

Shaping the Science of Australian Agriculture

**Reflections of Melbourne University
Agricultural Science Graduates of 1964**

*Compiled by Barry W. Norton
Bachelor of Agricultural Science Melbourne 1964*

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First Published in 2017

Shaping the Science of Australian Agriculture - Reflections of
Melbourne University Agricultural Science Graduates of 1964

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ISBN: 978-0-9925893-1-8

includes Agricultural Sciences, Education, Biography

RRP AUD40

Published by B.W. Norton

“Tamarind”, 3 Ted Street, Mt Glorious

Queensland, Australia 4520

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Front Cover: *Pencil Drawing of the School of Agriculture Building at Melbourne University*
by Jan Daly

Printed by
ePrinting, TJ's Imaging Centre Pty Ltd
Windsor, Queensland, Australia 4030

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Foreword

The invitation to write a Foreword for this book describing the careers of the class of 61 at Dookie recalled many facets of my own career and the debates from time to time about the nature and content of the course. At many points one is reminded that agriculture is different from any other profession (The school-boy definition “*Agriculture is like farming, but farming is doing it*”). Thus we have students learning about biological systems – the living soil, the plant ecosystems, animals both native and introduced – then overall humans making good to bad decisions and adding a variety of chemicals and kidding themselves that they know all about climate.

It is the task of a University faculty to produce graduates who will try to understand all of the above and bring prosperity to the land and its people. Thus Agricultural Education became a separate entity surprisingly early in the life of farming in Australia. The Port Philip Farmers Society had been established in 1848, a mere decade or so after the founding of Melbourne. It conducted shows with prizes for a wide range of products though clearly with a crop rather than an animal forage emphasis. It was a proud tradition that staff of the University judged these shows (then called the Royal Agricultural Society) so when my turn came, I did include forage plants and hay, with data on nutrient



David F. Smith AM

content and digestibility. The first reports of the Acclimatisation Society of Victoria were dated 1861. Its work is described as relating to ‘*all innoxious animals, birds, fishes, insects and vegetables, whether useful or ornamental*’. Interestingly, they did not show interest in Subterranean Clover, without doubt the most important migrant plant.

Agricultural colleges were established in Victoria in 1877 with an intake of 15 students in 1880 and a public opening in 1886 with 40 students. South Australia was slower and less easily satisfied. The SA Agent General in England was given a direct challenge to find a Principal ‘*a gentleman of middle age and good health who will recommend on and promote the well-being of the whole rural community*’. His selected person, John Custance, proved to be very important for another reason: he brought the news that in England fertiliser containing phosphate was having a big impact. He used it immediately at Roseworthy, with a doubling of yields. John Custance stayed about seven years and then was lured to New Zealand. He was aggressive and argumentative, especially critical of tillage methods just scratching the surface. It is to the credit of the community that Diplomas in Agriculture from the colleges were never considered to be strong enough in science. With our understanding of the educational process we argued for some understanding of science first – like the class of 61 – followed by information on the relevance of this science to agriculture. By the early 1900s both SA and Vic had courses combining science and some agriculture, though there was debate about course structures.

The land mass of South Australia is mostly low rainfall with shrub steppe. Initial settlers tended to overgraze their sheep and cattle and under-kill their rabbits. Wealthy settlers, such as Peter Waite, formed a partnership with Thomas Elder in the 1880’s, running a large grazing operation and chairing the rural company Elder Smith and Co. He regarded the Roseworthy course as useful for managers, but believed the industry needed a stronger science support. He left his estate (Urrbrae House and more than 2000 ha) to the university as a base for a high school and an agriculture degree course with research. When CSIRO

established the Division of Soils at the Waite, SA agricultural students were given a particularly solid base for learning.

The Dookie class of 61

It is a pleasure to read this account of the lives of people I knew as university students, and to ponder their ultimate cumulative effect on our world, surely well above any other randomly gathered group the same size. For them it all began in the 1950s - individuals considering doing the B.Ag.Sc degree, a motley collection indeed: girls who loved lambs: boys who hated milking cows at home: really smart people sent away to boarding school aiming at medicine or law but just missing out: some real drifters ... all doing Matriculation exams in their various schools and colleges. About half of these passed first year, and with only 32 students being admitted to second year at Dookie College in 1961.

How ready was the Faculty for the class of 61? As I understand it, from establishment of the B.Ag.Sc in 1905 till early in the war - 1940 - the course was taught at Parkville with some later years' studies at Werribee on the Agriculture Department experiment farm. These later year studies were moved to Dookie when space at Werribee was needed for the war effort, the experience here provided some farm work with diploma level lectures. The new Dean of Agriculture at Melbourne, Carl Forster in 1957 wanted more, and was granted funds for a staff member: I saw the advertisement for a Lecturer - effectively a course organiser - and took up the task in 1958: a Victorian task being done by a crow-eater! The retired Dean Wadham told me he had considered the task too difficult for one person. Our program was well developed for the class of 1961. By their graduation two years later, we had proudly equipped them to face a huge range of agriculture related challenges.

