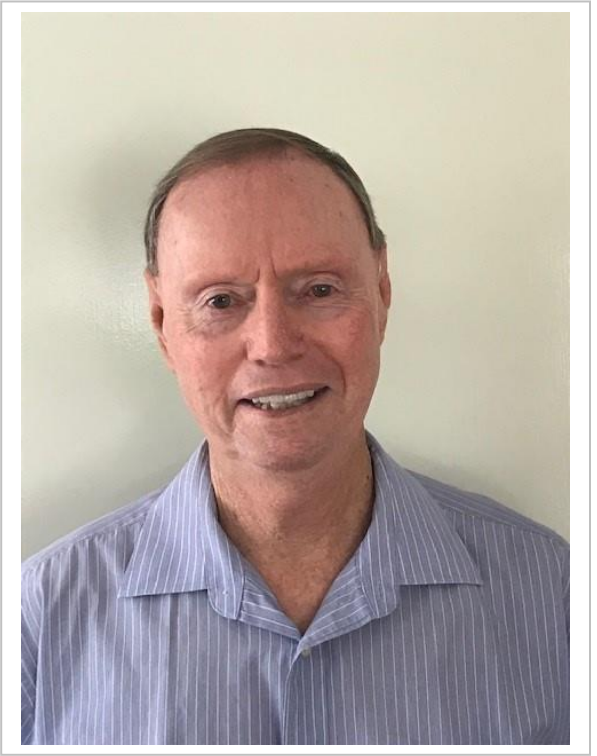


American Association of Avian Pathologists
Biographies of Professionals in Poultry Health

Tom Grimes

1944 -

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The Life of Tom Grimes

I was born in Ipswich, which at the time was a small industrial town 70km west of Brisbane Queensland Australia, on the 6th of November 1944. The main industries were coal mining, railway workshops and woollen mills. My father Roy serviced the wheel brakes of the train engines and carriages at the railway workshops all his working life until he retired at 65. Women did not work after they were married in those days. My two sisters Kathryn and Mary were younger than me. We had a happy childhood with our parents instilling in us good principles for our future life. Like many Australians in those days, my father's ancestors were from England and my mother's were from Ireland. My parents lived a very simple life and were not wealthy, but they prioritized our education to give us the best possible opportunities in life.

My school education was at the Christian Brothers College in Ipswich. I was a good student academically, coming top of my class each year of my school life and was an enthusiastic participant in sporting activities, representing the school in swimming, athletics, and football. There were only 20 students in my final year at school, as most students in Ipswich commenced working prior to completing their schooling in those days. My final year examination results in 1962 qualified me to obtain financial assistance for undertaking various university courses. For some unknown reason, I chose

a Queensland State Government Scholarship to study Veterinary Science at the University of Queensland in Brisbane.

For the first two years of the veterinary course, I travelled by steam train to Brisbane each weekday, which was a return journey of three hours but boarded with other students in a private accommodation in Brisbane for the subsequent three years of the course. After an initial settling in period, I applied myself more to study which subsequently resulted in me obtaining a Bachelor of Veterinary Science (BVSc) 2nd Class Hons. degree on graduation. I also participated in sporting activities such as basketball and football, for which I represented Veterinary Science in inter-faculty competitions. There were 64 students in the final year with only two being women, which differs from these days when more than 50% of the graduating class are women. To supplement my finances, I joined the Army Reserve in the Queensland University Regiment, which involved training every weekend and army exercises during the university holidays. Some attachments to the Regular Army were also undertaken during the seven years that I was a member of the Army Reserve, the most memorable being at Vanimo in the remote far west of Papua New Guinea where there was active insurgency from the adjoining Indonesian country at the time. I was progressively promoted to Captain during my time in the Army Reserve. I developed training and leadership qualities in the Army Reserve, which assisted me during my future veterinary career.

