Management policies (SLM and SFM)
- Integrated Coastal Management policies
- Use of biofuels
- Increased use of alternative energy
- Water harvesting systems
- Communication strategies
- Promotion of sustainable agriculture
- Promotion of agroforestry - the absorption of carbon by the soil is maximized under an agroforestry system
- Promotion of conservation agriculture (minimum and



reduced tillage technologies) - increases the role of agricultural land as a carbon sink. When the organic matter in the soil is moved closer to the surface, it is more likely to decompose and release carbon back to the atmosphere.

- Promotion of carbon sequestration by the soil, for example, through addition of charcoal.
- Restoration of habitats
- Afforestation and reforestation (carbon-absorbing schemes, and effective in the tropics because of the faster growth rate significantly reducing the cost)

The question is, are we doing all of the above effectively? Could we do more - can we exert pressure on our colleagues in areas outside of agriculture, to do more?

## Adaptation

We can have autonomous adaptation, which is more a response to historically natural disasters and does not require any external intervention. But if as predicted the impact of climate change is going to be significantly greater than what has been experienced in the past, will autonomous adaptation be sufficient, especially considering constraints such as limited information, inadequate knowledge and insufficient access to resources?

So we need to consider policies and programmes for planned adaptation aimed at preparing for the impacts of climate change and at facilitating and complementing autonomous adaptation initiatives. Such policies and programmes should also encourage the pooling of resources, providing the advantage of risk-pooling across regions and crops, thereby reducing the vulnerability of a region.

So what areas should we be considering that would be useful in any adaptation strategy and which would make our food security more robust?

- Community-based self reliance, based on traditional values (indigenous coping strategies). In India M.S. Swaminathan, chairman of the M.S. Swaminathan Research Foundation (MSSRF) analyzed 30 years of national data to understand how communities have traditionally managed during trouble spots such as droughts/floods. They have put in place local gene and seed banks, and crop-weather watch groups.
- Traditional indigenous food systems, which includes crops and varieties grown, cropping systems and food processing and storage methods.

- Sustainable conservation systems linked with efficient planting material response time - local, national and regional, and systems in place to support the movement of germplasm if/when the need arises.
- Crop diversity - traditionally used to reduce vulnerability - "the local tradition of seed varieties, planting techniques and timing was designed over centuries of trial and error to produce the most stable and reliable yield possible under the circumstances".
- Soil amelioration (efficient water use, reduced water stress).
- Farm-level adaptation programmes - changes in planting date; changes in crop variety; improved pest management; irrigation.
- Variety selection and breeding to identify varieties with known traits, such as drought tolerance, water-logging, high temperatures - specific collections of these varieties.
- Use of appropriate technologies, such as hydroponics
- Improved access to information - extension and communication services, farmer networks, associations etc
- Increased opportunities for income generation as a buffer when subsistence fails.
- Networking with other similar regions, for example the Maldives, the Caribbean Specific opportunities in the livestock sector can include include;
- identification of forage species better suited to higher temperatures, possible salinity and changed soil moisture conditions
- greater focus in inundated areas on aquaculture systems for food production and income generation
- livestock breed and genotype selection/development for ability to survive and produce in a hotter and possibly drier climate
- development of better zoonotic disease surveillance, monitoring, prevention and control programs, in particular for emerging diseases, as well as for vector-borne and external/internal parasites infections
- development of disaster mitigation provisions, particularly at the farm level, through better design and construction, as well as by way of enhanced local response mechanisms which might include rapid recourse to alternative short-term income streams

- engaging and interacting with other CSOs in exchanging experiences and views and in developing more integrated and cross-sectoral strategies

professional Colleague Potential Climate Change Effects on Warm- Season Livestock Production in the Great Plains; K. L. Frank, T L. Mader, J A. Harrington, Jr., G I. Hahn.

## Conclusion

In conclusion, there are a number of activities implemented by national and regional organisations within the Pacific region, such as the development of appropriate policies and the promotion of sustainable agriculture, which will contribute to reducing the impact of climate change. The participatory approach commonly used by these organisations is also fostering community-based self reliance.

## References

World Bank (2000) Cities, Seas and Storms: Managing Change in Pacific Island Economies. Volume IV: Adapting to Climate Change, Papua New Guinea and Pacific Islands Country Unit. The World Bank. Washington, D.C. November 30, 2000.

Climate Change and Food Security; Secretariat of the Pacific Community Paper to to the 2nd Heads of Agriculture and Forestry Meeting in Nadi, Fiji, 18 - 22 September, 2006.

Climate Variability and the Millennium development Goal Hunger Target; James W. Hansen, Maxx Dilley, Lisa Goddard, Esther Ebrahimian, Poly Ericksen; IRI Technical Report, September, 2004.

Global Climate Change and Environmental Stewardship by Ruminant Livestock Producers; Christian Wood, Callie K. Knipmeyer; 1998.

Personal Communications and Discussions with

### Male Chimps Prefer Older Mates

Researchers studying chimpanzee mating preferences have found that although male chimpanzees prefer some females over others, they prefer older, not younger, females as mates. The findings uncover a stark contrast between chimpanzee behavior and that of humans.

The basis for this difference may lie in the fact that whereas chimpanzees participate in a relatively promiscuous mating system, humans form unusually long-term mating bonds, thereby making young females more valuable as mates with greater reproductive potential. The findings, is reported by Martin Muller of Boston University and colleagues at Harvard University.

The findings, in addition to supporting the idea that long-term pair bonding and menopause may contribute to the preference of human males for young females, also suggest that this characteristic may be an evolutionarily derived trait that arose in the human lineage sometime after the lineages giving rise to humans and chimpanzees diverged.

- Pashudhan, December 2006

## Pig Production In Samoa

*Sina Taulealo*  
Principal Animal Health Officer  
Ministry of Agriculture & Fisheries  
Apia  
SAMOA

### Background

The Independent State of Samoa is a group of two large and eight smaller islands in the South Pacific, located just northeast of Fiji. It has a total land area of 2,934 square kilometers and a population of about 178,000 people. Livestock farming in Samoa is largely on a subsistence level; the 1999 Agriculture census noted that about 90% of households keep chickens, 77% own pigs and about 17% own cattle. Cattle are raised for the most part on a commercial basis. Chickens and pigs are virtually all free-range and used mainly for home consumption and traditional events. Some pigs are raised in fenced enclosures but most are free-roaming. In 1999, pigs numbered more than 167,000, distributed across more than 12,000 households.

### Pig Farming: End use

Pigs have a significant role in Samoan society; not only are they a source of food for the family, they are also of value in traditional feasts and ceremonies, where entire carcasses are exchanged as gifts. In the home, suckling pigs are usually slaughtered on special occasions like birthdays or for family gatherings. Adult barrows are saved for contributions to occasions like a funeral or other important event that takes place in the extended family or the village. Pigs are commonly a substitute for a monetary contribution to these events and are therefore very important to poorer families or families living in the outer villages with few or no wage earning members. The obligation to contribute to these events may be quite large, sometimes requiring the slaughter of a significant proportion of a pig herd, including the sows.

### Common Management Practices

Pig holdings typically consist of less than 10 sows and some adult barrows. Many farms castrate young males to prevent them from roaming extensively; in these farms with no boars, the sows mate with wild or other

free-roaming boars. Because of the value of large pigs in traditional gift exchange, a farm may consist of only a few sows and a greater number of fat barrows up to five years old, which are saved for these ceremonial purposes. Most farmers feed their animals once or twice daily; coconut and food scraps are the common feedstuffs as well as crops like breadfruit, depending on their availability.

In these extensive backyard systems, there is no discrete weaning period and sows may nurse their litters for up to 6 months. The rate at which sows farrow varies widely between farms employing similar management methods: some sows may take as long as a year in between farrowing, while some have two litters in a year.

### Common Problems

A common problem seen by the veterinary service, especially in confined pigs, is condition loss of sows starting at farrowing. The loss may be so severe as to leave the sows weak and emaciated and if they do not die, it may take up to a year to regain their pre-farrowing condition and to be in any form to conceive again. Many farmers do not make the link between inadequate nutrition and this loss in condition in sows as well as slow growing piglets. The condition is usually blamed in intestinal worms or the inability of pigs seen as natural free-roaming scavengers to cope with confinement.

Gastrointestinal parasitism and scabies are widespread but free-roaming pigs that can feed ad-hoc seem to cope better with their parasite burdens than those that are confined and rely on the once or twice daily feedings.

As already mentioned, scabies is commonly seen, usually as hair loss, pruritus and broken skin in young pigs. Internal parasites like kidney worm (*Stephanurus dentatus*) and *Ascarops strongylina* are also rife. However, when nutrition is inadequate, treatment for parasites only results in small improvements in weight gain.

The main source of loss in most holdings however is predation. Free roaming pigs, especially young ones,

are very frequently attacked by dogs, hit by cars or killed by other villagers, either for food or to stop destruction of their land or crops by rooting pigs. According to observations made during field visits and farmer consultations, there are cases where more piglets are lost than are utilised by the owners.

### Improving Pig Production

Many farmers would prefer to confine their herds rather than have them roam freely. Not only is it desirable in order to prevent losses to theft and predation, many villages have policies that discourage free-range pig systems, by allowing villagers to destroy any pigs that wander onto their properties or by imposing fines on owners that let their pigs roam free. There is legislation that forbids free-range pig farming and allows destruction of wandering pigs; however it is not enforced and village councils make their own laws about how pig herds should be run in their village. However, with confinement, farmers face other problems like the expense of fencing and housing materials as well as the cost of providing all the food required by the herd. Gastrointestinal parasitism can also be a bigger problem for pigs in these small muddy enclosures.

The Animal Production & Health Division, with assistance from the Commonwealth Veterinary Association carried out a longitudinal study on pig holdings primarily to investigate whether disease occurrence and mortality in regularly visited farms was similar to that in farms that were not clients of the division. Production in terms of farrowing rate was also measured and several farm characteristics investigated

as possible significant influences on production. Disease information was more problematic to gather because of budget constraints and the difficulty in catching free-range animals for bleeding for serology, but production information was much easier to collect. The results are as yet not finalised but from initial exploratory analysis, it seems that the veterinary service tends to attend more calls to confined rather than free range pig herds, where disease events are not as commonly seen. This may just be due to ease of detection compared with extensive pig holdings. Also, the confined systems seem to produce smaller litters.

It is hoped that the Animal Production & Health Division will be better equipped to advise farmers on the management practices best suited to their situation, based on the results of this study.

More detailed results of this ongoing study are to be presented at the forthcoming Fourth Pan-Commonwealth Veterinary Conference in Barbados in November 2007.

### WHATEVER HAPPENED TO ... VULTURES

Last month we reported on the decline of the vulture population in Africa and South East Asia. The article revealed how falling numbers in South Africa could be linked to locals eating the meat to gain clairvoyant powers as well as an increase in vulture shootings by starving farmers. The use of pesticides, though, was mostly to blame.

In Asia, the dramatic drop in the population is partly due to the use of the painkiller diclofenac, given to cattle, which is then passed on to vultures feeding on the carcasses of livestock. Without vultures to eat animal corpses, animals such as feral dogs take over, destroying livestock and wildlife.

It now seems that at least one drug company is taking the threat seriously. Last week, Medivet, Nepal's largest manufacturer of diclofenac, announced that it would replace the drug with a safe alternative called meloxicam. Vulture numbers on the Indian subcontinent have fallen from more than 40 million to a few thousand over the last decade and India already plans to replace diclofenac with meloxicam. Chris Bowden, of the Royal Society for the Protection of Birds, says that Medivet's move earns them 'a huge pat on the back'.

**Rowan Walker**

Sunday August 13, 2006

The Observer

# Abstracts

## Development and Evaluation of a Latex Agglutination Test for Rapid Diagnosis of Rabies in Human and Animals

The presently advocated tests for rapid diagnosis of rabies such as fluorescent antibody test (FAT) is expensive and requires expertise to do and interpret the results. In this study we have developed and evaluated a simple latex agglutination test (LAT) to detect rabies antigen in post mortem brain samples of humans and animals. Rabbit polyclonal antibody against purified rabies nucleoprotein was adsorbed to latex particles (0.3 microns) and used to detect the rabies nucleoprotein antigen in brain specimens. The brain homogenates of suspected rabid animals (n=200) and humans (n=16) were treated with the sensitized latex beads on clean glass slides and observed for presence or absence of visible agglutination.

The results of this test were evaluated with fluorescent antibody technique (FAT). Agglutination visible to naked eye was seen in all positive samples whereas there was no agglutination in negative samples. The concordance between FAT and LAT was 99%. To conclude, the latex agglutination test described here is a rapid, specific, sensitive and cost effective test for laboratory diagnosis of rabies using post mortem brain specimens of animals and humans.

MADHUSUDANA S.N., MUHAMUDA K., JOEL VASANTH P., SUJA M.S., (2006), *APCRI Journal*, Vol. 8 (1) 17-20.

## Johne's disease in Canada

Part I : Clinical symptoms, pathophysiology, diagnosis, and prevalence in dairy herds

Recent international developments in the area of infectious disease control and nontariff trade barriers, along with possible zoonotic concerns, have provoked a revival of interest in Johne's disease in Canada and elsewhere. The bacterium causing Johne's disease, *Mycobacterium avium* subspecies paratuberculosis, in domestic and exotic ruminants, including cattle. The subclinical form of this disease results in progressive weight loss, reduced milk production, lower slaughter value, and premature culling, with possible impacts on fertility and udder health. Eventually, infection can lead to the clinical form that manifests as chronic diarrhoea, emaciation, and eventual death. Currently, available tests to detect infected animals produce many false – negative results and some false-positives, particularly in sub clinically infected animals, thus making their interpretation and utilization challenging in control programs.

