



DANDER

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President's Report

Following the AGM we have a move of AVPA executive roles to mostly NSW members and we are starting to settle into understanding roles which are quite new to most of us. We're still moving the control base from the old executive. Hopefully we'll have bank authorities transferred soon so that we can become more active. One of the activities so far has been to update and clarify the members' database and to look at the possibilities of enabling direct debit and credit card payments for membership. Peter Gray has done a lot of work on this and we should be able to activate this by the time subscriptions are due. This will certainly help our overseas members.

We have two scientific meetings in planning for the coming months. The first of these will be in Auckland, probably in late October 2006. Dave Marks is organising this and the executive have supplied a few suggestions for topics and speakers. Members are asked to offer contributions and ideas. Hot on the heels of this conference will be our participation at the Australian Poultry Science Symposium being held at the University of Sydney in February 2007. I'm liaising with the APSS committee and again, contributions and ideas for the program are sought from all of you.

Thanks to Peter Scott

I would really like to offer a fervent vote of thanks on behalf of the Alliance to our out-going President Peter Scott. Scotty made an invaluable contribution to AVPA over the last two years. In particular he focussed a lot of his time on increasing sponsorship and the financial position we are left with is in fine shape. Peter also had a strong role in maintaining our financial independence from the AVA and in maintenance of our membership structure, which is a difficulty for us as an SIG of the AVA. Moving into the presidency and with a new executive has been made much easier due to the fine shape that the Alliance is in, so I'll add my personal thanks to Peter and the out going executive for a job well done. We are all indebted to your efforts.

AVA Issues

The AVA has a new executive as well and there is already a call to discuss our membership and financial situation with them in regard to our SIG position. We can expect a lot of pressure in this regard and this may consume much of our energies over the coming months. It will be our intention to maintain our current membership structure and our own control of AVPA finances.

Peter Groves

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The Australian Veterinary Poultry Alliance is a Special Interest Group of the Australian Veterinary Association. Membership of the AVPA is available to individuals and groups working in, or interested in, any veterinary aspect of poultry.

Dander will be published quarterly (March, June, September and December). Contributions are welcome. Electronic copy is requested. Deadline for copy is by the end of the second week of the month of publication. Please send information on abstracts of interesting papers, summaries of reports, case histories, social news etc. to Kevin Whithear, School of Veterinary Science, The University of Melbourne, 250 Princes Highway, Werribee 3030, Victoria <kevingwt@unimelb.edu.au> fax 03 9731 2366.

Summary of Important Upcoming Scientific Meetings

- October 2006** **AVPA New Zealand Conference.** Date and Venue to be confirmed. Contact Dr Dave Marks. Email: davidmarks@xtra.co.nz
- February 2007** **Australian Poultry Science Symposium.** Contact: Prof. T. Scott. Email: toms@camden.usyd.edu.au. Web: <<http://www.vetsci.usyd.edu.au/apss>>, February 12-14.
- February 2007** **AVPA Sydney Conference.** Contact: Dr Peter Groves. Email: "Peter Groves" zo48866@bigpond.net.au, February 14-15. There will be a joint session with APSS on the morning of February 14.
- September 2007** **XV Congress of the WVPA.** China International Conference Center for Science and Technology (CICCST), 86 Xueyuan Nanlu, Beijing 100081, P.R.China, Fax: +86 10 62174126. Email: llwang@wvpc2007.org. Web: www.wvpc2007.org. September 13-16, 2007. Abstracts must be submitted to the Congress Secretariat via the WVPC website no later than 28 February 2007.
- AVPA member Amir H, Noormohammadi is the Houghton Lecturer at the WVPA Congress. See page 12 of this edition of *DANDER*.
- June-July 2008** **23rd World's Poultry Conference and Sixth Asia Pacific Poultry Health Conference.** Brisbane Conference and Exhibition Centre. AVPA Contact Dr Kevin Whithear; Email: kevingw@unimelb.edu.au. June 29 - July 4, 2008.
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Sixth Asia Pacific Poultry Health Conference

The 6th Asia Pacific Poultry Health Conference (AP6) will be held in conjunction with the 23rd World's Poultry Conference (WPC2008) in Brisbane from 20 June to 4 July 2008.

Poultry Health topics at the conference will be incorporated into the AP6 stream and this part of the Program, including a Plenary Session, will be organised by an AVPA Scientific Program Committee. Nobel Laureate, Professor Peter Doherty will give a plenary address on Avian Influenza.

While details need to be discussed and decided, it is probable that all delegates will pay the same registration fee and will be able to switch between sessions of their choosing. A conference on Marek's Disease in Townsville will follow WPC2008 and AP6 on 6 July to 10 July, 2008.

June - July 2008 looks like being a very exciting month for conferencing, so all AVPA members are encouraged to start planning for it now.

MEMBERSHIP MATTERS

Membership List

Thanks to all members who have renewed their AVPA subscriptions for 2006. If you haven't done so, please take out your chequebook now and make out a cheque of \$49.50 to the AVPA and post it to the Honorary Treasurer today. **AVPA requests that members pay their annual subscriptions directly to AVPA rather than through the AVA.** A membership renewal form is on the back page of this edition of Dander. Sustaining members will be contacted individually about renewing memberships for 2006.