During an interview with the Queensland government Chief Veterinary Officer on completion of my veterinary course, he offered me a position working with the sheep industry in far-western Queensland. However, as I had girlfriends and sporting commitments, mainly competition squash, in Brisbane, I asked if there were any other work options available. Upon which, I was told that there was a new position, sponsored by the Queensland poultry industry, working on poultry diseases at the government veterinary laboratory in Brisbane. During the veterinary course, I undertook some practical training in small and large animal veterinary practices, worked with a racing horse veterinarian and was introduced to industry and veterinary experiences on a sheep property and on a dairy farm. The only knowledge I had of poultry diseases was from the 10 lectures I received in the final year of my veterinary course. But I willingly accepted the position, becoming the first Diagnostic and Research Poultry Pathologist at the Queensland Department of Primary Industries (DPI) Animal Research Institute at Yeerongpilly Brisbane in 1967. One of the conditions of the State Government scholarship was that I was bonded to work for the government for five years on completion of my veterinary course. Twenty refereed publications on poultry diseases in scientific journals assisted my promotion to Senior Scientist by 1980. During those years, I also gained teaching experience by presenting 10 lectures on poultry diseases to final year veterinary students at the University of Queensland in Brisbane for eight years. I was fortunate to be employed servicing the poultry industry at the time, as the broiler industry had only just become organized in the 1960s, and the egg layer industry still consisted of many small privately owned farms. The pathology research skills I learned from my more senior colleagues and the experience I gained in poultry disease diagnosis and research during these years provided a sound basis for my future career opportunities.

In 1971, the Queensland DPI sponsored me to be an observer for three weeks during the eradication of Viscerotropic Velogenic Newcastle Disease in California and in 1972 to undertake a 4-week study tour to visit poultry disease laboratories in the USA, including

the Poultry Diseases Research Center (PDRC) in Athens Georgia. It was during these visits that I met Dr. Stan Kleven who suggested that I undertake studies at the PDRC, which subsequently resulted after the Queensland DPI granted me three years leave on ½ pay and the Uni. of Georgia provided a supplementary scholarship to assist with funding. I commenced PhD studies in January 1974 in Medical Microbiology with research on avian adenoviruses, concentrating on Inclusion Body Hepatitis (IBH). My committee members were Drs. Kleven (major professor), Jack King, Oscar Fletcher and Caswell Eidson, all of whom provided friendly helpful expert advice and guidance throughout the 3-year study period, for which I will ever be grateful. The friendship and assistance of Drs. David Anderson, Phil Lukert, Pedro Villegas and John Donohoe were also very much appreciated. The intensive course-work program was somewhat stressful, particularly the biochemistry course, but my teachers were usually very supportive which helped me obtain good grades. I was supported by the PDRC to deliver presentations on my research at various conferences in the USA during my 3-year study period. My thesis on Studies on Avian Adenoviruses of Chickens consisted of a literature review and four scientific papers, either published or submitted for publication. Three additional publications also resulted subsequently from my PhD studies. I defended my PhD thesis before I returned to Australia in December 1976 in accordance with my contract with the Queensland DPI, which bonded me for an additional 3-year work period in the Queensland DPI. My PhD was formally granted on the 10th of June 1977. Many of the friendships I made during those years have continued to this day. International veterinarians that have been particularly helpful to me over the years include Drs. John Smith, Eric Gingerich, Mark Dekich, Don Waldrip, Charlie Broussard, Stewart Ritchie, Linnea Newman, Steve Fitz-Coy, Yan Ghazikhanian, David Swayne, Dan Pearson, Rik Koopman and Gossen van den Bosch. My then wife Terry and I also were able to have some brief but enjoyable holidays travelling in the USA. Attending Georgia Bulldog games were special occasions, particularly as they were winning under coach Vince Dooley during that time. In addition, my son Joel was born in Athens Georgia on the 26th of January 1976, which happens to coincide with the Australian National Day. Obtaining a PhD was a key factor in assisting me progress to my next career change.

In 1980, I accepted an offer to work as a Chief Veterinarian for Inghams Enterprises, the biggest chicken meat company in Australia, and for a partner company A. A. Tegel that farmed the Inghams' primary breeders as well as egg layers, turkeys, and ducks. The role, based in Sydney, included servicing Tegel's poultry health, overseeing quality assurance for Tegel's turkey and duck slaughtering and further processing plants, technical input into import and export of breeding stock, servicing of customers' egg layer flocks, managing poultry health Research and Development for Inghams, management of the Inghams' Group poultry health laboratory and poultry health servicing of Inghams' broiler division in Victoria for five years. Two "diseases" that were first diagnosed in the world by Inghams veterinarians were Big Liver Spleen Disease (Hepatitis E infection) and Sudden Death Syndrome of breeders. Big Liver Spleen Disease, which we suspected to be vertically transmitted based on epidemiological grounds, progressively disappeared as biosecurity programs improved. Sudden Death Syndrome of breeders was treated successfully with potassium citrate in drinking water and subsequently by increasing the inclusion level of potassium in pre-layer and layer rations. Vertically transmitted IBH caused high mortality rates in breeders and broilers until a live FadV-8b vaccine was