The objective of this 2-part review is to critically review the literature about Johne's disease in dairy cattle for bovine practitioners in Canada. Part I covers the clinical stages, pathophysiology, diagnosis, and prevalence of infection in Canada, while Part II discusses impacts, risk factors, and control programs relevant to Canadian dairy farms. By reviewing the scientific literature about Johne's disease, control of the disease could be pursued through informed implementation of rational biosecurity efforts and the strategic use of testing and culling.

ASHWANI TIWARI, JOHN A. VANLEEUEWEN, SHAWN L.B. MCKENNA, GREG P. KEEFE, HERMAN W. BARKEMA (2006), *Can. Vet J.*, 47 : 874-882

## Clinical evaluation of firocoxib and carprofen for the treatment of dogs with osteoarthritis

A double-blind, randomized, controlled, multicentre field study was conducted to compare the safety and efficacy of firocoxib chewable tablets and carprofen tablets in 218 dogs with osteoarthritis. Firocoxib is a non-steroidal anti-inflammatory drug with more than 350-fold selectivity in dogs for the inducible isoform of the enzyme cyclo-oxygenase-2. The efficacy, tolerance and ease of administration of firocoxib (5 mg/kg/day) and carprofen (4 mg/kg/day) were assessed by the owners and the attending veterinarians during 30 days of treatment. The efficacy was assessed in terms of the dogs' overall scores at the end of the treatment, based on the veterinarians' assessment of lameness, pain on manipulation / palpation, range of motion, and joint swelling; 92.5 per cent of the dogs treated with firocoxib and 92.4 per cent of the dogs treated with carprofen had improved. The reduction in lameness in the dogs treated with firocoxib was significantly greater than in the dogs treated with carprofen. The owners' evaluations were that 96.2 per cent of the dogs treated with firocoxib and 92.4 per cent of the dogs treated with carprofen had improved, and this difference was statistically significant.

M. POLLMEIER, C. TOULEMONDE, C. FLEISHMAN, P.D. HANSON (2006), *Veterinary Record*, 159 (17), 547-550

## Effects of long-term feeding of a diet supplemented with clinoptilolite to dairy cows on the incidence of ketosis, milk yield and liver function.

Fifty-two clinically healthy Holstein cows were randomly assigned to one of three groups according to their age and parity. The first group (A) consisted of 17 cows that were fed a concentrate ration supplemented with 1.25 per cent clinoptilolite, the second (B) consisted of 17 cows fed a ration supplemented with 2.5 per cent clinoptilolite, and the third group (C) consisted of 18 cows, which were fed the basal ration containing no clinoptilolite. The rations were fed from four weeks before the cows' expected parturition dated until the beginning of the next dry period. Blood samples were collected from each animal at the start of the experiment, on the day of calving and then monthly, and analysed for serum glucose ketone bodies, liver enzymes, blood urea nitrogen (BUN) and total proteins. The milk yield of each cow was recorded monthly. The cows in group B had significantly fewer cases of clinical ketosis during the first month after calving and a higher total milk yield. Feeding the cows with clinoptilolite for a long period had no apparent adverse effects on their liver function, and did not significantly affect the concentrations of glucose, ketone bodies, BUN and total proteins in their serum.

KATSOULOS P.D., PANOUSIS N., ROUBIES N., CHRISTAKI E., ARSENOS G., KARATZIAS H. *Veterinary Record*, 159 (13), 415-417

## Instructions to Authors

The JCVA publishes original articles, case reports, short contributions and review articles. Please contact the Editor if you plan to write a review.

Send your manuscripts to:

**Dr. S. Abdul Rahman**  
Editor, JCVA  
#123, 7th "B" Main Road  
4th Block (W), Jayanagar  
Bangalore 560011, INDIA

**Covering Letter**

Manuscripts must be accompanied by a letter to the Editor, signed by all coauthors.

**Copyright**

Submission of a manuscript will be held to imply that it is the unpublished original work of the author(s) and, if accepted, will not be published elsewhere in whole or in part without permission. Copyright, including the right to reproduce the article in all forms and media, is assigned exclusively to the JCVA.

**Animal Welfare**

The handling and use of animals in experiments must conform to the International Code of Practice for the care and use of animals for scientific purposes.

**Manuscript**

Submit the manuscript in duplicate. Type it on one side of A4 paper, with 10 cpi font, leaving a left-hand margin of 3 cm and numbering every fifth line. Use double spacing throughout, including title page, abstract, text, acknowledgments, references, tables and legends for illustrations. Do not underline anything. Number all pages.

Alternatively a version can be provided on a computer diskette, preferably in PC format. Acceptable word processing programs are WordPerfect and MS Word. If you use a Macintosh send your manuscript as an email attachment or on a PC formatted disc. An email attachment can also be sent to shireen@blr.vsnl.net.in

**Title**

The title should be concise, specific and informative but should not make an assertive claim about the conclusions of the study.

**Authors' Names And Addresses**

Give initials and surnames in capitals without stops. Separate the authors' names with a comma, except the names of the penultimate and ultimate author, which are separated with 'and' in lower case letters. If a single postal address is applicable, type it in full below the authors' names. If there is more than one address, provide all as footnotes. An Email address may be included. The first named author is assumed to be the author for all correspondence, including requests for reprints. Kindly include your qualifications mentioning the degrees obtained.

**Layout**

Articles should have a structured abstract of no more than 250 words. The subdivision is up to the author, but should encompass the Objective, Design, Procedure, Results and Conclusion. Write subheadings in lower case bold letters, followed by the text on the same line. List nonstandard abbreviations and their explanations after the abstract. Use only the abbreviated form in the text. Avoid use of abbreviations in the abstract. The main headings, following an untitled introduction, are Materials and Methods, Results, Discussion, Acknowledgments and References. The introduction should state the purpose of the study. The contents of Materials and Methods should enable others to reproduce the work. Present the findings in Results concisely and logically. Evaluate and interpret the findings in the Discussion, but do not present new data. If possible, write the main conclusions at the end of the Discussion. Headings may vary from standard if the variation makes the article more informative.

**Tables**

Type each table double-spaced on a separate page. Number tables in Arabic in the order they are referred to in the text. Each table should have a concise title that describes its content adequately. Information in the table must not be repeated in detail in the text. Do not use vertical lines. Use horizontal lines to separate the table from the title, and footnotes and column headings from data.

**Figures**

Both black and white and colour photographs are encouraged to a maximum of five only. Figures can be submitted in digital form as separate files. They should be saved as TIFF, JPEG or EPS files with a resolution of 300 dpi. EPS files must be saved with the preview option. Illustrations provided as MS Word files will not be accepted. Write legends for figures and explanations of symbols on a separate page. Legends should contain enough information to make the figure comprehensible without reference to the text.

**References**

Cite only those publications that are essential for the understanding of the study. Number text references consecutively, in the order in which they are mentioned, by superscript Arabic numerals. Write and number the reference list in the sequence of the references in the text. References to journals, books, conference proceedings, organisational papers, anonymous editorials, foreign language articles and internet web sites, respectively, are written as follows:

1. Gibson KT, Hodge H, Whittam T. Inflammatory mediators in equine synovial fluid. *Aust Vet J* 1996; 73: 148-151.
2. Peterson ME, Randolph JF, Mooney CT. Endocrine diseases. In: Sherding RG, Editor. *The Cat: Diseases and Management*. 2nd edn. Churchill Livingstone, New York, 1994: 1403-1506.
3. Rhodes AP. Infectious bovine keratoconjunctivitis vaccination. In: *Proceedings of the 23rd Seminar, Sheep and Beef Cattle Society*, New Zealand Veterinary Association, June 1993.
4. Australian Veterinary Association. Tethering of sows and sow stalls. In: Greenwood PE, editor. *Members' Directory and Policy Compendium*. 1997: B5.
5. Where do we stand on manpower? [editorial] *Vet Rec* 1995; 137: 1.
6. Homberger FR. Mäusehepatitis-Virus. *Schweiz Arch Tierheilkd* 1996; 138: 183-188.
7. Council of Docked Breeds. The case for docking. <http://www.cdb.org>. 1992. Retrieved 15 October 2001.

List all authors if there are five or fewer. When there are more than five authors, list only the first three and add 'et al'. Write titles of books, journals and other publications in italics. Capitalise only the first letter of the book titles. Do not underline or use bold letters. The abbreviation of journals follows that of Serial sources for the BIOSIS previews database. Cite references to unpublished work only in the text, with a notation of (personal communication) or (unpublished). Please send a copy of any cited work that is included in the reference list as 'in press'. It is the authors' responsibility to check the accuracy of reference citations.

**Acknowledgments**

Only acknowledge significant intellectual, technical and financial contributions. A short work warrants short acknowledgments.

**Articles of General Interest**

Articles of general interest, experiences in treating of clinical cases, country reports, success stories in animal production, using innovative approaches and where possible enhancing the contribution of women and also using sustainable methods are also encouraged.

**Review Articles**

Reviews on a specific topic usually are written by invitation. Other authors wishing to submit a review should first enquire of the editor whether the topic is of interest to the Journal. A synopsis of the proposed article often will be requested before the writing of the full version is commenced. Reviews should provide a critical assessment of published works that have contributed to the development or understanding of the chosen topic. The soundness of experimental evidence and the validity of conclusions and recommendations in cited articles should be assessed. Conflicting observations and interpretations should be examined and evaluated.

~ Editor, JCVA

# Commonwealth News

## Welcome to the 2007 Commonwealth People's Forum

### A message from Dr Mark Collins, Director, Commonwealth Foundation

Excellencies, Colleagues, Friends. It gives me great pleasure to inform you that the next Commonwealth People's Forum (CPF) will be held from 19 – 22 November 2007 at the Africana Hotel in Kampala, Uganda. The theme is Realising People's Potential.

The Foundation is working in close association with the Government of Uganda and under the guidance of a Steering Committee of representatives of civil society organisations in Uganda, to plan and organise the CPF in the immediate run-up to the Commonwealth Heads of Government Meeting. Please follow these links to the Commonwealth Foundation's website where the first announcement for the CPF and a call for workshop proposals can be found.

Under the umbrella of the Forum, a wide range of events and activities will be taking place including workshops; cultural events and performances; and learning journeys to selected civil society organisations to provide an opportunity for civil society representatives from other parts of the Commonwealth to learn more about the work of their Ugandan counterparts and to share experiences and ideas

All the activities are geared towards the following key objectives:

- to ensure that civil society across the Commonwealth can express their views to Heads of Government and influence the decisions made at Commonwealth Heads of Government Meetings (CHOGM);
- to monitor and comment upon implementation of CHOGM decisions and Commonwealth goals;
- to gather feedback from partners that can inform the Foundation's own work;
- to network, discuss and debate issues of the day, understand each other's work and build partnerships;
- to provide civil society in the host country with a legacy that will strengthen its capacity to achieve Commonwealth goals.

The CPF will provide key opportunities for networking

and interaction among civil society organisations within Uganda and involve the wider Commonwealth. The 2007 Commonwealth People's Forum in Kampala will demonstrate to governments a real depth of knowledge and show that it truly brings the voices of excluded and marginalised people to the fore.

This year, the CPF will be bigger than ever and it will also have more focus to enable civil society to access their governments in a productive and efficient way. Workshops will be kept to 12 and will have a real focus on and interaction from our Ugandan hosts to go even further to ensure that the Commonwealth People's Forum leaves a positive legacy for the people of Uganda.

I hope to see you in Kampala in November 2007 and look forward to sharing ideas across the Commonwealth on Realising People's Potential.

**Mark Collins** BA MBA PhD

## WORLD AIDS DAY

Over 25 million Commonwealth people are living with HIV and AIDS and 72 per cent of all women living with the disease are Commonwealth citizens. Those are staggering statistics and because the numbers are so high it is clear that to prevent the spread of HIV and AIDS, governments, civil society, and the private sector must work together to inform and educate Commonwealth people about how to meet the many challenges posed by the disease.

Regina Namata Kamoga, Country Manager of CHAIN in Uganda spoke about the situation currently affecting the whole Commonwealth: "It is high time we translate theory into action and keep the promises that have been made at all levels; individual, community, organisational and governmental.

"HIV infections are on the increase, hence the need for focused, targeted and multifaceted, interventions.

"In treatment and care, drugs alone are not enough. A comprehensive care package that looks at the bigger picture would do more for those who live with the disease and their friends and family.

"We must work towards preventing new infections and go further in providing adequate up-to-date information especially in developing countries. It is imperative that civil society with other stakeholders make a constructive and meaningful contribution towards this.

“At CHAIN over the past years we have and are still trying to make our contribution especially in the area of treatment literacy and we work with various stakeholders to promote leadership and governance in the fight against HIV/AIDS at all levels. We must strengthen our partnerships and make HIV and AIDS an international priority.”

Dr Mark Collins, Director of the Commonwealth Foundation added: “The Foundation is uniquely placed to act as an essential interface between governments and civil society organisations such as CHAIN to facilitate a much

needed multisectoral and multifaceted response to ending HIV and AIDS.