2006 Financial Members: Caroline Ash, Phillip Ashby, Trevor Bagust, John Barnett, Carol Bates, Peter Beers, Susan Bibby, Doug Black, Pat Blackall, Wayne Bradshaw, Glenn Browning, David Buckley, Graham Burgess, Brian Burke, Eleanor Chaine, Peter Claxton, Kim Critchley, Mike Cundy, Peter Curtin, Wieslaw Demkowicz, Elizabeth Evans, Gordon Firth, Peter Gray, Tom Grimes, Peter Groves, David Hampson, Bob Hughes, Clive Jackson, Rod Jenner, Noel Johnston, Bob Johnston, Brian Jones, Wayne Jorgensen, Vivien Kite, Azadeh Laghai, Mark Lindsey, Margaret MacKenzie, Michael McDermott, Paul McQueen, Con Malliadis, David Marks, Krystyna Minkiewicz, Linden Moffatt, Iain Mortimer, Robert Morton, Kerry Mulqueen, Amir Noormohammadi, Frank Pace, Barry Philips, Bruce Remington, Grant Richards, Julie Roberts, Simon Robinson, Ambrosio Rubite, Peter Scott, Margaret Sexton, Wafa Shinwari, Via Sfetsas, Jo Sillince, Peter Spradbrow, Jillian Templeton, Andrew Turner, Greg Underwood, Aileen Vanderfeen, Steve Walkden-Brown, John Walters, Ben Wells, Kevin Whithear, Pam Whitley, Sarah Wiley.

Student Member: Gabriel Brown.

Life Members: Balkar Bains, Leon Barlow, Roger Chubb, Dinah Fry-Smith, Paul Gilchrist, Harvey Langford.

Please see the AVPA website for information on sustaining members and links to websites

AVPA Sustaining Members 2006

Sustaining members contribute funds that help defray costs of services to members of the AVPA. We thank all sustaining members for their active interest and support.



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Australian Veterinary Poultry Alliance

Draft Minutes of the Ordinary and Annual General Meetings

5th April 2006. Held at 5.30pm to 7.00pm, Holiday Inn Hotel, Gold Coast, Qld

Attendees: Peter Scott, Peter Groves, Phil Ashby, David Tinworth, Greg Underwood, Clive Jackson, Mark Lindsey, Steve Walkden-Brown, Linden Moffatt, Leon Barlow, Susan Bibby, Aileen Vanderleen, Trevor Bagust, Graham Burgess, Neil Cooper, Bob Hughes, Sarah Wylie, Pat Blackall, John Reeves, Wayne Bradshaw, Dave Marks, Amir Noormohammadi, Kevin Whithear.

Apologies: Ben Wells, Peter Gray, Andrew Turner, George Arzey, Edla Arzey, Soy Rubite, John Barnett, Kim Critchley.

ORDINARY GENERAL MEETING.

Peter Scott welcomed members and opened the meeting.

1. Minutes of OGM 12 February 2006

The minutes had been published in Dander. Moved Clive Jackson, seconded Graham Burgess, that the minutes be accepted as a true record of the meeting. Carried.

2. Matters arising

2.1 Welfare matters mentioned will be covered in the Welfare Subcommittee Convenor's report.

2.2 World's Poultry Science Conference 2008 (WPSC). This will be held in Brisbane, possibly in July 08. Kevin Whithear has been liaising with the WPSC organising committee. Arrangements have been made to hold the 6th Asia Pacific Poultry Health Conference (APVI) as the health stream for WPSC. AVPA has been asked to nominate a main plenary speaker and session topics. The AVPA membership is invited to offer suggestions. It was resolved that Kevin continue as chair of a liaison committee to include Amir, Trevor Bagust, Pat Blackall and the incoming Executive to facilitate progress with APVI and WPSC. Registration will be centralised through WPSA. Sponsorship will also be centralised – Peter Scott to liaise with WPSA over this.

2.3 AVA Conference – We will not have an involvement in the AVA Annual Conference in may 2006.

3. General business

3.1 Future Scientific Meetings

3.1.1 Marek's Disease Conference, to be held in Townsville in 2008, will feature as a satellite meeting to WPSC. The date will thus be brought forward. Speakers for this also need to be identified and should be integrated with APVI as much as possible. Graham Burgess is involved in the organisation of this meeting.

3.1.2 It was resolved to hold a Scientific Meeting in late 2006. Location to be New Zealand, probably late November. David Marks is to convene an organising committee in NZ and liaise with the Executive. Location may be Auckland or Christchurch.

3.1.3 February 2007 – Agreement to combine with Australian Poultry Science Symposium (APSS) at University of Sydney. This may take the form of a joint session as in 2005. Peter Groves to join the APSS Organising Committee as AVPA representative.

3.1.4 Late 2007 – Suggested that we hold a meeting in Melbourne.

3.1.5 PIX 2008? The meeting felt that we will have too much on in 2008 with APVI and we should only hold one meeting that year. Peter Groves to convey our decision to the PIX Organising Committee, noting that our members will still be pleased to contribute to PIX as speakers in their normal sessions.

3.1.6 Moved Clive Jackson, seconded Susan Bibby, that, prior to each AVPA scientific meeting, a call for papers be placed in Dander. Carried.