developed, partly with Inghams' veterinary input, and administered to GGP, GP, and PS breeders during rearing. At the American Association of Avian Pathologists Conference in St. Louis in 1981, I met Dr. Mae Lummis who had researched *Pasteurella anatipestifer* (now *Riemerella anatipestifer*) and developed vaccines for control of what was called "duck cholera" for New York duck producers. Dr. Lummis subsequently kindly supplied me with the recipe for the vaccine. In conjunction with the Australian vaccine company Arthur Webster Pty Ltd and Inghams laboratory staff, an autogenous "duck cholera" bacterin was produced and applied which resulted in complete control of this disease in Tegel's duck breeder flocks that had previously suffered up to 40% mortality. Another interesting disease occurrence was vertically transmitted Reticuloendotheliosis, that caused lymphoid tumors in the liver and spleen and death in turkey breeders and broilers, which was eradicated from breeders, as confirmed by agar gel and ELISA testing at the Inghams' laboratory, by implementing a very comprehensive mosquito control program for turkey breeder flocks,

From 1994 to late 1999, I became the National Veterinarian for Steggles Ltd., the second largest chicken meat company in Australia, with responsibility for breeder and broiler health in five Australian states and technical input into the vaccine and diagnostic laboratories. One disease that occurred for the first time in Australia and caused considerable poultry losses in Steggles was ALV-J infection of imported GGP stock, which filtered down vertically into GP and PS breeders and then into broilers. Importing stock free of ALV-J and strict biosecurity programs eventually eradicated this infection and resultant disease, which was confirmed by monitoring tests developed by Dr. Trevor Bagust at the Commonwealth Scientific and Research Organisation laboratory, Melbourne Victoria Australia.

During those 20 years working for the two poultry companies, I participated in a number of overseas poultry health conferences, including Western Poultry Diseases Conferences and American Association of Avian Pathologists conferences, undertook a number of study tours in poultry companies in the USA and regularly delivered presentations at poultry conferences in Australia and to a lesser extent at overseas conferences, including in the USA. A most interesting early overseas visit in 1981 was to Tianjin and Harbin in China on behalf of an Australian Government Aid organization which resulted in the Veterinary School at Harbin receiving several filtered air, positive pressure isolators for research on infectious diseases. During the same trip, I spent four weeks diagnosing and controlling disease, mainly Fowl Cholera and *Riemerella anatipestifer* infection, in the joint venture Chinese-Inghams duck farm in Guangdong Province. China was quite primitive in those days, which is very different to when I have consulted in China from 2015-2024. In co-operation with researchers, vaccine company staff and Inghams/Tegel's colleagues, I was closely involved with the development, testing or registration of most of the poultry vaccines produced in or imported into Australia from 1980. The knowledge I gained from working as a poultry pathologist in the Queensland DPI, undertaking PhD studies in microbiology in the USA and my poultry health experience working for Australia's two national poultry companies laid the foundations for my next career move.

Robyn, my current wife, and I were married in 1988 (see recent photo of us both), the bicentennial year of first settlement in Australia. We lived in Sydney until 2005 when we

moved to our current home in Paradise Point on the Gold Coast in Queensland. We enjoyed sailing frequently in our yacht on Sydney Harbour and occasionally for overnight stays in nearby inlets. Snow skiing at resorts in NSW and Victoria were enjoyed most winters while we were living in Sydney and we also skied in New Zealand, Canada, and the USA. I started my wine collection of aged Australian wines while in Sydney. Golfing with friends was a frequent occurrence for me. Camping (see photo) on various Queensland and northern NSW beach-side caravan parks became our most common holiday activity when we moved to Queensland but in recent years we have holidayed in resorts in Australia and travelled overseas to various countries for holidays. We are more energetic on some holidays than during others (see photo of us swimming with whale sharks). My son Joel and his wife Miriam live in Brisbane, which is only one hour's drive from our home, and have two sons Jacob and Samuel aged 13 and 12 respectively at the time of writing. We frequently visit one another, and my grandsons and I enjoy selected special activities during their school holidays.