“Working in this way is essential if we are to halt the spread of the pandemic by 2015. In order to beat it, we have to fight it before it destroys the lives of more Commonwealth people.”

**December 1, 2006**

*A Commonwealth Foundation Press Release*

## COMMONWEALTH WELCOMES CALL FOR ACTION ON CLIMATE CHANGE

The Commonwealth Deputy Secretary-General, Ransford Smith, welcomed the call for urgent action on climate change contained in the Stern Report on the Economics of Climate Change.

Observing that the report has implications for all 53 members of the Commonwealth, Deputy Secretary-General Ransford Smith said “This report is highly significant because it puts action on climate change squarely within an economic framework and demonstrates that the benefits of strong action today far outweigh the costs of tomorrow.”

The report by Sir Nicholas Stern, a former chief economist at the World Bank, makes it clear that the responsibility of finding ways to deal with the problem must lie primarily with the big polluters in industrialized countries.

It points out that the impacts will be felt most heavily on the African continent, in countries that are least able to respond and least responsible for causing the problem. The same is true for other vulnerable Commonwealth members like the 26 small island developing states.

Most of these states have agriculture-based economies, and are working hard to compete in today’s globalised markets.

The Deputy Secretary-General observed that, “They already suffer from unfair trade rules and the impact of climate change on agriculture threatens to make matters worse. They need financial and technological help to prepare for and adapt to global warming.”

The Commonwealth Secretariat is working to address concerns and help member states adapt to the impacts of climate change.

The Commonwealth Foundation, which promotes civil society cooperation, is looking at how more than 80 professional networks in the Commonwealth can help. Director Mark Collins says, “It is time to mobilise engineers, foresters, architects, doctors and other professionals to help people adapt to the rapidly changing environment.

“Increased aid spending must take this problem into account if disasters are to be averted and local communities are to adopt diverse livelihoods, resilient in the face of climate change,” he added.

*A Commonwealth Foundation Press Release*

## Fourth Diversity Matters Forum

The Fourth Diversity Matters Forum will be held between 21 and 24 February 2007 at Johannesburg, South Africa on the theme of Diversity and the Media. It is being co-organised by the Commonwealth Foundation.

The Forum will address key issues regarding the relationship between communities and the media in different Commonwealth countries, and explore approaches to the reporting and representation of cultural diversity in both the traditional and new media.

The Forum is being organised partly in response to paragraph 26 of the Valletta Communiqué, in which

Commonwealth Heads of Government, “affirmed the importance of promoting tolerance, respect, enlightened moderation and friendship among people of different races, faiths and cultures,” and called for initiatives which “promote mutual understanding and respect among all faiths and communities in the Commonwealth.”

This meeting will also be the first large event the Foundation has supported in South Africa since they joined the Foundation in 2006.

More information is available at the Forum website [www.diversitymatters2007.org](http://www.diversitymatters2007.org), from where a registration form can be downloaded.



# CVA News

## NEW PRINCIPAL SPONSOR FOR CVA

2006 was a historical year for CVA and its supporters when a new agreement was entered into with Norbrook Pharmaceuticals Ltd, to become the sole principal sponsor of CVA for the five years commencing October 1, 2006. CVA has in its history previously only had one principal sponsor.

### The Norbrook Company

Norbrook Pharmaceuticals was founded in 1968 and has grown to be one of the world's leading pharmaceutical companies. With manufacturing facilities on four continents and sales and marketing offices in over 30 countries, the company exports to more than 120 countries worldwide. The Company has a particularly large veterinary division and is the only company in the world licensed by the food and drug administration of the United States to manufacture sterile injections for veterinary use outside the USA and import same for sale in USA territory.

The Company has four divisions, bulk pharmaceutical synthesis division which includes synthetic penicillins, a wide range of antibiotic steroids, and hormones and anthelmintics. The Company is almost self-contained in its raw material production and produces many intermediates for the pharmaceutical industry.

The Company's finished dose forum division produces sterile injectables for both medical and veterinary use. It has facilities to produce tablets, capsules, aerosols, creams, sterile injections of solutions, suspensions and powders, all to the standards of Good Manufacturing Practice and for export world wide including Europe, the US and Japan.

The Company has a heavy commitment to chemical process development. It has invested over £80 Million within the last 5 years in the synthesis of complicated molecules

Research and Development is of major importance - over 10% of the company's turnover is annually invested in research and development of new products. There is a strong pipeline and the Company has filed a number of patents each

year and obtained marketing authorisations worldwide to a level that equates with any of its multinational competitors.

Its production facilities in Ireland, North and South are housed on over 100 acres of land with 40 acres covered employing in excess of 1500 people.

### CVA and Norbrook

From a CVA point of view, it is my firm view that the geographical spread of Norbrook's business, and its range of products, ties in nicely with the membership of CVA in every continent and the veterinary activity in them.

It was a happy coincidence that matters relating to the sponsorship were developed by CVA at its Executive Committee meeting held in Belfast, Northern Ireland in late June, 2006 under the valued local guidance of Dr Bob McCracken, and that the Head Office of Norbrook is located in Northern Ireland.

The five-year sponsorship funding will result in a set amount being paid to CVA in four of the years whilst in the fifth year, when the Pan-Commonwealth Conference is held, a double payment will be made. This will help meet the heavy expenses that must be incurred, including speakers and other participants. The regular sponsorship payments will be used to advance CVA projects in each of its six regions.

I should also like to express my personal appreciation to Lord Ballyedmond, Chairman of Norbrook, to Ms Joanne Dodgson, Senior Brand Manager of the Cumbrian Offices, and Mr Martin Murdock, Financial Director, with whom I have liaised to develop the sponsorship agreement. They were all most helpful in finalising details all of which were based on integrity and good will. We in CVA have every confidence that the sponsorship will result in an expanded range of programmes and services to our members with particular stress on programmes in some of our developing country members where animals are so critical in poverty-alleviation.

**WJ Pryor**  
CVA Treasurer

**Think wise**

*Most folks are about as happy as they make up their minds to be.*

*Abraham Lincoln (1809-1865)*

## CVA LECTURESHIP

### Report on Commonwealth Veterinary Association Guest Lectureship, 2006, at School of Veterinary Medicine, University of the West Indies, Trinidad and Tobago

I left Australia on January 23, 2006 and arrived back on April 12. This allowed me to stay for 11 weeks in Trinidad and Tobago after allowing for long flight times, poor connections, and indirect routing [via North Carolina and Barbados]. This was sufficient time, however, to enable involvement in the teaching programme in years 3, 4 and 5 of the veterinary course, as outlined below.

#### The School of Veterinary Medicine [SVM] at the University of the West Indies [UWI]

The SVM forms part of the Faculty of Medical Sciences [FMS] and is located within the Eric Williams Medical Sciences Complex at the Mount Hope campus of UWI, about 3 kilometers west of the main university campus at Saint Augustine and some 10 kilometres east of central Port of Spain. Along with the SVM, the FMS also includes Faculties of Medicine, Dentistry and Pharmacy, as well as the Veterinary and Dental teaching hospitals. A major Regional [Human] Medical Hospital is adjacent and a Diagnostic Services Laboratory of the Department of Agriculture is located within the veterinary precinct.

The SVM itself is well located on the Mount Hope campus, which provides a spacious and well landscaped environment. The teaching facilities at the SVM seem to be adequate for current needs. But additional investment in lecture theatres and other teaching spaces would obviously be welcome, as giving formal lectures within a laboratory setting is not ideal, though it was sometimes necessary. I was not involved in laboratory classes so can't comment on the adequacy of teaching laboratories. However, the computer laboratory within the SVM building is obviously popular with students. The Faculty's library, located nearby, has a good range of up to date textbooks and journals available for student and staff use and provides a comfortable ambience for reading and study.

The Veterinary Hospital and Clinic is adjacent and comprises large and small animal facilities that were constructed concurrently. Because of an apparent gap between projected and present usage patterns, the large animal facilities are not fully used at present, whereas the small animal hospital seems quite active, with much of the available space currently in operation. It is a challenge for clinical staff in veterinary schools everywhere to cope with the 'triple threat' of clinical service work, didactic teaching, and research, and the circumstances evident within the SVM reflect this reality. However, in all veterinary schools that I

have experienced, it has been difficult to find and maintain a satisfactory balance between service work and teaching duties; in essence the question is "should clinicians consult with clients and process cases even when students are absent [the 'service dominates' model] or should consultations and investigations occur only when students are rostered on duty ['teaching dominates']?"

Case load data for 2005 show a total case throughput at the veterinary hospital of 4739 patients, with a range of 320 to 498 per month. Just under half [46%] were classed as 'first visits', only a small proportion [4%] were considered 'referrals', and 12% were listed as being 'in patients'. The medical cases I was aware of while there indicated a preponderance of routine problems involving endo- and ecto-parasitism, dermatoses and systemic infectious diseases, interspersed with a smaller number of challenging and unusual syndromes. These latter would provide fruitful areas for ongoing research if funding and staffing permitted.

For the academic year 2005 – 2006, there are 113 students spread through the 5 year course, giving an average class size of 22.6 [range 16 to 31]. Most [approximately 60%] are from Trinidad and Tobago or other Caribbean nations [~30%], with women predominating [just over 60%]. Overall teaching and academic staff numbers appear to be around 30 or so at the present time.

#### Teaching Activities

As indicated previously, I was able to contribute to the clinical teaching programme for years 3, 4 and 5. This involved a variety of formal and informal activities. Days usually commenced with clinical rounds involving 3 to 7 students from year 5 and a number of staff members, during which the students presented for discussion medical or surgical cases they had encountered recently. Afterwards, there were often informal discussions with a clinician about a current case or, more rarely, a request to examine and advise on a difficult case currently in hospital. I also attended and contributed to Clinical/Pathology rounds on Fridays, open to all students and staff, and various other presentations by staff and students.

Formal teaching involved giving a series of 15 lectures to year 3 students on alimentary [6], haemopoietic [4] and urinary [5] systems, illustrating the approach taken to diagnosis in various typical presenting syndromes. I also gave 6 lectures to year 4 students on syndromes in which endocrine disorders would be considered amongst various possible diagnoses [for example polyuria and polydipsia, endocrine pattern alopecia, eating well while losing weight]. In addition, I presented 3 informal 'review sessions' to year 5 students on interpretation of haematological findings and on investigation of weight loss as a clinical problem.

### Other Aspects of the Visit

The funding support provided by the Commonwealth Veterinary Association was sufficient to cover my fares and associated travel costs, including accommodation in transit. In Trinidad, comfortable accommodation was provided gratis by the SVM at a student hall on campus, while all other expenses were met from my own resources.

The staff and students at the SVM were very welcoming, and Drs John Watkins and Winthrop Harewood and Professors John Cooper and Dan Ezeokoli were especially helpful, considerate and generous hosts - with their help I was able to gain some appreciation of the diversity of the people, culture and landscape of the country.

### Comments on the CVA Guest Lectureship

I feel the aims of the CVA Guest Lectureship were successfully met during the 2006 visit – I was able to contribute usefully to the didactic and heuristic components of the teaching programme at the SVM and to exchange experiences and ideas with staff and students there. I think

the time was well used, and the contacts made may bring some additional benefits in the future.

Some of the difficulties discussed in relation to the 2005 Guest Lectureship were again evident this year, but at a lower level – for example, the challenges of integrating a different teaching content and style into an existing course, and of making full use of the visitor’s presence and skills. However, these problems may be to some extent inherent and unavoidable, given the nature of the situation.

Although the SVM at UWI is a relatively small school, it does seem to function at a good level. The small number of academic and teaching staff within clinical disciplines, however, makes it very difficult for them to keep abreast of developing areas in medicine and surgery. I believe ongoing external support through the CVA Guest Lectureship Programme or other mechanisms could be very beneficial for this school.

- A.D.J. Watson

---

## NEW CVA EXCHANGE PROGRAMME

### Atlantic Provinces Veterinary Conference-Commonwealth Veterinary Association Caribbean Veterinary Interchange Program

advised that financial support will be made available to have a Caribbean veterinarian visit a private veterinary practice in the Atlantic region to gain practical experience in practice management and/or technical training.

This proposal is the result of meetings involving the Past President, CVA and the APVC Organizing Committee and a meeting of the Chair, APVC, the Past President, CVA and the President, CVA at the CVMA Convention in St John’s, July, 2006.

Within the Atlantic provinces there are some of the best and most progressive veterinary practices in Canada. This program is designed primarily to assist private veterinarians from the Caribbean to visit and share practice management skills and to obtain practical technical training. Also, it is intended that such interchanges will serve to strengthen the ties between veterinarians in Canada and the Caribbean region.

This program will be reviewed on an annual basis by the APVC Organizing Committee.

#### Terms of Reference:

##### Visiting veterinarian:

- Must be a member in good standing of their national veterinary association.
- Must be in private practice. Preference will be given to

veterinarians starting private practice. In cooperation with the Commonwealth Veterinary Association,

- Must agree to abide by the visiting practice codes of conduct, practices, security and confidentiality.
- Cost of travel, accommodation and meals shall not exceed \$3000. Air travel shall be the least expensive and most direct route.
- A brief report stating what the individual has learned must be submitted prior to departure.
- Time of visit will be by mutual agreement. A free veterinary registration to the APVConferenc (held annually during the 3<sup>rd</sup> week in April) for the visiting veterinarian will be made available..