3.1.7 AVPA relationship with AVA. Membership issues (re non-vet members and non-AVA veterinary members). It was noted that a motion from Paul Gilchrist from many years ago is still "on the table" re our relationship with AVA (in abeyance but could be voted on if deemed desirable). It was agreed that our constitution be published again in Dander and member comments invited. Noted that the meeting desires the membership structure to stay as it is. The constitution is old and could do with some tidying up (Moved T. Bagust, seconded D. Marks; carried).

3.1.8 Money handling in relation to AVA: It was resolved that we retain our current system whereby an accountant completes AVPA's BAS, quarterly. Money which AVPA owes to the AVA will only be paid on the basis of a Tax Invoice.

B. ANNUAL GENERAL MEETING

Attendance and apologies as for the OGM.

1. Minutes: Moved Clive Jackson, seconded Graham Burgess that the minutes as published in Dander be accepted as a true record. Carried.

2. President's Report: published in Dander

3. Treasurer's Report:

Amir presented a financial summary of the past year. Moved D. Tinworth seconded M. Lindsey, that the report be accepted. Carried.

4.1 Convenor's Reports:

4.1 Exotic Disease & Importation Subcommittee

George Arzey had published a report in Dander.

Comments on the Importation of SPF Eggs – note that importation can only occur with total failure of local supply and that this is unlikely with a "partial" failure. What constitutes a "critical national need" is not fully defined.

Moved D. Marks seconded P. Groves that the report be accepted. Carried.

4.2 Welfare Subcommittee

A report had been published in Dander. Discussion involved noting that the AVPA submission to AVA was footnoted by an independent comment made by Bob Johnston. Request to members that we should comment via AVPA, not independently if we are to have a combined authoritative voice.

Moved M. Lindsey seconded T. Bagust that the report in Dander be accepted. Carried

4.3 Therapeutics Subcommittee

Verbal report from Susan Bibby. The DMZ issue : Tom Grimes was appointed by ACMF and AVPA to make a submission to APVMA. Linden Moffatt reported that there was also a submission from the pig industry. APVMA decision is pending. Susan raised an issue of whether the welfare implications of not being able to treat a disease was considered in these cases.

General discussion noted that there was a lot of aquaculture therapeutics interest at present within APVMA and that poultry issues were not attracting much attention.

Pat Blackall commented that the national survey of antibiotic resistance through poultry abattoirs report is soon to be released. This is still confidential but there are no surprises.

4.4 WVPA Bureau member

Trevor Bagust provided a report in Dander. The Beijing conference is coming up in August and we are encouraged to attend. WVPA has a scheme to encourage young researchers – how can we access this funding to support our young (<35 years) members/researchers?

AAAP has also requested a nomination from us of 3 late eminent scientists for inclusion in a world wide "hall of fame". AVPA nominated Rob Cumming, Beri Sinkovic and Len Hart. Prof Cumming would have priority if only one could be included due to his being more widely known internationally.

Moved P. Blackhall, seconded T. Bagust "that we establish a funding process to assist one young researcher to attend each WVPA conference." This could be named in honour of one of our passed members. Perhaps to the value of \$2-3,000. The incoming executive is to put forward a concept. Carried.

4.5 Dander Editor

The Editor expressed some concern about how well read Dander is. The last edition contained an article in French to which there has been no comment. The Editor suggested that Dander be only be published half-yearly instead of quarterly which after discussion was rejected.

The membership, feeling duly chastised, promised more attention in future. The editor made a call for input from the membership into Dander.

5. Election of Office Bearers

President:	Peter Groves
Vice President:	Peter Scott (retiring President)
President-elect	vacant
Secretary:	Ben Wells (nominated P. Groves, seconded P. Scott)
Treasurer:	Peter Gray (nominated P. Groves, seconded P. Scott)
Assistant Secretary:	Steve Walkden-Brown (nominated P. Groves, seconded P.Scott)

Convenor positions were reconfirmed, subject to acceptance by members not present (all nominated by P. Groves, seconded by P. Scott).

Importation & Exotic Diseases Subcommittee:	George Arzey
Therapeutics Subcommittee:	Susan Bibby
Welfare Subcommittee:	John Barnett
WVPA Bureau Member:	Trevor Bagust
Website Coordinator:	Graham Burgess
Dander Editor:	Kevin Whithear

The President offered a vote of thanks to all convenors for there continued commitment and valuable contributions.

The President thanked the outgoing President and Executive for their fine work over the last 2 years

The meeting was closed at 7.00 pm.

Therapeutics Subcommittee 2005 Annual Report

The last 12 months have been a very steep learning curve, my thanks go to Tom and the many others that have assisted to allow me to move "into the swing of things".

The major activities for 2005 were -

AVA Therapeutics Advisory Committee

I attended my inaugural one day meeting on 30th November 2005. Minutes of this meeting are available from the AVA website.

AVA Quality Use of Antimicrobials Group

I am a member of this group, chaired by Stephen Page. Details of the inaugural meeting were published in the December edition of Dander.

APVMA Dimetridazole Review

AVPA had input into this review via the ACMF and AVA. The draft review report is available on the APVMA website.