Tom and Robyn.



Camping near beach.



Tom and Robyn swimming with whale shark, Ningaloo, WA.

In early 2000, I became a private veterinary consultant to the poultry industry consulting for overseas chicken meat companies in 21 countries, mainly in the last 20 years - Turkey (two companies over 11 years), China (for nine years), Russia (three companies), Ukraine, South Korea, Papua New Guinea (two companies), Azerbaijan, Malaysia, Fiji (two companies), Saudi Arabia, Jordan, Romania, Cote D'Ivoire, India, Nepal, Bangladesh, Indonesia, Philippines, Vietnam, Thailand and New Zealand. Many companies were visited every 3-4 months during the consultancy. Ongoing electronic consultations by email, Teams or Zoom occurred with all companies, irrespective of the number of visits undertaken. Poultry house type varied among farms in different countries (see examples in three photos). Diseases encountered that elicited successful control measures included Avian Influenza, variant Infectious Bronchitis including False

Layer Syndrome, variant Infectious Bursal Disease, variant reovirus infection, Chicken Anemia, Newcastle Disease, Marek's Disease, IBH, Hepatitis E infection, Avian Encephalomyelitis, Avian Metapneumovirus, Infectious Coryza, Fowl Typhoid, Mycoplasmosis, *Enterococcus cecorum* infection, coccidiosis, Histomoniasis, fungal toxicities, ionophore toxicity, Sudden Death Syndrome of breeders and Hemorrhagic Hepatopathy. One company had a crocodile farm which required my input into health programs (see photo of an antibiotic being injected into baby crocodiles). Workshops on the prevention of Avian Influenza were conducted in 2005-6 with poultry companies in Turkey, Egypt, Russia, Ecuador and Mexico for the International Finance Corporation (IFC) of the World Bank. Turkish government-sponsored workshops were conducted with poultry companies throughout Turkey in 2007 on "Compartmentalization", which is a WOAHA initiative to facilitate trade. I have undertaken consultancies for MSD Animal Health Australia (24 years), Australian Agricultural Nutrition Services (17 years), McLean Farms a large Australian egg layer company (17 years), Hubbard Breeders in Asia (nine years), a large Australian organic free-range egg layer company (six years) and Asian Agribusiness Consulting in SE Asia (five years). Spotty Liver Disease (*Campylobacter hepaticus*) emerged in Australia as an economically important disease as free-range egg layer farms became prevalent, which was well treated with chlortetracycline but more recently a killed vaccine has been used with some success.



Antibiotic treatment of crocs for chlamydia infection.



I asked for a knife.

Consultancies for other Australian poultry companies and poultry industry associations were serviced from time to time, regular participation in poultry conferences continued and membership of numerous professional committees in Australia occurred during this time.

In 2001, I was the senior author of the Australian Egg Corporation Limited (AECL) Code of Practice for Biosecurity in the Australian Egg Industry, which I also helped to update in 2014. In 2004, Vaccination Training Workshops, sponsored by the AECL, were organized and conducted in five Australian states. I was the senior author of an update of the AECL Vaccination Training Manual in 2018, a member of the combined veterinary-medical Joint Expert Technical Advisory Committee on Antibiotic Resistance (JETACAR) in 1998-99 and then served on the medical Expert Advisory Group on Antimicrobial Resistance (EAGAR) antibiotic committee. In 2000 and 2021, I coordinated updates of the Australasian Veterinary Poultry Association (AVPA) “Code of Practice for the Use of Antimicrobials in the Poultry Industry”. The scientific programs were organized for three conferences, which I also chaired, in Bangkok for Asian Agribusiness Media on Poultry Health in May 2012, Poultry Respiratory Diseases in June 2013 and Antibiotic Use and Control-Current Trends and the Future in May 2019. Regular participation occurred in the Queensland, NSW and Victorian Poultry Health Liaison Group meetings, which were initiatives for sharing poultry health knowledge between government and industry, since their inception. I was a member of the Chicken Meat Panel of the Australian Rural Industries Research and Development Corporation (now AgriFutures Australia) for 17 years, which involved evaluation, approval, and monitoring of poultry research projects in Australia.