#### Hosting veterinary practice:

- Agree to assist in arranging suitable accommodation.
- Agree to demonstrate/participate in training activities.
- Agree to write a confidential brief report, indicating their assessment of the training experience and of the individual.

#### Application:

- There is no formal application form.
- Applicants should provide the following:
- Brief history of work experience since veterinary

graduation.

- Passport-size photograph.
- Specifying the type of training/experience requested.
- A letter from their employer granting leave for such training

**Administration:**

Applications to be sent to:

- Dr Collin Boyle, Regional Representative (RR), Canada-Caribbean Region, Commonwealth Veterinary Association, P.O.Box 1135, Kingstown, St. Vincent, West Indies.
- The RR will forward all applications that meet the criteria to Dr Bert Stevenson, Past President, CVA, 99 Celtic Lane, Stratford, PE, C1B 1L4, Canada.
- Dr Stevenson will present the applications to APVC Organizing Committee, who will select the successful applicant and to suggest a possible Host veterinary practice.
- Dr Stevenson will contact the Host veterinary practice and, get in writing, confirmation of their agreement to host the veterinary visitor.
- Dr Stevenson will advise the successful applicant and confirm travel arrangements and itinerary. The RR will be informed.
- All follow-up reports to be forwarded to Dr Stevenson.

- **Bert Stevenson**  
Past President, CVA

**New Regional Representative of East, Central and Southern Africa**



Dr. G.F. Bath, CVA Councillor, South Africa has been elected as the new Regional Representative of East Central and Southern African region of the CVA for a period of four years with effect from 1st January 2007. Dr. Bath replaces Dr. William Ogara who completed his tenure as the regional representative on 31st December 2006.

Dr. G.F. Bath started his career in private practice in 1979 and became the State Veterinarian in 1981 at

the Middelburg Regional Veterinary Laboratory. From 1981-88 he worked as the Veterinarian-in-Charge, at Allerton RVL. Specialising in sheep and goat diseases. 1987 He was promoted as Assistant Director and then as Associate Professor of Small Stock Health and Production, Onderstepoort and in 1999 became the Head of Department: Veterinary Production and Ethology. He has published over 100 papers and authored two books in addition to presenting numerous papers at international conferences.

He is also a member of various professional associations and organisations and has been associated with the CVA for over 15 years as a CVA Councillor of South Africa. He was the Vice President of South African Veterinary Association from 1990-1993 SAVA and President from 1993-1996.

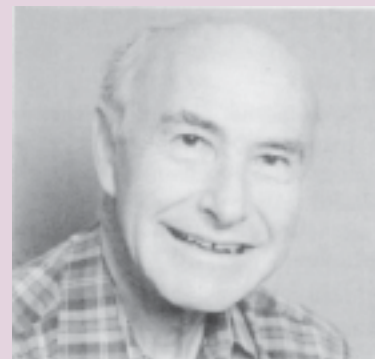
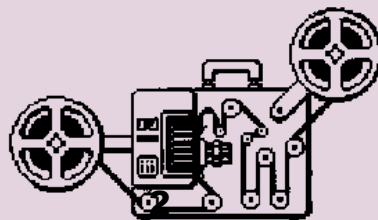
**Pressing for action on Millennium Development Goals (MDG)**



Reducing hunger and extreme poverty is a prerequisite for achieving the international community's Millennium Development Goals, the Director - General of the United Nations Food and Agriculture Organization, Dr. Jacques Diouf, said recently.

Addressing a high-level advisory committee set up to help FAO respond more effectively to the challenge of meeting the MDGs by 2015, Dr Diouf said achieving the eight objectives "will test the international community's political will to deal with a number of global problems and unite behind actions required for solving them". "I believe you share my conviction that reducing hunger and extreme poverty is the key to achieving all the MDGs," Dr Diouf declared. "We stand very little chance of achieving the rest of the goals – environment, education, child mortality, maternal health, gender equality, HIV/AIDS – unless the first MDG is achieved," he added. Dr. Diouf noted that, as the lead UN agency for agriculture, forestry, fisheries and rural development, virtually all of the organization's activities – including monitoring, analysis, resource mobilization, partnership building and field activities- supported progress towards the MDGs.

- Far Eastern Agriculture Sep / Oct 2006



**JOURNALS, BOOK  
AND  
AUDIO-VISUAL PROGRAMME**



**Contacts: Dr. J.B. Derbyshire, Coordinator, CVA Book Programme, Department of Pathobiology  
Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada N1G 2W1.  
E-mail: jderbysh@uoguelph.ca**

**Dr. Jeff Cave, Reg. Rep. Australasia/Oceania, Department of Primary Industries, 1 McKoy Street  
Wodonga, Victoria 3689, Australia  
E-mail: jeff.cave@dpi.vic.gov.au**

**CVA Book Programme**

The CVA Book Programme is coordinated from the Ontario Veterinary College at the University of Guelph by Dr. Brian Derbyshire, assisted by Mr. Jim Brett, the College Librarian, and by Dr. Jeff Cave in Australia. Books are donated by veterinarians in Canada, Australia and New Zealand. They are available for distribution free of charge to graduate veterinarians, but not veterinary students, in CVA member countries in good standing. Priority is given to requests from institutional libraries, such as veterinary schools and veterinary associations, and requests from individuals are met as funds permit. Because of budgetary constraints and increasing mailing costs, the number of books which can be shipped is normally restricted to up to 30 titles for institutions, and up to 5 titles for individual veterinarians in any one year. Individual veterinarians are encouraged to share their books with colleagues in their area if possible.

Requests for books should indicate the required subject areas and/or preferred titles where possible, and they should include the mailing address to which the books should be sent. The latter should be abbreviated as much as possible in order that it may be accommodated in the limited space provided on the customs declaration. It is suggested that those wishing to submit a request should first obtain a copy of the current inventories of books available by contacting, preferably by e-mail, either Dr. Derbyshire or Dr. Cave (see above for contact information). Shipments are made by surface mail, and may take several months to reach their destination. The recipients are requested to acknowledge the safe arrival of the books.

sent from Guelph to 5 Commonwealth countries as follows: Nigeria (53 books), Uganda (40 books), Guyana (29 books), Kenya (3 books) and Tanzania (2 books). From Australia, 166 books were sent to 7 countries as follows: Nigeria (48 books), East Timor (37 books), Fiji (33 books), Sri Lanka (30 books), Samoa (8 books), Barbados (5 books) and St. Vincent (5 books).

The current inventory at Guelph comprises over 300 titles, and the Australian depot, including sub-depots in New Zealand, Western Australia and Tasmania holds close to 350 titles. Multiple copies of many titles are held. Most of the books were published during the last 20 years; older texts, for which more recent editions are available, are discarded each year. While most areas of veterinary medicine are covered by the Australian depot, there has been a steep decline in the number of donations to the Guelph depot of suitable texts by Canadian veterinarians, partly due to competition from others who ship books to non-commonwealth developing countries, and partly to the changed emphasis of veterinary medicine in Canada. This has resulted in the donation of fewer texts in those subjects of greatest value in developing countries, and a surplus of titles in companion animal medicine and surgery. This situation gives rise to serious concerns about the future contributions of the Guelph depot to the programme.

January, 2007

**J.B. Derbyshire**  
Coordinator  
CVA Book Programme

During the period July-September 2006, 127 books were

## CVA STUDY FUND

### The Fund

This fund has been established by the Commonwealth Veterinary Association (CVA) in conjunction with the Commonwealth Foundation to honour the contributions made by Mr. John Anderson and Dr. L.P.E. Choquette in establishing and promoting the activities of the Commonwealth Veterinary Association.

Financial support to match the funds contributed by the Commonwealth Veterinary Association and the several national and local veterinary associations throughout the Commonwealth may be provided by the Commonwealth Foundation.

### 1. Purpose

Its purpose is to provide financial assistance to:

1. Veterinarians who are members in good standing of their respective national associations to undertake short term study visits to schools, institutions or to undertake short term study courses in veterinary medicine, animal production or related areas in other Commonwealth countries.
2. Animal Health Assistants recommended by the appropriate CVA Council Member and Regional Representative, to undergo further short-term training at a school or institution in another Commonwealth country.

It is expected that such visits will promote professional and para-professional contacts and provide grantees with new knowledge and expertise in their respective fields of interest. Study proposals which will directly benefit the rural poor and disadvantaged will receive sympathetic consideration. All proposals will be expected to describe how they will benefit the home institution, veterinary organization and community. The visit is also expected to result in a broadening of cultural experience and horizons and to promote Commonwealth understanding.

### 2. Guidelines

1. Grants will be limited to persons with field experience and not holding senior positions.
2. The awards are not normally available for University academic or research staff.
3. Preference will be given to related regions with 'south-south' movements being encouraged. In exceptional cases, visits to institutions outside the regions qualifying under south-south arrangement will be considered as long as the cost of the visit does not exceed the allocated fund award (Aus \$ 3000). In exceptional circumstances and where approved by the President grantees may receive training in a non-Commonwealth country within that Region.
4. The study period should be preferably between 2-3 weeks.
5. Awards will normally be distributed equally amongst Regions, however, on occasion, the President may authorize additional awards to a particular Region in any one year.
6. The study visits will be financed at a maximum of Aus \$ 3000 including a prepaid air ticket for the least expensive and most direct route.
7. Grants are provided only for periods of concentrated study or training on a particular topic or activity and cannot be made

for attendance at conferences, meetings etc., nor to underwrite a tour of visits to a number of institutions.

8. A report must be submitted to the Secretary CVA within three months of the completion of the study visit. At the completion of the study visit, the participant must receive a letter of release, which should clearly indicate duration of stay, and satisfactory completion of course. The letter should also confirm that at the time of departure, the participants have not left any debts unsettled. This requirement must be conveyed by the Regional Representative or Programme Director to the host institution before arrival of participant.
9. It will be necessary for the host institution to agree to assist in arranging suitable accommodation etc. affordable by the applicant.
10. Grantees will be expected to give one or two lectures at the host institution or veterinary association on aspects of animal health and production activities in their home country. These lectures should emphasize how their studies in the host country will benefit the rural poor and disadvantaged as well as their impact upon the environment.
11. These lectures and the discussions of topics, both professional and social, with the staff of the host institution or veterinary association will serve to further the aims and objectives of the Commonwealth Veterinary Association.

### 3. Applications

- i) There is a set Study Application Form/Application. Forms are available from the CVA Secretary, or through the CVA Website.
- ii) Applications should be submitted to the appropriate Regional Representative for processing, at least 6 months prior to the proposal visit.
- iii) The applicants should provide the following:
  - a) A complete curriculum vitae to the Regional Representative
  - b) Two passport size photographs
  - c) A letter of acceptance from the person who will supervise the study program in the host country
  - d) Evidence that the study has the support of his/her home institution or national association

### 4. Administration

- i) The Study Application Form with supporting documents must be sent to the appropriate Regional Representative
- ii) The Regional Representative will review the application and make a recommendation to the Secretary, CVA.
- iii) The Secretary, CVA will make a recommendation to the CVA President, who will make the final decision.
- iv) The Secretary, CVA will then inform the Regional Representative who will inform the candidate.

**Last date of submission of request to Council Members/Reg. Rep. is 30<sup>th</sup> Oct. 2007. RRs to submit their recommendations before 30<sup>th</sup> Nov. 2007 to the Secretary, CVA.**

# Asia

## Sri Lanka

The following activities were conducted by the Sri Lanka Veterinary Association during 2006-2007.

**1) Continuous Professional Development Seminar - 19.08.2006.** A Seminar on Emergency/Critical Care Management of Animals, Exotic Animal Medicine on Veterinary Dermatology was held and 60 members participated. It was organized jointly by SLVA and Society of Companion Animal Practitioners of Sri Lanka.

### The resource persons were:

- Dr Luis H Tello Teaching Veterinary Hospital, College of Veterinary Medicine, University of Chile,
- Dr Jayanthi Alahakoon Senior Veterinarian National Zoological Gardens Sri Lanka.
- Peter J Ihrke VMD School of Veterinary Medicine, University of California, Davis, California USA.

### 2) World School Milk Day Celebration - 29 Sept 2006

In collaboration with the National Livestock Development Board and the MLCO Company (Pvt ) Ltd two schools, where the majority of the children are from disadvantaged families were specially selected and 1310 cups of fresh milk and chilled vanilla milk in packets to suite the preference of children, were distributed by SLVA in Colombo North.

The participation of the Hon Minister of Livestock Hon C B Ratnayake and his decision to provide free milk for one more week to these deserving school children of the 3 major ethnic groups was a notable achievement.

The lack of funds for continuation of this program was a major drawback. Nevertheless the SLVA initiative during the school milk week resulted in at least one private milk company distributing reconstituted toned milk free to one more school and the selection of deserving schools in 3 districts for a daily bottle of 250ml fresh sterilized milk by the Government's poverty support program.

### 3. The World Animal Day - October 4th 2006.

The World Animal Day was celebrated by SLVA by organizing an Animal Welfare Program for the disadvantaged people at a Buddhist Temple at Mattakkuliya Colombo.

300 dogs and cats received free anti rabies vaccination and veterinary diagnosis and treatment. A notable feature was the increased number of cases of canine demodicosis presented.