Susan Bibby
Convenor

Getting to Know Your New Executive

Peter Groves - President

Peter is a consultant veterinarian to the poultry and related industries, primarily involved with Baiada Poultry Pty Limited. Peter has taken on a part time role as Senior Lecturer, Poultry Health at the University of Sydney and is also an Adjunct Senior Lecturer at Charles Sturt University. He is a member of the Poultry CRC R&D committee and the CRC Governing Board and a director of the Australian Poultry CRC Pty Ltd.

Peter has some research links through the University of New England, particularly in the epidemiological side of their Marek's Disease research projects.

Peter Gray - Treasurer

I live at Lake Macquarie, NSW (just south of Newcastle). I'm married to Sue with 3 children & have been working as a veterinarian for Inghams in NSW for 20 years.

I have benefited very much from the hard work many have put into the AVPA over the years & now as Treasurer it gives me the opportunity to 'put back in'. Previous executives have left the AVPA in good financial shape so it does make the transition to Treasurer much easier.

One aim for this year is to explore increasing the range of payment options for membership & conference fees for 2007. I look forward to the opportunity to get to know many of you better over my term as Treasurer.

Your new Executive, hard at work in the AVPA office, earnestly responding to member's enquiries about the future of the AVPA!



Ben Wells - Secretary

The legendary New Zealand Prime Minister, Sir Piggy Muldoon, once remarked that the flood of New Zealanders migrating to Australia served to raise the IQ of both countries. Whilst happy to be part of that jostling throng I was always just a little disappointed that my departure had been perceived as raising the NZ national IQ.

I went through University very slowly, (and not particularly thoroughly,) with the aid of a Yellow Cab scholarship which was much more readily available than the Commonwealth Scholarships of those days, and much more fun, as one met a comprehensive cross section of the Australian population whilst simultaneously enjoying the beauty of greater Brisbane. The only qualification required was an altered driver's licence purporting to show the holder was over 21 years old.

Upon graduation, which was accomplished with a grade average of "P" with the one accidental and undeserved Distinction being balanced by a leavening of "Pass Conceded," I wrote to the entire Australian pig industry looking for work. This troubled Australia Post to the extent of but four letters, but I thought it worthwhile as a

childhood among the pigs had given me a lifelong affection for the animals. Alas there was no response beyond one "thanks but no thanks," and there I remained as the best qualified cab driver in Brisbane.

By chance I saw an Inghams advertisement for Vets, applied and got the job. With considerable sadness the keys to the yellow EH Holden went back to the company and the family moved to Leppington at which point it became clear that I had not been employed for my sparkling wit and completely non-existent knowledge of anything to do with chooks. I was the eleventh Vet on staff and that made a cricket team for the cricket tragic who ran the Veterinary Empire of Inghams in those days of the early 1970s. It rapidly became obvious that I had no talent for cricket, and monocular vision and very poor hand eye coordination meant that I could never be more than an embarrassing liability on the Leppington village green and thus my career with Inghams came to a premature close after only 11 months.

But the experience left me with a life long passion for poultry tempered by sharp pangs of nostalgia whenever I visit Brisbane and see those gayly-coloured Yellow Cabs.

What's Your Diagnosis?

Due to lack of popular support the What's your diagnosis? section of DANDER has been temporarily (hopefully) suspended.

The History of Infectious Bronchitis in Australia

RB Cumming

In the 2 previous *DANDER* instalments of the "History" of IB in Australia we followed Rob Cumming's identification of IBV as the cause of the clinical condition uraemia and his run-ins with authority in trying to convince them of the validity of his findings. This continued, with what he considered to be incorrect information in Government extension pamphlets to poultry farmers about the disease. This final edited instalment looks at research he conducted on electrolyte replacers and IBV vaccines and what he considered to be incorrect or inappropriate application of his work.

Editor

Electrolyte Replacers

When I arrived in Australia, there was a suggestion from some farmers that putting molasses in the drinking water was of some benefit to birds affected with uraemia. I tried to repeat this work experimentally with variable results. My first postgraduate student to work on IB was a Rural Science graduate, Bronya Heath. In her Masterate work, she showed very clearly that chickens infected with IB virus died from an acute loss of sodium and potassium. Based on Bronya's work, we then were able to come up with effective mixtures of sodium and potassium salts that would dramatically reduce losses from the nephritis (uraemia) caused by IB viruses. These results were presented at a conference in Surfers Paradise in 1969, and the formulations were given to the poultry industry. Subsequently various electrolyte replacer mixtures were marketed by a number of drug firms.

In early 1975, I conducted a course under the auspices of the Australian Asian Universities Cooperation Scheme at the University of Gadjah Mada, Jogjakarta, to help upgrade poultry disease teaching at Indonesian universities. It was a five-week course and I had four other Australians on the course, including Dr Harvey Westbury who then worked for the Inghams Group. I can remember Harvey telling me in one of the many long evening discussions we had in the small hotel, that the electrolyte replacers he had used in the Inghams group did little good, and caused extremely wet litter. We had not observed this in our research work but I did not do anything about it when I returned to Australia.