The Dookie Program.

There were 100 - 150 college students in the diploma course and the University Ag.Sc degree group was 30 or so, including 3-6 young women housed in separate quarters - the college diploma course was not open to women. Effectively my lecture course was Agriculture 101 - a course with base units linked to later year's courses. I invented a subject General Farm Practice - tractor driving, all of the machinery etc, taught by a very successful early retired district farmer. Nearby Department of Agriculture plots were good demonstration material.

Excursions were very significant with great diversity within reach. My guideline was that visits must involve less time in the bus than out of it. We covered leading cropping farms, large dairy and beef farms, processing of produce: including the huge pear, peach and apricot crop, research sites etc. We capped the year with a one week excursion into the Riverina in October: overnight in campsites, shearers quarters, old hotels, which enabled reaching places like the Mallee with cropping and strong soil conservation measures, the Riverina with rice growing, large Merino studs, the various irrigation districts etc. I worked with the Dookie staff who taught our university students, improving content and interaction with our staff in Melbourne. It came to be an enjoyable and valuable year.

My own path to Agricultural Science.

So how did I cross the path of this group - and successive ones? I had been born into a farming family at a locality called Green Hills in the Mount Lofty Ranges of South Australia: high rainfall lands - grazing dairy cows, cultivating potatoes and other vegetables, selling wattle bark etc. My mother's brother John had attended Roseworthy College and knew the professionals. He farmed a few miles from us and was frequently on our farm talking

phosphate and clover, rubbing out the clover seed to assess yield for harvesting seed. The world first use of molybdenum as a plant nutrient was near us – I know the paddock.

Into my teens I had vacation work with various contractors near home. There were odd interests and influences. Football was important in mixing: my first published work, in the Adelaide Advertiser as a school boy, was on local finals chances. I had attended a short-lived one-teacher primary school, then Mt Barker High School to year 10, leading to admittance to a diploma course. As a teenager I had no particular ambition, maybe staying on the land with my father, maybe selling and moving to the south-east of SA on to a bigger area of sandy scrub country.

My mother's younger brother was a teacher – so why should I not be a Junior Teacher, then do the Roseworthy course which did not demand Matriculation entry - then become a teacher of agriculture? I was selected for the Junior Teacher appointment at Urrbrae, the central agricultural high school – the Principal saw a farm boy as useful. The school was just across the road from the Waite Institute so I met staff and made some student visits to experimental plots. My Urrbrae teacher/supervisor suggested some university night school – and we chose Physics I. I passed, proving I could cope with University work so next year I was allowed to try first year of the degree. I got a January supplementary exam in Botany (I couldn't cut a microscope section - the others had learned this in Matric). My supp. was supervised by Prof Wood, a leading world ecologist. We chatted long over morning tea each day – he was impressed with my 'bush' knowledge, from life growing up, plus rabbiting, logging and bee-keeping. After a week or so 'You are fine, Smith. Good Luck!'.

I graduated B.Ag.Sc and was sent to a fairly remote area in the west of the state. After a coastal ship journey to Pt Lincoln and a rail trip I arrived at my location. I was to set up agriculture research from scratch. There were large areas of alkaline sandy soils and with the land-use this meant a good balance with my home farm on acid soils. I played tennis and football on Saturdays, went to church on Sundays. There wasn't much to do at night so come the second year I decided to try to do some more study, maybe Economics I – I had gained Honours in Agricultural Economics, but Professor Karmel of Economics wouldn't allow it. On vacation in Adelaide, I heard Vice-Chancellor Roe on radio advocating graduates continuing study. Remarkably I saw and recognised him on North Terrace the next day and appealed. In a quite long consultation on a North Terrace bench he urged me to do a Masters in Ecology, not odd Arts subjects. In the Botany School, Wood remembered me, welcomed me as a former student, said I was the first major in Botany to ever live over in the west, and readily arranged for me to enrol in a Master's degree on the Ecology of Lower Eyre Peninsula. The areas cleared were forming into some of the most productive farms in southern Australia so Wood arranged for the Head of Agronomy at the Waite Institute, Professor Colin Donald, to co-supervise. Though there were some areas of acid soils, most of Eyre Peninsula was alkaline soils developed on the Post-Miocene landscape described/explained by Crocker.