The SLVA acknowledges the logistic support of the Veterinary Department of the Colombo Municipality and the private and State sector drug companies that supported the programme and the Voluntary services of our members who actively participated to make this annual event a success.

## Bangladesh

### First Vice Chancellor of Chittagong Veterinary and Animal Sciences University



Dr. N.C. Debnath, Principal, Chittagong Veterinary College has been appointed as the first Vice-Chancellor of Chittagong Veterinary and Animal Sciences University, Chittagong, Bangladesh.

Dr. Debnath, graduated with a Degree of D.V.M. from Bangladesh Agricultural University in 1979 and obtained his M.Sc. in Tropical Medicine from Edinburgh, Scotland in 1983. He obtained his Ph.D. from University of Surrey, England in 1992 specialising in Animal Virology. He has a Postdoctoral Fellowship of Science and Technology Agency of Japan in 1995. He has also undergone training on Veterinary Disease Investigation in Scotland College of Agriculture, Auchincure, Ayr in 1983.

He is a member of various national and international organisations. He is the President of Bangladesh Veterinary Council and Member, Bangladesh Veterinary Association. Agriculturist Institution, Bangladesh, Bangladesh Society for Microbiologist, Editorial Board, Bangladesh Journal of Microbiology (2000-2004) and Planning and Development Committee of Chittagong University 2004-2005). He has over 40 publications to his credit.

## Pakistan

### New Office Bearers of Pakistan Veterinary Council

Dr. Muhammad Arshad has been elected as President of Pakistan Veterinary Medical Council. Dr. Arshad replaces Dr. Muhammad Amjad. Dr. Muhammad Iqbal was elected as Vice President of the council.

### International Livestock, Poultry and Dairy Congress

Pakistan Veterinary Medical Association (PVMA) has planned to hold an International Congress on Livestock, Dairy and Poultry from 13 to 14 March 2007 at Awan-Iqbal Complex in Lahore. Over one thousand delegates are expected to attend this congress.

### Workshop on Molecular Biology

The Vice Chancellor of University of Veterinary and Animal Sciences Lahore Dr. Manzoor Qureshi has called for close interaction / Liaison between the Molecular Biology experts working in the fields of Livestock, Plants and Human Health. He was addressing the delegates at the concluding ceremony of a three-day national workshop on "Application of Molecular Biology Tools for the improvement of Livestock" organised by the Department of Livestock Production, UVAS in collaboration with the Higher Education Commission Islamabad. Professor Manzoor also distributed certificates to the participants.

### New Chairman for Pakistan Poultry Association

Mir Tahir Zaidi was elected as new chairman of Pakistan Poultry Association while Mr. Shahid Mahmood Dar was elected as chairman Pakistan Poultry Association Punjab. Currently poultry industry of Pakistan is undergoing a severe crisis due to over production. Broiler farmers are forced to sell their birds below production cost. After the crisis of bird flu, the poultry industry not only recovered quickly due to extra ordinary demand as prices of day old chicks soared to Rs. 32 a little more than 50 US Cents.

Unofficial sources have claimed that over 12 million broiler breeders are currently involved in the poultry industry as compared to when 7.5 million breeders last year.

### Nutrition Conference

Nutritionists Association of Pakistan is planning to hold its 3rd international conference at University of Agriculture Faisalabad from 23 to 24 February 2007. This conference will hold separate sessions for Animal Nutrition, Poultry Nutrition, Feed Industry, Human Health & Nutrition. Renowned researchers and scientists from Pakistan and abroad are expected to present their latest research papers during the conference.

**Dr. A.A. Ramzee**, R.R. CVA Asian Region

## Rebuilding lives in North-West Pakistan



Ms. Macro is pictured in the yellow headscarf

A former veterinary nurse from the UK is helping women in north-west Pakistan to improve the welfare of their working animals and develop long-term skills to help rebuild their lives following the earthquake that struck the region last year.

Ms Julia Macro is an emergency relief and livelihood specialist working for the UK equine welfare charity the Brooke. In the immediate aftermath of last year's earthquake, the Brooke organized a donkey train to transport food and medicine to inaccessible areas and established mobile clinics to treat animals affected by the earthquake. Now the charity, in collaboration with Mercy Corps, an international humanitarian organization, is spearheading a joint campaign to teach women the vital techniques needed to keep their working animals healthy. The two organisations have identified women as holding the key to the long-term development.

### New study reveals alarming statistics :

#### Senior citizens are the biggest carriers of AIDS.

Hearing AIDS, Seeing AIDS, Chewing AIDS,  
Band AIDS, Walking AIDS, MedicAIDS and  
Government AIDS.



## India

### FLOODS IN INDIA AND BANGLADESH



**Cattle being evacuated in a village in Orissa : Photo Courtesy : Animal People, Oct. 2006**

At least 49 people were reported dead in Bangladesh and 46 in India in September 2006, following the ninth cyclone to hit the western coast of the Bay of Bengal in as many weeks. The animal toll was not immediately available.

The Visakha SPCA assisted animals along the stricken Bengal coast while rebuilding its own facilities, destroyed by a cyclone and landslides on August 3, just 11 months after a typhoon destroyed the previous facilities in September 2005.

The rising Vamsadhara River isolated some villages for as long as 10 days, with broken roads, bridges, and in some areas miles of chest-high water. The villagers had to walk up to nine kilometers to receive help. Violent stampedes broke out several times while fodder was passed out.

A government report estimated that 235,000 cattle, more than 9,000 buffalo, 53,000 “small animals,” and 66,000 “others” were affected.

### NATIONAL WORKSHOP ON GUIDELINES FOR PREVENTION OF RABIES

A workshop was organized by Association for Prevention and Control of Rabies in India (APCRI) at Hyderabad on February 24<sup>th</sup> and 25<sup>th</sup>, 2006 to develop guidelines for prevention of Rabies.

The inaugural session was held on 24<sup>th</sup> February. Dr. D.Sambasiva Rao, IAS, Secretary, Health, Medical & Family Welfare, Andhra Pradesh was the Chief Guest. Sri. B.Aravinda Reddy IAS, Managing Director of AP Health & Medical, Housing & Infrastructure Development Corporation presided over the function. Both these officers emphasized the need of implementing a cost effective method like intradermal administration of Rabies Vaccine to tide over the shortage of vaccine and to reduce the financial burden on the Governments.

### TURKEY MELA



Turkey Mela, a programme on Marketing strategies for farmers rearing turkey under semi-intensive system was conducted by Veterinary University Training and Research Centre, Thanjavur, Tamilnadu, India on 24th August 2006. Thirty farmers including Self Help Group women participated in the training programme. Thiru. Vijayarajkumar, District Collector, Joint Director of Animal Husbandry and officers of revenue and veterinary departments participated in the programme. The farmers were imparted training in hygienic handling and value addition of turkey meat. A wide media coverage was given for the programme to bring awareness among the prospective consumers about turkey meat. An exhibition was also conducted as a part of the programme.

### Indian vet of Lebanon war

KHIAM, LEBANON : Amal al-Nimr flips a goat on its back in her muddy farm yard in south Lebanon to show the Indian vet how the shrapnel wound in its leg is healing. Lieutenant Colonel Parasanali Bapu, the only veterinary surgeon serving with the United Nations Interim Force in Lebanon (Unifil), applies iodine to the stricken goat, another casualty of Israel’s recent war with Lebanese Hezbollah guerrillas. When Nimr complains her animals have grown skinny since the conflict, Bapu supplies de-worming medicine.

The vet, who returns to India after a 12 month tour next month, has trained villagers to give injections and medicine to their animals. “After the war, help was puring in for people to rebuild their houses but no help came for the animals”, he says. “The greatest satisfaction is I was there with medicines, to save them”.

- Reuters

## Australasia/Oceania

### Fiji

#### CABINET APPROVES FIJI'S MEMBERSHIP TO THE INTERNATIONAL VETERINARY ORGANISATION

The Fiji Government Cabinet at its 10th Meeting, held on September 26, 2006, approved Fiji's membership to the Office International des Epizooties (OIE).

The OIE is recognised by the World Trade Organization (WTO) for setting standards for animal health matters under the WTO Sanitary and Phytosanitary (SPS) Agreement (WTO SPS Agreement).

Cabinet based its decision on a submission from the Minister for Agriculture, Gyani Nand.

Mr Nand explained that this membership will enable our veterinary services to benefit from a range of services.

He said that Fiji will be able to have official representation at the General Session of the International Committee, which provides a true forum of international veterinary co-operation.

"During these sessions, information on aspects of animal health is exchanged at an international level and internationally recognised experts present scientific items of current interest.

"The International Committee also adopts animal health guidelines for international trade in animal and animal products which refer to the Agreement on the application

of sanitary and phytosanitary measures of the World Organization of Animal Health (WOAH)."

He said Fiji will also be represented at Regional and Specialist Conferences and Symposia organised with a view to exchanging the most recent information on items of topical interest.

"Fiji will also have access to immediate and regular information on world animal health, expertise and technical assistance on animal diseases; a complimentary subscription to all OIE publications."

Mr Nand said that because of the threat of the incidence of Mad Cow Disease, Fiji has not been able to provide local raw material to the local beef cannery [Foods (Pacific) Limited].

"Once Fiji becomes a member, it could apply for assistance to OIE whereby the appropriate scientific study could be carried out with the expected output that Fiji is free from Mad Cow Disease. In today's globalised trading regimes, only a scientific study by a reputable and globally recognised organisation like the OIE declaring Fiji's livestock disease-free, will be accepted by any member country."

The OIE consists of 167 member countries.

- Fiji Ministry of Information Press Release

### Australia

#### WSAVA Congress 2007

Drs Diane Sheehan (Congress President) and Roger Clarke actively promoted the upcoming World Small Animal Veterinary Association Congress, to be held in Sydney in 2007, to over 2800 delegates at this year's WSAVA Congress in Prague. They were assisted by AVA President Kersti Seksel and Past President Norm Blackman. Ms Shona Kellock of the Meeting Planners was there to canvass the commercial exhibitors.

The 2007 organising committee has been working hard promoting the Congress at various international

meetings. In 2007, they will send delegations to the North American Veterinary Conference in Florida in January, the AAHA meeting in Denver in March and the BSAVA and Voorjaarsdagen in April. In May they will be promoting the Congress at the AVA annual meeting in Melbourne. The full scientific programme is on the website [www.WSAVA2007.com](http://www.WSAVA2007.com).

- Roger Clarke  
Bundoora Veterinary Clinic  
and Hospital

## New Zealand

### NZVA Branch Summit held in Wellington



**President, John Maclachlan addressing the participants**

The NZVA Branch Summit in Wellington in August brought together veterinarians from all over the country, from Northland to Southland and representing NZVA's regional and special interest branches, for two days of information exchange and networking.

It was also a chance for participant to view the new premises in Victoria Street, jointly purchased by NZVA, VetLearn and VPIS. Restructuring project manager Lewis Griffiths explained the background to the project, which will bring activities of the whole NZVA family closer together, and plans for fit-out of the new office space.



**Mr. David Carter**

The summit programme, chaired by NZVA President John Maclachlan, included a number of guest speakers. Opposition Spokesperson on Agriculture David Carter talked about political lobbying and the parliamentary process, and encouraged the Association and members to make submissions on Bills at the Select Committee stage. He also discussed agriculture and the threats and opportunities he sees in the years ahead.

NZVA chief executive Murray Gibb, VetLearn director Warren Webber, NZVA Animal Welfare Coordinator Virginia Williams, NQVS manager Lewis Griffiths and NZVA Resource Veterinarian Elizabeth Sommerville were also on the programme, updating the meeting on current activities and issues.

- Vetscript Sep. '06

### New Zealand forces assist animal care in Afghanistan



**Sgt. Lisa Pomana cleans up an infected wound on a sheep**

The New Zealand Defence Force's Provincial Reconstruction Team (NZPRT) in Afghanistan is based in the Bamyán Province, one hour out of Kabul and 200 km west of Bagram Airfield. There it carries out a number of programmes to assist the local population in rebuilding their communities, including recently providing healthcare services for animals as well as people.

Sergeant Lisa Pomana, a medic with the NZPRT, was part of a joint medical action programme, supported by the Bagram Cooperative Medical Assistance Team, in late July in the Punjab and Waras districts.

- Vetscript Nov. '06

### NZVA CEO Retires

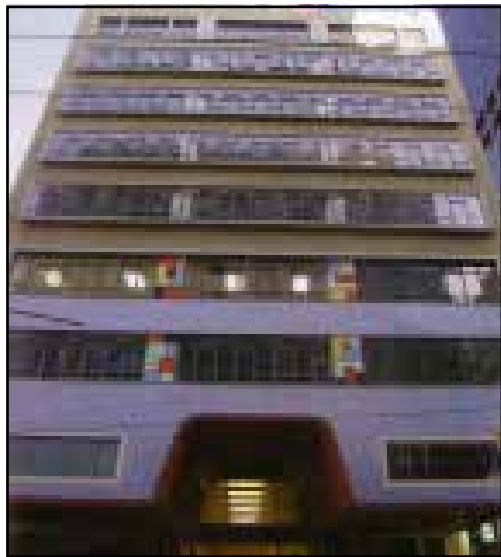


Murray Gibb, Chief Executive Office of NZVA announced his retirement with effect from 1 June 2007.

Murray became the first full-time CEO of the NZVA in 1998 and has overseen a period of significant growth and success for NZVA. Since

1998 the membership base has grown by 50%.