In our work at the University, we always made up our own electrolyte mixtures if we required them for experimental purposes as we had large quantities of the individual salts in store. However, about 1979, we ran out of our individual salts and then purchased a registered electrolyte replacer for an experiment. We were amazed to find that the birds on the electrolyte replacer continued to die like untreated birds and consumed vast quantities of water, flooding the dropping trays of the experimental cages. This reminded me of what Harvey had said in 1975. I had a sample of the electrolyte replacer analysed, and found that it had not been correctly compounded. In our earlier experimental work we had shown that at least one third of the potassium or sodium salts had to be supplied as citrate or bicarbonate salts and the remaining two thirds could be supplied as the chloride salts. Per unit of sodium or potassium, the citrate and bicarbonate salts are much more expensive, three to four times more expensive than the chloride salts.

I notified the firm that had made up the electrolyte replacer that we had purchased as well as the Department of Agriculture. I then collected electrolyte replacers from about eight different manufacturers and started testing them. Only three were correctly formulated (the electrolyte replacer that Harvey Westbury had used was one of the incorrect formulations.) I asked a couple of the manufacturers of the inefficient mixtures why they had left out the essential but expensive citrate or bicarbonate salts, and their answer was that this made the product too expensive. When I pointed out that their mixtures were practically useless, their reply was that they sold thousands of kilos of these (ineffective) mixtures each year.

Throughout all this, I was in contact with the Department of Agriculture as to the incorrect registration of some electrolyte replacers. In 1981, I presented a paper in Perth on this whole problem at a poultry industry meeting so that everyone knew exactly what had been happening. My argument was that if a product is registered by the Department of Agriculture, it should guarantee a certain quality. I felt that the New South Wales Department of Agriculture was letting the Australian poultry industry down again on the IB problem. Bob Pym, who was the geneticist working at the New South Wales Department of Agriculture Research Station at Seven Hills, was in the audience at the time, sitting next to Denise, my wife. Bob said to Denise "He is a stroppey old coot, isn't he?"

IBV Vaccines

Back in the early 1960s, we decided not to attempt to produce an IB vaccine for the industry as we were then busy unravelling the remarkable interactions that occur with the disease. These include the fact that males are twice as susceptible as females, factors in meat meal aggravate mortality markedly, a slight cold stress can dramatically increase mortality, and there were very significant genetic differences in the various strains of birds around. We had also shown that viruses differed quite markedly in their ability to kill chickens and that the milder viruses would protect chickens against the ravages of the severe viruses. So we handed out samples of the milder viruses as possible candidates for vaccines to the vaccine firms then operating in Australia as well as the larger integrated organisations like Inghams Enterprises and Steggle's. These people then put the virus through varying numbers of embryo passages to produce their vaccines.

Vaccines were used on a wide scale from 1966 onwards and had a dramatic effect on field problem of deaths from nephritis. Electrolyte replacers were widely used at the time too. However, by the early 1970s, there were some murmurings from the industry that we should perhaps have a "better" vaccine - a vaccine that caused no adverse effects in the young chickens, but protected them against all the viruses they might encounter in the field

Normally eggs are incubated at 37°C, and we found the virus could still grow but very poorly at 38°C. However, when the eggs were incubated at the low temperature of 34°C, we found the embryos remained alive. So we concentrated on this cold attenuation method and by 1977

had produced the new A3 IB vaccine. I can honestly say that this vaccine was far better tested than any other IB vaccine in Australia. We put it into chickens which were cold stressed to see how safe it was and then, after vaccination with A3, we challenged the chickens with a variety of IB viruses. We showed that it did not affect birds in production, not harming egg quality or egg number. Further, the A3 virus did not damage the oviduct when introduced to day-old pullets without antibodies to IB.

Samples of this virus were then handed out to any vaccine firm that wished to use it. By this time – the late 1970s, the Dutch firm Phillips Duphar had set up a vaccine branch in Australia. Roger Chubb was appointed as the Chief Scientific Officer to this branch of Phillips Duphar. Roger had returned to England a couple of years earlier but then decided Australia was the best place after all. Another important point is that at this stage, new regulations were being brought in regarding the registration of vaccines in Australia and new quality control measures were mandatory.

From that time on, reports came in that the (commercially produced) A3 vaccine was doing extremely well while other reports came in saying A3 was not standing up to severe challenge. In discussions with Roger Chubb of Phillips Duphar, he reported that their A3 vaccine was giving excellent results. I was at a complete loss to explain these irregular and unsatisfactory results, until a couple of years later, when the reason for the differences became obvious. According to Rob the difference was due to the method of propagation used for purification of the A3 virus seed, either in chick embryos or in cell culture, with the latter causing over attenuation and loss of immunogenicity.

Cell Culture of Other IB Viruses

In the 1970s, I sent a number of IB viruses to the National Biological Standards Laboratory (NBSL) as they were to act as the national repository of these viruses. Thus anyone in Australia or overseas who wants an Australian IB virus can obtain it from them. Unbeknown to me, these viruses have all been purified by cell culture. In other words, all the viruses have been passaged through cell culture three or four times, being, dramatically altered in the process.

Use of cell culture propagated T strain in pathogenicity studies by another researcher and failure to identify this fact in a scientific publication caused Rob further grief because it “muddied the scientific literature” and “led to a number of overseas researchers querying my assertion that the Australian T virus will practically always kill chickens from nephritis”.