Awards include an Australian Veterinary Association (AVA) Meritorious Service Award in 2001 for 30 years' service to the AVA and the AVPA, the Australian Poultry Award in 2002 for services to the Australian poultry industry and installation as a Life Member of the AVPA in 2012. I am a current member of the AVPA (previous President and Committee member), AVA (member since 1968), the Australian and New Zealand College of Veterinary Scientists (ANZCVS) by examination since 1978 and for which I have been an Examiner for a number of years, the American Association of Avian Pathologists (AAAP), the American Veterinarians in Egg Production (AVEP), the World's Poultry Science Association (WPSA) and the Australian Society for Microbiology (ASM).

My career experience encompassed veterinary input into poultry health and welfare programs; flock productivity and costs; biosecurity programs, procedures and audits; quality assurance; training of technical poultry company staff; poultry vaccine R&D, testing and registration; importation of poultry vaccines; technical servicing; poultry disease research; teaching; exotic disease contingency planning; food safety programs, including antimicrobial resistance control; and poultry export and import certification.



Broilers in cages.



Broilers on slats.

My contribution over the past 57 years to the Australian and overseas poultry industries, with the willing cooperation of many industry staff, has contributed particularly to:

- Improvement of the health, biosecurity, welfare, food safety and economic productivity of poultry flocks and the profitability of poultry companies and some associated service companies
- Training and mentoring of veterinarians and other company technical staff in poultry diagnostics, biosecurity, and disease control procedures to provide ongoing sustainable technical input by poultry company staff into poultry health programs.
- Reduction in the use of antimicrobials, and the likely consequential reduction of antimicrobial resistance, by controlling disease with hygiene, biosecurity, vaccination, and management programs.

Some important lessons that I have learned over the years include:

- Never assume that you know everything because most likely you don't.
- Always listen to the advice of others and be prepared to accept it when appropriate.
- Work at the “coal face” at farm level, as farm workers often can share more accurate information than their managers.

- Never assume that what you are told is correct. Always double check the written or computerized records.
- Consider the influence of breed, house environment, house type, house equipment, husbandry, management, vaccination, and nutrition when investigating infectious disease occurrences, many of which are “man-made.”
- Immunosuppressive diseases are often insidious but are the root cause of many poultry diseases, so conducting appropriate monitoring tests in affected flocks and the parent flocks is very important.
- Discussions on which is the best brand of vaccine occur frequently but unfortunately often there is less attention given to the vaccination process. Auditing vaccination procedures is essential.
- Remember that the diagnostic process depends on clinical history, clinical signs, postmortem lesions, and laboratory test results and not only on one of these in isolation.
- Always examine the feces on the litter and in the rectum for maldigestion when investigating “enteritis problems”
- Always check the crop, proventriculus and gizzard for lesions, as infectious and non-infectious agents affecting these organs can be the cause of maldigestion and wet litter.
- Be prepared to experience new or emerging diseases that have not previously been reported, both of which have occurred relatively frequently over the years.
- It is one thing to have the knowledge on how to control a disease but another to have it implemented.
- Effective implementation of disease control measures relies on the empathy developed between you and the relevant managers, which often takes time to establish.
- Identify the relevant manager who has the authority to implement disease measures you recommend, as others may agree with your recommendations but, sometimes unknown to you, they do not have authority to implement them.
- Estimating the economic importance of a disease can assist management agree with control recommendations that are perceived to be costly.
- While treatment is often required initially, preventative programs are always the most sustainable control methods.

I retired on the 31st of December 2024 at the age of 80. COVID restrictions on travel somewhat prepared me for retirement, although regular Teams or Zoom meetings and conferences still occurred during that period. Robyn and I intend to continue to enjoy special holidays in Australia and overseas and we will likely spend more time with Joel and his family. It has been a pleasure to work with so many companies and organizations

over the years. I have enjoyed every minute of my working life. The friendships I have made will always be valued.

Biography solicited by the Committee on the History of Avian Medicine, American Association of Avian Pathologists.

Additional biographical materials may be available from the AAAP Historical Archives located at Iowa State University. Contact information is as follows:

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