## New Office of NZVA



NZVA has shifted to its new office building at 44 Victoria Street, Wellington in Nov. '06 in November.

## Singapore

The Singapore Veterinary Association held its Annual conference on 6-8 October 2006 at Singapore. The conference dinner was held on 6 October.

Papers presented at the conference included “Progress of control programs for H5N1 avian influenza in Asia but how do we know if and when the risk has passed” by Dr Trevor Ellis Senior Research Fellow Murdoch University, FAO & EU Consultant Epidemiologist; “Current Challenges in Food Safety” by Dr Chua Sin Bin, Chief Executive Officer, Agri-Food & Veterinary Authority; “Managing the Health of Livestock: From Antibiotic to Probiotic” by Dr Tan Hai Meng Vice President, R&D, Kemin Industries Asia Pvt. Ltd.

At its Annual General Meeting held on 8 Oct 2006, the following office bearers were elected – President Dr. Ngiam Tong Tau, Vice-President Dr. Choo Li Nah, Hon Secretary Dr. Cheryl Goh. Hon. Treasurer Dr. Tay Choon Nghee

### AVIAN INFLUENZA - Regional Partnership To Combat Threat

Asian Development Bank (ADB) and major regional development partners have unveiled a US\$38mn grant project designed to counter the immediate threat to the Asia and Pacific region posed by avian influenza. The project, part of up to US\$470mn in funds pledged by ADB to fight avian flu, will provide resources urgently needed to help control and reduce the spread of the highly pathogenic H5N1 bird flu virus among poultry and to increase the region's preparedness for a potential human influenza pandemic.

Designed as a flexible response in close coordination with the Association of Southeast Asian Nations (ASEAN), UN Food and Agriculture Organization (FAO), World Health Organization (WHO), and others, the project will be undertaken in a harmonized way with these regional partners and other national and international initiatives over the next two and a half years. It aims to prevent or rapidly control infection at source among birds, strengthening early detection, reporting and controlling bird flu outbreaks,

and rapidly managing cases of human influenza caused by the H5N1 virus. The project will also help prepare the region for a possible pandemic by supporting regional inter agency collaboration, regional cooperation in sharing information, and strengthening regional networks.

Besides underwriting the cost of experts, equipment, supplies, drugs and services, the project includes a US\$14.5 million avian influenza response facility to provide critical financing to contain outbreaks and meet countries' most urgent needs. All ADB's developing member countries will be eligible to apply for funds, with those at greatest risk to be given priority. The project fits within a framework discussed at a high-level meeting in Beijing in January, where the international community pledged US\$1.9bn for the fight against avian flu.

- Far Eastern Agriculture March / April 2006

### VETERINARY WORLD CUP CRICKET 2007

26 March - 1 April 2007 - Pietermaritzburg, South Africa

A KwaZulu-Natal Branch of the South African Veterinary Association has hosted a National Veterinary Cricket Tournament for many years.

The inaugural Veterinary World Cup Cricket Tournament was held in the Republic of South Africa during Easter 2003 attracting 9 local teams as well as a team from India.

Following the success of this tournament, it has been decided to host the event once again at the same venue, in Easter 2007 and the intention is to broaden the concept to attract representation from all cricket playing countries.

Registration will take place on Tuesday (27 March) and Wednesday (28 March). This will run concurrently with an academic programme, the details of which will be made available at a later date. Tours of veterinary interest will occur on the Thursday (29 March).

Contact Details :

**Dr. Philip Knetzmann** - E-mail : vethouse@rnweb.co.za

**Dr. Mark Warren** - E-mail : mwarren@allerton.kzntl.gov.za

**Academic Program - Professor G. Bath :**

E-mail : gibath@op.up.ac.za

## A Veterinary First For Singapore

A Singapore veterinarian has performed what is believed to be the world's first stem cell transplant on cats.

The successful operation was performed by the Animal Recovery Veterinary Centre's Dr Jean-Paul Ly on three-year-old Fifi, a local cat left without the use of her legs following an accident seven months ago.

Said her owner Lim Yi Xian: "We found her in the neighbour's garden; one of her legs was half-severed, while the other leg was fractured. "She was in tremendous pain."

Since then, Fifi has undergone about 10 operations at a total cost of about \$20,000, none of which were successful.

"We were feeling helpless because the future for Fifi was very bleak at one time. We didn't know whether she would survive, and we didn't know whether she would keep her legs," said Ms Lim. The family's dedication to their pet paid off eventually.

Since undergoing stem cell transplant — conducted by harvesting cells from the cat's own body, and placing

them where needed — Fifi's condition has improved tremendously.

"Fifi's recovery was excellent. She grew new bones and now she has recovered almost all her abilities, though they're not as good as before," said Ms Lim.

Dr Ly said Fifi was the second cat to undergo such a treatment under his care, and only after all other options were exhausted.

"These two cats were so far gone. There was nothing else we could do for them. I've heard of this stem cell being used experimentally in horses and I spoke extensively to the doctors and researchers involved in stem cells. They encouraged me to try this," he said.

Encouraged by the success, Dr Ly said he would recommend the transplant for other seriously-injured animals in the future.

**TODAY online, October 24, 2006**

### 4<sup>TH</sup> PAN COMMONWEALTH VETERINARY CONFERENCE

4<sup>th</sup> to 8<sup>th</sup> November 2007 - Barbados, West Indies

#### CALL FOR PAPERS

The Scientific Program Committee 4<sup>th</sup> Pan Commonwealth Veterinary Conference invites abstracts of papers to be submitted for presentation at the conference. Papers may be in the form of oral or poster presentations, and should be on topics of interest to the practicing veterinarian rather than on highly specialized work.

Sessions will be of one hour in length, with the presentation taking approximately 45 minutes, allowing 10 minutes for questions and discussion.

All abstracts must be approved by the Scientific Program Committee and must be submitted to that Committee by June 1<sup>st</sup> 2007.

Abstracts may be submitted to the Chairman of the Scientific Committee,

Dr. Stephen St. John  
C/o The Veterinary Diagnostic Laboratory  
The Pine, St. Michael, Barbados, West Indies.  
Or by email to: [program@commonwealthvetconference.com](mailto:program@commonwealthvetconference.com)

### A Little Dairy Humour

Why does a milking stool have only three legs?

- Because the cow has the udder.

What are the spots on black and white cows?

- Holstains.

What kind of milk comes from a forgetful cow?

- Milk of Amnesia.

Where do cows go when they want a night out?

- To the moo-vies!

What was the bull doing in the pasture with his eyes closed?

- Bull-dozin'.

What did the bored cow say when she got up in the morning?

- "It's just an udder day".

How does a farmer count a herd of cows?

- With a Cowculator.

Why don't cows have any money?

- Because farmers milk them dry.

Where do Russians get their milk?

- From Mos-cows.

What's a cow's favorite musical note?

- Beef-flat.

What do cows wear in Hawaii?

- Moo-moos.

What do you call a cow that has just had a calf?

- Decalfenated.

Why did the cow wear a bell around her neck?

- Because her horns didn't work

## Canada/Caribbean

### 24<sup>th</sup> Biennial Caribbean Veterinary Medical (CbVMA) Conference

The Caribbean Veterinary Medical Association Conference (CbVMA) was held for the first time in Grenada from November 8-10, 2006.

It was hosted by the Grenada Veterinary Association and the St. Georges University.

This year's conference, "**Veterinary Medicine: What is the future?**" brought together veterinarians and scientists from all parts of the Caribbean, Canada, USA and the UK to address issues that affect the Caribbean Region. A select group of over 150 professionals, including veterinary students, had the opportunity to network, share ideas and participate in three consecutive days of outstanding educational programmes on the shores of the Caribbean sea.

The event began on Wednesday, November 8<sup>th</sup> with an impressive opening ceremony that included welcome addresses from Dr. Eugene Rennie, President of the Grenada Veterinary Medical Association and Dr. Allen Pensick of the St. Georges University.

Introductory remarks were given by Dr. Raymond Sis, Dean of the School of Veterinary Medicine. Dr. Collin Boyle, Regional Representative of the Canada / Caribbean Region of the CVA, conveyed greetings on behalf of the CVA and President Dr. Robin Yarrow.

The conference was inaugurated by Senator the Honorable Adrian Mitchell, Minister in the Ministry of Agriculture, Lands, Forestry, Public utilities, Energy and MNIB.

The conference featured series of lectures on topics including aquatic and avian medicine, re-emerging infectious diseases, anesthesiology, dentistry and public health.

The invited plenary speakers and their topics of lecture were :

- Dr. Richard Halliwell, Professor Emeritus, Veterinary Clinical Studies, Royal (Dick) School of Veterinary Studies, Edinburgh, UK: **Whither Veterinary Medicine: Challenges and Opportunities.**
- Dr. Tom Nemetz, Dentistry Practice, South Athens, Animal Clinic, Athens, Georgia: **Overview of small animal dentistry.**
- Dr. Gerald Johnson, Faculty of Atlantic Veterinary

College of the University of Prince Edward Island in Canada: **Aquatic Veterinary Medicine: Awash with Opportunities.**

- Dr. William Novak, Chief Medical Officer of Banfield, The Pet Hospital: **Anesthesiology Workshop.**
- Dr. Howard Evans, Professor Emeritus, Cornell University: **Marine life of Grenada.**
- Dr. J.P. Dubey, United States Department of Agriculture: **The economic and Public Health impact of Toxoplasmosis.**
- Dr. Paul Gibbs College of Veterinary Medicine University of Florida: **A global perspective on recent epidemics: Are there lessons for the Caribbean Region in the coming decade?**

The highlight of the Conference was A Lecture on Animal Dentistry followed by a dental wet lab held at the St. Georges University (SGU) Campus.

The second day of the conference featured lectures on epidemics of West Nile Encephalitis, Foot and Mouth Disease, Avian Influenza, Canine Influenza, Classical Swine Fever and Blue Tongue. The afternoon session focused especially on avian medicine and the challenges facing CARICOM countries and the preparation for an outbreak of the highly pathogenic avian influenza.

The final day's itinerary included several concurrent programmes on aquatic veterinary medicine, small animal practice guidelines and management and public health issues.

- **Dr. Collin Boyle**  
RR Canada Caribbean Region

### Offshore Veterinary and Nursing School

The Government of Montserrat is currently in negotiations with US based organization that has expressed an interest in setting up two offshore medical schools in Montserrat.

The CITI Health Training Center in Brooklyn, New York, wants to setup a veterinary educational institution and a nursing training school on the island. A team from the US organization is expected to visit Montserrat early January 2007, to continue discussions on the proposed project.

Chief Minister Dr Lowell Lewis said, "We have begun discussion with a north American group, who are interested in setting up a veterinary school and a nursing school here on Montserrat.

## CANADIAN WINS COMMONWEALTH SHORT STORY COMPETITION 2006

Erin Soros of Canada has been announced as the winner of the 2006 Commonwealth Short Story Competition for her story **“The Moon, the Cat, and the Donkey”**. The story tells the harrowing tale of a workman’s colleagues as they watch him get slowly crushed under machinery. She wins a cash prize of £2,000 for her winning story, which will also be broadcast on radio stations around the world.

On winning the award Ms Soros commented: “Winning the Commonwealth Short Story Prize for “The Moon, the Cat and the Donkey” means a great deal to me. While the story is fictional, the described circumstances arise from the history of logging in British Columbia, with its inherently dramatic setting and risks. Logging remains the most dangerous occupation in Canada. The danger of this work, and the resulting injury and death, is not necessarily witnessed in the discourse of Canadian nationalism, so I am honoured that this story will be broadcast internationally and hope it may inspire listeners to consider the often complex and hidden histories of our Commonwealth. Hearing the broadcast will be like hearing a character walk off the page.”

The Commonwealth Short Story Competition gives up and coming writers the opportunity for recognition and greater exposure. Writers often write about their societies and the things that matter to them. Once again this year, many of the stories addressed social questions, such as corruption, migration and the status of women. As in previous years, a large proportion of both entrants and winners are women and young people.

*A Commonwealth Foundation Press Release*

## New CVMA President



Dr. Paul Boutet, of Revereview, New Brunswick will lead over 9000 veterinarians as the new president of the Canadian Veterinary Medical Association (CVMA). Dr. Boutet accepted the presidential gavel at the 58<sup>th</sup> annual CVMA convention in St. John’s, New Foundland in July.

An active member of the veterinary profession, Dr. Boutet is a former president of the New Brunswick Veterinary Medical Association and has lent his expertise to the CVMA over the years as a Council member and a member of the Professional Development and Animal Welfare Committees.

## ISLAND VET RECEIVES AWARD



**Dr. Bob Curtis accepts his award from Hon. Myra A. Freeman**

The Atlantic Veterinary College presented the 2<sup>nd</sup> annual Lieutenant Governor’s Award in Animal Care and Veterinary Medicine during a gala dinner on April 7, 2006. The award was bestowed by Nova Scotia’s Lieutenant– Governor Myra A. Freeman on Dr. Bob Curtis, a veterinarian from Prince Edward Island.

Dr. Curtis received his award before a gathering of approximately 200 veterinarians, veterinary industry representatives, former colleagues, and students during a ceremony honoring his achievements. Dr. Robert Ashburner, president of the Canadian Veterinary Medical Association was there to congratulate Dr. Curtis on behalf of the CVMA. Other notable guests also praised Dr. Curtis’ accomplishments.