Overview and Conclusions

This whole story of the problems that have arisen following the first isolation of IB virus in Australia in 1962 makes one realise how complex our society is. On the one hand we have the bureaucracy of the New South Wales and other Australian veterinarians who were prepared to go to almost any lengths to bury the truth about the presence of this virus, and it was not just a single incident. When one considers the problems with farmer pamphlets on IB, the registration of incorrectly formulated electrolyte replacers and the omission of critical evidence from scientific publications, one wonders why all this happened.

One thing that is painfully obvious is that, in a democratic society, there is a need for competent people in all fields of human endeavour who are not controlled by “big brother”. I was fortunate when I came to Australia in 1960 that I was a graduate from the Onderstepoort Veterinary Research Station in South Africa. At that time, South Africa was very much in the forefront of virus disease research in the world, and as an Onderstepoort graduate, I was well versed in poultry diseases.

Even more important was my relationship and contact with Dougie Coles. He was Professor of Avian Diseases at Onderstepoort and lectured to me over two years in the veterinary degree. I also worked under him in his Department for four years (1956 - 1960) where I learned so much from him. He taught me to make a laboratory diagnosis and then visit the farm. “So often,” he said, “there are a number of husbandry and nutritional interactions in diseases that are crucial to practical disease control.” How correct he was about IB, the classical interaction disease.

In addition, I was extremely fortunate in coming to the University of New England where I received such unstinting support from people like Frank Annison, Bill McClymont, Bert Madgwick, as well as a host of poultry farmers in the Tamworth area.

Unfortunately in the year 2000, the picture has changed dramatically in that research money is largely denied to universities and Departments of Agriculture have largely given away any poultry research work. The powerful people in poultry disease work are now the employees of large integrated companies. These people are not free to express their scientific opinions and of course, the bottom line is the only thing that counts these days.

As a case study, what conclusions may be drawn from my experiences as an academic veterinary research worker in Australia over the last 40 years? My perception is that there has been some extraordinary resistance to the acceptance of research results that were in conflict with the conventional wisdom of some other researchers in the field, and even more from government policy makers and regulators anxious to protect their reputations as guardians of Australia's ‘disease free’ status. Extension workers have felt compromised and commercial companies have sometimes put their profits ahead of the interests of their clients.

This concludes an edited version of Rob Cumming's account of the History of IB in Australia, liberally sprinkled with Rob's views on a number of other issues that affected him as a poultry veterinarian and academic.

Feedback about the article is welcomed, especially from contemporaries of Rob Cumming who may be able to add more to the historical record of this important period in the unravelling of the pathogenesis, epidemiology, treatment and control of a major poultry disease that was aptly and appropriately referred to by Tom Hungerford as Cumming's Disease.

BOOK REVIEW

Beak Trimming Handbook for Egg Producers

Best Practice for Minimising Cannibalism in Poultry

This Handbook, written by Phil Glatz (South Australia Research and Development Institute) and Michael Bourke (TAFE NSW), was produced by the Australian Poultry CRC and published by CSIRO Publishing in 2006.

The Handbook is designed to assist farm managers to develop optimal strategies to minimise cannibalism in their poultry flocks. It helps farm managers to understand the possible triggers for cannibalism and discusses the range of solutions currently available or likely to become available in the near future.

Handbook chapters provide useful and practical information on:

- Pecking problems
- Beak-trimming methods
- Best practice beak trimming
- Managing beak-trimmed birds
- Welfare of beak-trimmed birds
- Industry views on beak trimming
- Alternatives to beak trimming
- Strategies for minimising cannibalism

The Handbook provides best practice information to assist farm managers to benchmark their current practices and to review and revise their strategies to prevent cannibalism in their flocks.

Proper beak trimming is identified by the Handbook as the most effective method of preventing cannibalism currently available for most poultry flocks. Increasing concern from the public and customers over this practice and the specification of standards in the Model Code of Practice for Welfare of Animals – Domestic Poultry (4th Edition) make this Handbook an important educational resource for all farm managers utilising beak trimming as a management tool. The Handbook provides farm managers with information to assist them to ensure that the quality and effectiveness of beak trimming operations are optimised and to identify methods to minimise the use of beak trimming.

This Handbook is well written for the target audience, with appropriate language and technical content. Although the Handbook is designed as a training manual, there is currently no avenue for farm managers to be assessed for competency in relation to this material. The “Management checks” contained in the Handbook are useful exercises to ensure managers think through the issues that have been discussed. Farm managers would benefit from networking with other managers to discuss the issues raised in these “management checks” in order to learn from each-others experiences.

Irene Gorman

2006 – 88 pages – spiral bound – ISBN 0643092560 – \$35.00

CSIRO PUBLISHING <http://www.publish.csiro.au/pid/5205.htm>

AVPA Undergraduate Scholarship Program Report

Sarah Haberecht

Introduction:

When applying for this work placement I sought to use the practical experience as well as the knowledge gained from people within the industry to further my understanding of this quickly developing industry with a hope to learn where and what my abilities could be best used for.

Program:

During my time spent on placement I visited Rainbow Valley Turkeys, Ridley feed Mill, a research and pathology centre, Kinross Layers and various farms within Hazeldene, as well as a service call with Susan Bibby.