- *Can. Vet. J.* 47, June '06

## Dean for New Vet School



The University of Calgary has approved Dr. Alastair Cribb as the Dean.

Dr. Cribb, who was recruited in April as associate dean of Research and Faculty Affairs, comes to the University of Calgary from the University of Prince Edward Island, where he was the founding director of the Prince Edward Island Health Research Institute and held a Canada Research Chair in Comparative Pharmacology / Toxicology.

He received his DVM with Distinction from the Western College of Veterinary Medicine at the University of Saskatchewan in 1984. Following a small animal internship at Michigan State University, he entered mixed animal practice in Nova Scotia.

In 1991, Cribb received his PhD in clinical pharmacology from the University of Toronto. After working in industry for several years, he then began his academic career in 1996 at the University of Prince Edward Island.

## South Africa

### South Africa Becomes 46<sup>th</sup> Commonwealth Foundation Member

The Chairman and Executive Committee of the Commonwealth Foundation welcomed South Africa as their 46<sup>th</sup> member.

Professor Guido de Marco, Chairman of the Commonwealth Foundation, said: "It is a great pleasure for me to announce that the Republic of South Africa has decided to join the Foundation. South Africa plays a key role in African and global affairs, not only politically, but also through its cultural achievements and in the work of its civil society organisations. Our membership will benefit enormously from South Africa's guidance, experience and support."

He added: "This is the second Commonwealth country to join the Foundation in less than six months, reflecting the growing appreciation that civil society has a key role to play in Commonwealth affairs. I hope this will encourage those few remaining countries who are not yet members of the Foundation to join us in our work."

The South African Minister for Arts and Culture, Zweledinga Pallo Jordan said: "We in South Africa attach great importance to listening to our people and responding to their needs. The Commonwealth Foundation exists to strengthen the voice of civil society across the Commonwealth, and I am delighted that we are now able to help in this valuable work."

opportunities to support those working in film and music. Both these areas are of huge cultural importance to South Africans and the Foundation hopes to draw on their experience to help shape these new initiatives.

Deputy Director General for Cultural and International Affairs Mr Victor Julius in South Africa said: "We look forward to a fruitful collaboration with the Foundation, not only in our cultural work, but also in building the broader connections between culture, democracy and development across the Commonwealth."

Dr Mark Collins, Director of the Commonwealth Foundation said: "The membership of South Africa is further endorsement for the "People's Commonwealth", a growing and vibrant aspect of Commonwealth affairs. This is exciting news for the Foundation and brings new opportunity to strengthen our work in the region. The Foundation is now able to support influential forthcoming events in South Africa, such as the 4<sup>th</sup> Diversity Matters Forum – a Pan-Commonwealth conference on "Media and Diversity in the Commonwealth" that will take place in Johannesburg in February 2007."

- Commonwealth Foundation Press Release, Nov. '06

The Commonwealth Foundation is currently reviewing

### President of the WSAVA



Dr. Brian Lois Romberb has been elected as the president of World Small Animal Veterinary Association (WSAVA). He qualified as a vet in 1970, and went straight into companion – animal care at Orange Grove Veterinary Hospital.

He has maintained his interest and enthusiasm for veterinary science by his involvement in many aspects of continuing professional development in South Africa and membership of local and overseas associations. He has served on and chaired various committees such as those of the Johannesburg Branch of the SAVA, Witwatersrand Clinicians Group, National Veterinary Clinicians Group, SAVA Ethics Committee and was a member of Veterinary

### Director of Animal Health

Dr. Mpho Maja has been promoted as the new Director of Animal Health, South Africa. She graduated with a BVMCh from former Medunsa in 1995.



She started her career as a state veterinarian in the Free State in 1996 and later joined the Gauteng Provincial Government. In 1999, she was appointed chief state veterinarian in the Import / Export Policy Unit of the Department of Agriculture and was promoted to head the Unit in December 2005.

She is currently working on a MSc in Veterinary



## The Third South African Veterinary and Para Veterinary Congress, Durban, South Africa

The Third South African Veterinary and Para Veterinary Congress was held from 6th to 9th June 2006 at Durban, South Africa. Various awards were presented at a Gala Award Ceremony.

### Boswell Award



The Boswell Award is awarded to any member of the South African Veterinary Association for eminent service rendered to the profession through the South African Veterinary Association. The Boswell award for 2006 was given to Dr. Lawson Miller Cairns. He has served the Association for

the last 22 years : as Chairman of the Kwazulu Natal branch of the SAVVA, representative of the Kwazulu Natal branch of the SAVVA on Federal Council, Chairman of the National Veterinary Clinicians Group, and as the representative of the Association on the World Small Animal Veterinary Association.

### Veterinary Nursing Award



Veterinary Nursing Association of South Africa (VNASA) is given the opportunity to present two awards; firstly an award for "Outstanding and dedicated service to the veterinary nursing profession". This was awarded to Sr Cindy-Lee Price. Cindy has served on the VNASAs committee for 10 years.

The "Professional Excellence in Veterinary Nursing Award" also went to Sr Cindy-Lee Price.

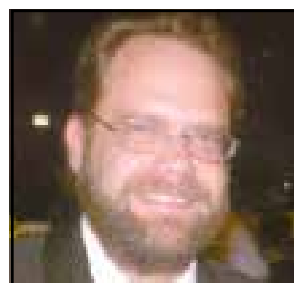
### Research Awards



The Research Awards of the South African Veterinary Association is awarded to any member or group of members for the best scientific article or series of articles published in any scientific journal.

The year 2006 awards were presented to Professor

Robert Munro Kirberger for numerous contributions in the field of diagnostic imaging whose work has been published in both national and international journals (9) as well as in text books. His investigations cover diagnostics and descriptive aspects of different diagnostic imaging techniques in a variety of conditions and species inclusive of lions, marmosets, ostriches, cheetahs, dogs and horses.



The second Research Award for the 2006 award was presented to Professor Bruce Gummow. He has been instrumental in advanced research in veterinary epidemiology in South Africa. His papers have been the cutting edge in the use of epidemiological methods,

often introducing these to South African readers for the first time. He is currently the only formally recognised specialist of European College in population medicine in South Africa. The investigations into the epidemiology and public health aspects of vanadium poisoning in cattle over a period of 16 years resulted in elucidation of the pathogenesis and treatment thereof.

### Woman of the Year Award

The Woman of the Year Award pays tribute to the country's unsung heroes, and presents them as role models to the rest of South Africa. The award pays tribute to the most exceptional and achieving women in the country who have not only achieved successes in their own respective fields but who have made a tangible difference in communities and society as a whole.

The 2006 Award was presented to Prof Cheryl McCrindle who is a pioneer in the field of veterinary health care and education in South Africa. She heads the Section of Veterinary Public Health at the Faculty of Veterinary Science at Onderstepoort. In a male-dominated field she is one of only two women veterinarians who have been awarded full professorships and one of only a handful who have been promoted as head of their sections at the Faculty of Veterinary Science.

- Vet. News, Jul. '06

## Namibia

### Web Page Of Namibia Veterinary Association

The Namibia Veterinary Association has hosted its new Web Page - [www.van.org.na](http://www.van.org.na).

It contains the following headings : Home Page, About Us, Contact Us, Events, Congress 2006, News (Newsletter Manga), Links, Virtual Library, Find A Vet and Veterinary Council. The EC of NVA believes that this webpage will contribute significantly to advancing the veterinary profession in Namibia, bringing the colleagues closer together and linking them to the outside world and the profession abroad.

## Botswana

### New Executive Committee of Botswana Veterinary Association

Botswana Veterinary Association (BVA) held its 2006 annual general meeting on 21 November 2006 in Gaborone. The well attended meeting with veterinarians coming from all corners of the country culminated with voting in of a new executive committee. Only two members were retained and the new committee's first activity will be to put in operation the new association's constitution immediately after it satisfies the Registrar of Societies. The drafting of the new constitution, a scientific conference and celebrations of 100 year of the existence of the profession in Botswana, were the highlights of the work of the outgoing committee. The following were elected as office bearers for the year 2007.

President	L. Mogomotsi
Vice President	B. Ditsele
Secretary	J. Rukwava
Treasurer	M. Reuben
Additional Members (2)	M. Bontsi E. Verreyne
CVA Councillor	N. Mapitse

## Tanzania

### New CVA Councillor Nominated

Dr. Pascal F. Mujuni, National Epidemiologist, Ministry of Livestock Development, Dar es Salaam, Tanzania has been nominated as new CVA Councillor, Tanzania. He replaces Prof. Uswege M. Minga.

## Swaziland

### Executive Committee of Swaziland Veterinary Association

The new executive committee of Swaziland Veterinary Association has been elected as follows :

Chairman	Dr Tony Dlamini
Secretary	Dr Thembinkosi Ndlangamandla
Treasurer	Dr Zizwe Cindzi
Members	Dr Sihle Mdluli Dr Sibongile Songo
CVA Councillor	Nick Gumede

## Kenya

### Online training for vets in Africa

An initiative designed to combat neglected animal diseases that affect poor farmers in Africa, by providing advanced training for veterinarians using online learning, is being led by the Royal (Dick) School of Veterinary Studies (R[D]SVS) in partnership with seven sub-Saharan African universities.

The African Universities Veterinary e-Learning Consortium (AUVEC) will be launched this month to help strengthen the African animal health sector. It will offer new training courses using a mixture of traditional teaching and e-learning for undergraduate and post graduate veterinary students, as well as providing extra training for veterinary surgeons who need to be able to study while working, often in remote parts of rural Africa.

The R(D)SVS and the African Virtual University, which is based in Nairobi, will provide key support in sharing knowledge and expertise and will set up the infrastructure needed for the initiative. Other members of the consortium include the veterinary schools of Addis Ababa University in Ethiopia, the University of Pretoria in South Africa, the University of Zimbabwe, the University of Zambia, the Sokoine University of Agriculture in Tanzania, Makerere University in Uganda, and the University of Nairobi in Kenya, as well as the Department of Animal Health and Livestock in Malawi.

# West Africa

## Ghana

### 11th Commonwealth Veterinary Association West African Regional Meeting And 16<sup>th</sup> Ghana Veterinary Medical Association Conference. Accra Ghana. 20th - 24th November 2006.

Livestock and poultry production plays an important role in the development of the economy of developing countries, including Ghana and the role of women in particular in these areas cannot be over emphasized. Women constitute about half the population of Ghana. In the Agricultural sector, women constitute about 60%. However, with all these significant role of women, they are disadvantaged in respect of socio-economic development and health issues. The theme of the conference: "Sustaining Livestock and Poultry Production at the village level. The Role of Women", is undoubtedly very relevant at the present economic development state of Ghana. . These were some of the remarks made by the 2<sup>nd</sup> Lady of the Republic of Ghana, Hajia Ramatu Mahama. In her address, the deputy Minister of Food and Agriculture, Hon. Anna Nyamekye said livestock form a significant component of the livelihood of as many as 70% of the world's rural poor. In Ghana, out of an estimated total of 2.74 million farming households, livestock including poultry are kept by about 1.54 million households, and women especially the rural folk play a major role in ensuring sustainability of the sector. It is therefore pertinent to fully empower women at the village level so that their full potential in the area of livestock and livestock production will be realized. Constraint that militate against the poultry and livestock production at the village level included high mortality and morbidity from diseases, poor hygiene and husbandry practices, unavailability or high cost of orthodox drugs. To avert the problem, the government of Ghana in collaboration with donors, initiated many projects including the community Animal Health Worker concept. There has

to the rural women in the Agricultural sector to improve the livelihood of the rural poor and subsequently reduce poverty amongst them.

The Commonwealth Veterinary Association hopes that the conference will help address many of these issues and doing so will enable information and experience to be shared, exchanged and updated among the participants who included Veterinarians from Ghana and Commonwealth West Africa, researchers, farmers, NGOs, traditional authorities, and politician.

The meeting was opened by the Minister for Food and Agriculture, Mr. Ernest Debra. It was also addressed by the Minister for Women and Children Affairs, Hon. Hajia Alima Mahama, the Deputy Minister for Food and Agriculture, Hon. Anna Nyamekye. The keynote address was from Her Excellency the second lady of the Republic of Ghana, Hajia Ramatu Mahama.

Scientific presentations covered many fields of the livestock and poultry industry including current strategies in poultry and livestock management, livestock and poultry diseases, role of women in livestock and poultry production. There was a symposium on the theme with papers from participating Commonwealth delegates.

**Dr. Richard D. Suu-ire**  
**R.R. West Africa**

### 4<sup>TH</sup> PAN COMMONWEALTH VETERINARY CONFERENCE

4<sup>th</sup> to 8<sup>th</sup> November 2007 - Barbados, West Indies

#### COMMERCIAL EXHIBITION

The conference venue is the new and beautiful Barbados Hilton Hotel and Conference Centre, on the beach at Needhams Point, Bridgetown, providing luxurious accommodation along with a state of the art conference centre, within easy reach of all the activities available in beautiful Barbados.

Companies interested in exhibiting products and services or exploring sponsorship opportunities are invited to see the relevant information on the Conference website or email [exhibitor@commonwealthvetconference.com](mailto:exhibitor@commonwealthvetconference.com)

# UK/Mediterranean

## United

### New President of BVA



Mr. David Catlow was elected President of the British Veterinary Association for 2006/07 at the Association's annual general meeting in London on October 1, 2006.