At Rainbow Valley Turkeys I was introduced to most aspects of turkey breeding including artificial insemination, broody control, and general production of turkey breeding.

The Ridley feed mill was a largely new area for me and was shown the complete process from raw materials to complete feed, also percentage content of feed as well as how to formulate a satisfactory diet for feed.

The research centre and pathology allowed me to see a research experiment in full swing including active data collection and previous results. It also showed me the approach taken in diagnosing poultry disease and how

certain tests are undertaken to determine these diseases and also I was fortunate to participate in some bird post mortems.

The Kinross farm was a complete introduction to cage layers, from breeding, rearing, laying and collecting as well as packaging and other products made on site from the eggs.

The Hazeldene's farms allowed me to experience hands on breeder rearing, breeder production, broiler rearing and production as well as the processing plant.

The service call with Susan allowed me what the function of a service person is and how important this role is in the overall health and well being of the birds as well as the importance to production.

Outcomes:

From these placements I have learnt an awesome amount about poultry production, from both practical experience and from asking knowledgeable people many (I'm sure annoying at times) questions.

I have learnt a huge amount about differences between turkey rearing and breeding to chickens, most of which I had never encountered nor even considered due to a lack of contact with turkeys before. Chris Prestwood, Quintin and Rhonda were all helpful and very patient with me stopping them every 5 min with questions. The most intriguing part of this placement was learning about the potential of the turkey industry, this made me want to spend more time learning more about these birds from these very welcoming people, and with Chris' permission I did return for 3 more days a couple of weeks after my placement and got to watch a placement of day old poults as well as learning about teaching them about food and sleeping patterns, this was an immensely rewarding experience.

The feed mill, although it appeared that I had turned up at time when the people I would have benefited most from speaking to, were busy, it was still an eye-opening experience to be shown through the whole milling process. I was also introduced here to the way feed is formulated by a computer program which takes into account cost and nutritional value of raw materials to create a cost effective feed meeting nutritional requirements, this was a largely in-depth, but worthwhile process to be shown as the different variations were interesting.

The research and pathology centre was an integral part of my learning I saw that there are many people who never set foot on a farm in the poultry industry, however their work is vital in keeping all birds healthy and also stopping outbreaks. I was also shown a current research project with bantam chickens involving egg size. I learnt a lot about the work that goes into genetics of birds to boost specific traits for higher production and lower costs. Although a little repetitive at times, there were very rewarding periods where I was able to gain an understanding of the objectives of this centre in poultry production.

The Kinross farm gave me a complete and in-depth look at the way one layer farm is set up from breeders, rearers and the layers as well as the packing plant. This farm was able to demonstrate different types of cage setups for the birds and explain the pros and cons of these differences. Due to renovations being carried out I was able to see how the setup of sheds and ultimately the living standards of the birds has changed over time, it was also explained how these changes also affect production, it was interesting to see how research carried out can be put into practise and change the way a farm houses birds totally.

All the Hazeldene's farms allowed me to get some practical experience in all aspects of the poultry farming world. I was able to see how important each farm is to the whole scheme of production and how a problem which starts at each level will affect the next starting with the hatchery, to the breeder rearers, then to breeders, back at the hatchery and then onto the broilers, these placements allowed me to see the possibilities where errors can occur to disrupt production and I learnt how significant a small error can be. I was also shown the production plant where I could see most of the affects errors on farms played in the meat production.

My service call with Susan was enlightening to the health side of the birds. It allowed me to see the importance of service people and the influence they have. With Susan I was able to carry out post-mortems on sick birds to physically see what was happening inside the bodies which give rise to the external symptoms, it was also an intense education on all the important aspects to the particular broiler farm which could allow potential problems to arise. It also allowed me to see the relationship between farmers and the service people.

Comments:

Although most of my time was productive, I did encounter quite a few people who either didn't know what to do with me for a whole day or 2, or who didn't seem interested in having me there at all. I did have to explain quite a few times who I was and what exactly it was that I was doing on their farms, I think this was due to a lack of communication between managers and assistants, but also could have been a misunderstanding in my role, I am not totally sure, as it was assumed in almost all placements that I was a vet... however flattered I was, a vet I am not! Another small issue I had was the amount of travel done in one week from Melbourne to Bendigo to St. Arnaud then back to Melbourne and then Bendigo again I do understand that it had to work in around quarantine and other people, however time and fuel were wasted here, I am not complaining I just think that organisation on the whole could have been better, especially the last few days.

Conclusion:

My issues with the program are very few and far between, however my praise keeps spilling out to everyone I talk to and even writing this report does not allow for all the things that I enjoyed and learnt to be shown. I succeeded

in learning about the practical side of poultry production and also managed to gain experience about the industry which I did not expect. I do have to say that the wonderful experience and knowledge I have gained through this program is all due to the interesting and amazing people who were more than willing to share what they know with me, I have meet people who I will stay in contact with throughout my career as well as some awesome friends that I will know forever. Thank you Susan for giving up so much time to arrange these 3 weeks for me and for spending so much time with me and answering all my questions.

I now feel that I have enough practical experience to say that I would love to be involved with this exciting industry in whatever way I can.

Thank you so much for this opportunity it is one which I will never forget and is the perfect grounding for the start of my career in the poultry industry.