Mr Catlow, from Preston, Lancashire, graduated from Liverpool in 1987. He immediately joined a five-vet mixed practice on the Fylde coast in Lancashire, becoming a partner in 1992. The practice, the Oakhill Veterinary Centre, is now a three-centre, 14-vet practice, with Investor in People status.

Mr Catlow works predominantly with farm animals and horses. His interest in veterinary politics developed through his membership of the Lancashire Veterinary Association, where he served as president in 2000. He has also served on a number of BVA committees, including the Veterinary Services Advisory Committee and the Internal Audit Group. He was chairman of the BVA's Veterinary Policy Group until October 2004 and has also served as BVA representative on the RCVS Practice Standards Working Group.

*Vet. Record, Oct. '06*



The BVA's Officer team for 2006/07: (from left) Mr. Nick Blayney, president-elect, Mr. David Catlow, President and Dr. Freda Scott-Park, past-president

### RCVS President



The new RCVS President, Professor Sheila Crispin (centre), with the RCVS Registrar, Miss Jane Hern (left), and her fellow officers for 2006/07, who were elected at the AGM : senior vice-president, Mrs. Lynne Hill; junior Vice – President, Mr. Robert Moore (second left): honorary treasurer, Dr. Jerry Davies (right).

*Vet. Record. Sep. '06*

### British Equine Veterinary Association Congress.



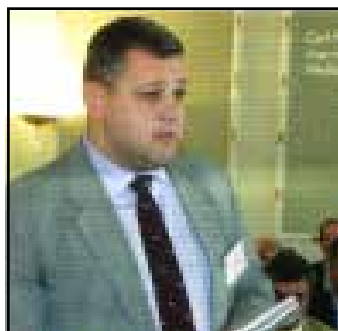
The British Equine Veterinary Association (BEVA) is working with the British Horse Society (BHS) to produce an emergency services protocol to help deal with horses involved in road traffic accidents. News of the protocol came from the BEVA president, Mr.

Chris Rea, during a press conference at the association's annual congress held in Birmingham last week.

Delegates were welcomed to the congress by BEVA's patron, HRH the Princess Royal, and by the BEVA president, Mr Chris Rea. The congress was officially opened by Dr Peter Webbon.

*Vet. Record. Sep. '06*

## New Chairman for the BVA-AWF



The November meeting of the BVA Animal Welfare Foundation (BVA AWF) trustees saw the election of a new chairman and a new trustee.

Mr. Carl Padgett has been elected chairman of the BVA AWF. He follows in the footsteps of Kate Kerr, who stood down after a successful

five-year term of office. Carl is a partner in a 14 vet mixed practice in his native Lancaster, and he is actively involved in veterinary education and politics. He is also junior vice-president of the BCVA.

The Foundation also welcomes Sean Wensley as a newly elected trustee, and Elizabeth Rice as its new full time administration manager. Sean qualified from Liverpool in 2003 and is working as a locum vet in the south west. He recently represented the veterinary profession in Europe in seeking to make the current temporary ban on import of wild-caught birds permanent.

The trustees are already planning what they hope will be an interesting programme for the BVA AWF discussion forum to be held on May 9, 2007. The programme has yet to be finalized; however, likely topics for discussion include animal welfare aspects of racing, and fish farming. Following the success of last year's event, this is set to be another day of lively and interesting debate. For more information visit [www.bva-awf.org.uk](http://www.bva-awf.org.uk)

Off the Record, Jan. '07

## Falkland Islands

### New CVA Councillor for Falkland Islands



Dr. Vic Epstein has been appointed as the new CVA councillor of Falkland Islands. He replaces Dr. Steeve Pointing.

The following is a report by Dr. Epstein on his activities in the Falkland Islands as a Senior Veterinary Officer.

"I oversee the veterinary staff in the Falkland Islands consisting of a small department of 2 veterinarians, clerical assistant/veterinary nurse and laboratory technician. This team swells for several months of the year while an intensive sheep embryo transfer and AI programme is conducted by an imported specialist and an OVS and meat inspector are employed while the meat export season is in progress between January and May to oversee the abattoir compliance to ensure the meat will meet EU standards.

The veterinary section is the "competent authority" for the export of meat and fish to the EU. As the Senior Officer I am the official Food Veterinary Officer and have to monitor and certify compliance with EU regulations to maintain our export licenses into the EU.

This, as most would know, includes ensuring standards of animal health monitoring, hygiene processing of meat and fish and animal welfare are maintained; as well as setting ~~standards for animal and animal product imports~~

Stock diseases in the Falklands are thankfully few. The biggest problem facing farmers of the 550000 sheep is nutrition on the 53<sup>rd</sup> parallel in this harsh Atlantic environment

The monitoring of animal disease is through farmer education, clinical services and abattoir surveys. Bovine TB, Brucella ovis, ovine lice, ovine footrot, ovine Johne's disease, nor any OIE list A diseases exist however I found one case of variant scrapie in an old sheep. The first described in the southern hemisphere!

An eradication programme for hydatidosis is ongoing with the level now at 0.06% found in mutton processed at the abattoir last season. I am currently investigating the reason why it persists and that Falklands is not free of this problem.

There is a big wildlife asset in the Falkland Islands and occasionally things go wrong there too and have to be investigated. Last year we diagnosed penguin pox in some penguin colonies. It would appear to be one of the few cases ever described in wild penguin colonies.

The other important role I fulfil is supplying a veterinary service for the domestic pets with my colleague. These are primarily cats and have all the common ailments seen world wide, except Falkland Islands seems to be domestic pet flea free.

In summary my duties are varied and I have had days (many) where I start out by sexing a pet rabbit or hamster, inspect a fishing boat to ensure EU compliance and finish by trying to draft legislation for imports of sheep semen from South Africa. I never get bored."

- Vic Epstein



**4<sup>TH</sup> PAN COMMONWEALTH VETERINARY CONFERENCE**  
**4<sup>th</sup> to 8<sup>th</sup> November 2007 - Barbados, West Indies**

The 4<sup>th</sup> Pan Commonwealth Veterinary Conference is being hosted by the Barbados Veterinary Association, on behalf of the Canada /Caribbean Region of the Commonwealth Veterinary Association, at the Hilton Hotel, Barbados, from the 4<sup>th</sup> to 8<sup>th</sup> November 2007

The theme of the conference is “Animal Health and Welfare; Continuing Challenges for Veterinarians”.

This conference provides an opportunity for veterinarians from the 52 member countries of the Commonwealth to meet with each other and with veterinarians from many other parts of the world, to discuss matters of common interest, and benefit from quality continuing education on topics ranging from trade issues, food safety, animal welfare and alleviation of poverty, to companion animal medicine, aquatic and avian medicine, emerging and re-emerging diseases and practice management.

**SCIENTIFIC PROGRAM**

The Scientific program of the 4<sup>th</sup> Pan Commonwealth Veterinary Conference aims to provide 20 hours of quality Continuing Education for registrants, on a wide variety of subjects of interest, with five streams of sessions running concurrently.

An overview of the topics to be covered is as follows:

**1. Advances in Companion Animal Medicine.**

- Dermatology
- Diseases of the ear
- Allergic conditions and Allergy testing
- Ophthalmology
- Dentistry
- Animal behaviour
- Practice management

**2. Advances in Large Animal Medicine.**

- Equine lameness and surgery
- Equine ophthalmology
- Bovine medicine and nutrition
- Swine medicine
- Poultry medicine
- Small ruminant medicine

**3. Marine Mammal Strandings and Emergency**

**Medicine.**

**4. Emerging, Re-emerging and Zoonotic Diseases.**

- Avian Influenza
- West Nile Virus

**5. Adaptation to Climate Change**

**6. New Challenges for Veterinarians**

- Aquaculture
- Fish medicine
- Exotic animal medicine
- Stem Cell therapy

**7. Alleviation of Poverty**

- The Role of Women in Livestock Production in Developing Countries
- Programs and Projects to Alleviate Poverty
- The Training of Pastoral Women in Kenya
- The Training of Women Dairy Farmers in India
- Smallholder Grazing Systems

**8. Animal Welfare**

- Changing Global Perspectives on Animal Welfare
- The Development of Animal Welfare Guidelines
- Animal Welfare Education and Initiatives
- Animal Welfare in Developing Countries

**9. Food Safety**

- Caribbean Approaches to Food Safety
- Food Safety for the Future in the Canada/Caribbean Region
- Food Safety Issues and Challenges
- Risk Assessment in Food Safety

A detailed timetable of lectures and featured speakers will be posted on the conference website. Suggestions and queries can be emailed to: [program@commonwealthvetconference.com](mailto:program@commonwealthvetconference.com)

**REGISTRATION**

Registration for the Pan Commonwealth Veterinary Conference is open, and there is a registration form attached on Page 47 of this Journal. Registration forms are also available on the PCVC 4 website, [www.commonwealthvetconference.com](http://www.commonwealthvetconference.com)



## 4<sup>TH</sup> PAN COMMONWEALTH VETERINARY CONFERENCE

November 4<sup>th</sup>-8<sup>th</sup> 2007

“Animal Health and Welfare; Continuing Challenges for Veterinarians”

Website: [www.commonwealthvetconference.com](http://www.commonwealthvetconference.com)

### REGISTRATION FORM

#### A. Personal Information

Title: \_\_\_\_\_  
 First Name: \_\_\_\_\_ Surname: \_\_\_\_\_  
 Preferred Name on Badge: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City: \_\_\_\_\_ Country: \_\_\_\_\_ Zip/ Postal Code: \_\_\_\_\_  
 Telephone: ( ) \_\_\_\_\_ Fax ( ) \_\_\_\_\_ E-mail: \_\_\_\_\_

#### B. Registration Package

Please tick which package/s you would like to be registered for:

	Price before October 1st, 2007	Price after October 1st, 2007
<input type="checkbox"/> Full Package	US \$400	US \$450
<input type="checkbox"/> Scientific Programme only	US \$300	US \$350
<input type="checkbox"/> Student	US \$175	
<input type="checkbox"/> Accompanying person	US \$250	

Please indicate if you will require a vegetarian lunch.

Please indicate if you will prefer not to have pork/beef in your lunch.

Please indicate there are any other preferences for the meals provided (lunch/ banquet):

All prices are inclusive of Value Added Tax. There will be a cancellation fee of 30% on all registrations if cancelled by October 15, 2007, and 80% if cancelled after October 15, 2007. Substitute delegates will be accepted, provided authorization is confirmed before November 3<sup>rd</sup> 2007.

#### C. Payment Method

A bank draft/ money order is attached for the sum of USD\$ \_\_\_\_\_

I have transferred the sum of USD \$ \_\_\_\_\_ by bank transfer notice to you.

Beneficiary's Name: Barbados Veterinary Association Bank Name: \_\_\_\_\_

ABN Code: \_\_\_\_\_ Account No: \_\_\_\_\_

*Please quote reference: 4<sup>th</sup> Pan Commonwealth Veterinary Conference  
 Please also advise payment details to [registration@commonwealthvetconference.com](mailto:registration@commonwealthvetconference.com)*

I wish to pay the sum of USD\$ \_\_\_\_\_ by credit card  MasterCard  Visa  Discover Card

Name of Cardholder: \_\_\_\_\_ Signature of Cardholder: \_\_\_\_\_

Card Number:                 Date of expiry: \_\_\_\_\_

Printed forms can be faxed to: Fax: (246) 228 3780

Completed forms may be emailed to: [registration@commonwealthvetconference.com](mailto:registration@commonwealthvetconference.com)

They may also be posted to: Barbados Vet Association, C/o Central Veterinary Clinic  
 Lower Estate Complex, St. George BB19188, BARBADOS.

## CALENDAR OF EVENTS

### 2007

SAEVA Congress Stellenbosch, Western Cape, South Africa 18-22 February.

Veterinary World Cup Cricket Tournament – Hilton College – KZN Midlands, South Africa, April

World Veterinary Dental Congress, Brazil. April. (Date and Venue to be announced)

32nd World Small Animal Veterinary Association (WSAVA) Congress, Sydney, Australia. 19 - 27, August.

4th Pan Commonwealth Veterinary Conference, Barbados, West Indies. 4 - 8, November.

### 2008

CVA Regional Meeting of Asian Region, Bangalore, India. February (Date to be announced)

20th International Pig Veterinary Society Congress, Durban, South Africa. 26, June.

The 15th Congress of The Federation of Asian Veterinary Associations (FAVA) Bangkok, Thailand 27-29 October.

World Congress of Veterinary Dermatology, Hong Kong. 19 - 22, November.

CVA Regional Meeting of Australasia/Oceania Region, Apia, Samoa. (Date to be announced)

CVA Regional Meeting of ECS African Region, Kampala, Uganda. (Date to be announced)

### 2009

29th World Veterinary Congress, Vancouver, Canada . July 20-31, 2009.

### ADVERTISEMENT TARIFF

**Full Page US \$ 400**

**Quarter Page US \$ 100**

**Half Page US \$ 200**

**Back Cover and Selected Pages US \$ 800**

**\$ 25 per column inch of classified advertisement. Colour Pages quotation on request**

Annual Subscription for JCVA is 12 Aust. \$, Life Subscription 300 Aust. \$

**Subscriptions should be sent to Treasurer, CVA.**