Sarah Haberecht

Sarah Haberecht was in her final year as a BSc student at the University of New England when she applied for an AVPA scholarship. While these scholarships are intended for veterinary students, there were no vet applicants in 2005. Peter Scott had taught Sarah in Julie Roberts' Poultry Physiology Course at UNE and was impressed with her ability and her enthusiasm for poultry. The Executive decided to award Sarah a 2005 scholarship. It is pleasing to note that after graduation, Sarah joined the Graduate Livestock Program at Barter Poultry. Sarah has recently been promoted to a position in Accounts and Finance for Livestock in the Barter Sydney office and is very happy and optimistic about her future career in the Australian Poultry Industry.

AVPA members will also be pleased to learn that there are 4 veterinary students from the University of Melbourne who have chosen a poultry placement for a final year elective this year. Susan Bibby has organised a comprehensive program for them covering many facets of the industry. Hopefully some of these may be destined to becoming the next generation of poultry veterinarians. Thanks to Peter and Susan for their active support of practical poultry production education.

Amir H. Noormohammadi the 2007 Houghton Lecturer

The Houghton Lecture is given every two years at WVPA Congresses. The Houghton Trust Ltd. in conjunction with the WVPA sponsors this Award, which is given to a young scientist who is judged to have made major contributions to the field of poultry disease research.

AVPA members will be delighted to hear that AVPA member and recent Treasurer, Amir H Noormohammadi has been selected to give the Houghton Lecture at the 2007 WVPA Congress in Beijing. Amir was nominated by the AVPA. The award comprises payment of the costs of the Houghton Lecturer in attending the Congress at which the Lecture is given and an engraved vase.

Amir is currently Senior Lecturer in Poultry Diseases at the University of Melbourne. He graduated from the School of Veterinary Science, Tehran University in 1990. He had a keen interest in poultry diseases even as a student – the subject of his undergraduate thesis was on mortality of the young commercial chickens in regional areas in Iran.



Amir did his PhD at the University of Melbourne on the molecular pathogenesis of *Mycoplasma synoviae*. He has done ground-breaking research on the surface proteins and the molecular mechanisms used by this organism to generate antigenic variation and induce chronic diseases in chickens and turkeys. Amir's work has influenced scientific thought into the intriguing biological phenomenon of phase variation and elucidated a unique mechanism about how it is achieved in *M. synoviae*.

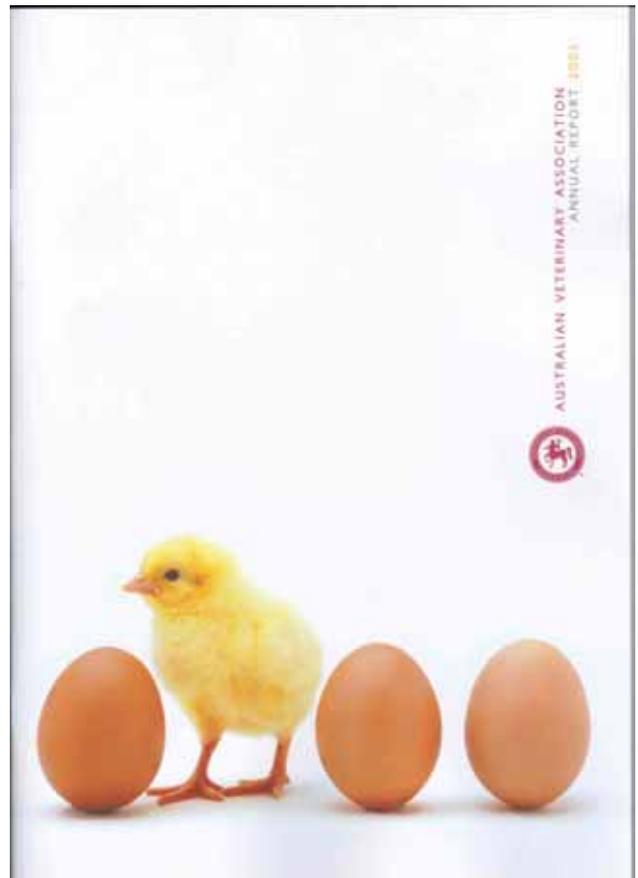
Amir's research interests have extended beyond mycoplasmas. He is a key researcher in several projects within the University of Melbourne including molecular pathogenesis and epidemiology of infectious laryngotracheitis, infectious bronchitis and chicken anaemia viruses and of pathogenic avian *Escherichia coli*. Most of these projects involve supervision of postgraduate students and significant advances have been made, particularly in the area of distinguishing strains of ILTV and IBV. Amir has recently been awarded R&D funding by the Australian Poultry CRC for a project to take a suite of these molecular diagnostic tests out of the research lab and put them to routine practical use for the Australian poultry industry.

Kevin Whithear

Who says the AVA has no interest in Chooks?

AVPA members who are also AVA members would have received a copy of the 2005 AVA Annual Report.

The cover page is reproduced at right for the enlightenment of non-AVA members.



avpa



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(Note: Membership of AVPA does not provide membership of AVA)

Membership fees are due by the 31st of January, 2006

The annual membership fee is \$49.50 (inc GST) for individuals

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