I had been teaching in the school for nearly 5 years, had thoroughly enjoyed it but felt like a change. The Department of Agriculture wished to have research on the deep sands - the area where we would have farmed if I had stayed home ten years before. I was appointed District Research Agronomist. I selected three research sites and encouraged participation by all interested parties. The Waite Institute (University) people had an interest in the inoculation of legumes with Rhizobium bacteria, backing our interested in legume growth. The commercial fertiliser company was interested in the compounding of fertiliser - the deep

sands were deficient in just about everything: copper and zinc, potassium, added with the seed, or special applications. We put great effort into design.

I was aware that the results of plot work were often dismissed as 'it's only in little plots' so I also took a punt on one package, persuading a landowner to develop 20 ha with my favoured recipe. I had got it right – so as part of our farmer field day we showed paddock scale. It was estimated that in the order of two million hectares could be developed. For me it was a great example of integration of experimental design and assessment. The Director noticed it and boxed samples were part of the Department's display at the Royal Show. I presented at various conferences such as the Australia New Zealand Assoc. for the Advancement of Science. I kept in touch with the development my sister and her husband did at Esperance WA so I had familiarity right across WA, SA and into Western Victoria.

Meanwhile what might be called 'older' agriculture was being practiced on soil types of somewhat better fertility. On those soils I covered such questions as residual phosphate. I found Crocker's papers very stimulating, especially his *Post-Miocene climatic and geologic history and its significance in relation to the genesis of the major soil types of South Australia* as a CSIR Bulletin. I consider this paper the most influential I ever read. I was to become focussed on plant/soil ecology.

Thus the first 8 years after graduation brought a wonderful extension of my qualifications and experience and connections, with knowledge of agriculture right across the south of the continent. I had enjoyed the media work, too, ABC Radio and some local TV and farmer groups in the Agricultural Bureau.

Success brought pressure to move to administration and management, eg to become Director of a field station. One Sunday we drove a student doing vacation work to a student gathering at Hamilton, Vic. On the way home I remarked to my wife how nice it had been to work with students again - and perhaps I should have followed-up the Dookie position. That evening we had other mail to post down at the rail siding, so I mailed to The University of Melbourne including the briefest of personal details in an inquiry that arrived at the university on the day of closure. Suffice to say that my credentials overcame the disadvantage of my interstate origin: in less than 10 years out from University I had experience in high and low rainfall teaching, success in a large research project including a variety of field designs and measurements, near completion of a Masters degree and could supply a reference from Australia's top scientist in agronomy. In addition my young life had been on a commercial farm with a range of experience as a paid contractor around the district.

I have described my own experience above as an example of the various 'extras' that students can develop. Many of the Class of 61 had similar examples. I offered these experiences as support for my appointment to the Dookie position and was duly interviewed and appointed. The Dookie college farm of more than 2000ha offered many sites for field plots and studies in animal management.

Mt Derrimut Field Station

Every year students responded well to our program at Dookie and I was happy to see them move on to third and fourth year, building on this. It was all well integrated. During 1963 there came a temptation no dean could refuse: Mt Derrimut, the property at Deer Park that ICI had developed for staff training became available on a part rental part purchase basis. There was almost enough accommodation, excellent kitchen and dining facilities, buildings

that could be used as research lab etc. I was asked to set up a program - it was necessarily more difficult in some ways - eg less scope for excursions – but on the other hand the full program was under university control and staff from Parkville could contribute. I set up and ran the place for six years, then moved to live in suburbia largely for the benefit of my teenage family. There was also the issue that my application for promotion had been revised to greatly reduce the value of running such places. In the early 1980s Mt Derrimut was terminated for a variety of reasons: the high expense; city housing development creep, and the absence of wholesale staff support – I guess my own could be questioned here.

I had moved on, becoming an ordinary academic in Parkville. The rest of my career is not germane to this book, except to recognise the needs of our teenage children in suburbia. About four years later I was thrown the challenge of equalising post-secondary education participation in Tasmania – developing a special institution in Launceston beginning with the Teachers College. Although I did manage to establish a number of awards in a CAE format, we made little headway in the main task. I was awarded a Master of Educational Administration for my thesis “A Model for Regional Education”.

After six years, late 1979, I applied and was appointed to the position of Director General of Agriculture, Victoria. This was unusual, a first for a non-Victorian and Departmental outsider. My varied career was seen as excellent experience for directing a large organisation: I found a very good Department, with a strong emphasis on research and inculcation of new methods on farms – and many former students, including some from the class of 61. We were seen by the Government as one of the best in their total management and various members were seconded from time to time eg I spent some months reorganising the Dept of Community Welfare Services. Other senior members of my Directorate were ‘borrowed’.

After six years (my base term) I let it be known that I would prefer to move on at the end of 1985, taking various consultancies, especially overseas and spending more time on my (hobby) farm. My wife Marian had died during my early years in the position so I could be more available for overseas work. Among various interesting projects were reviewing the Field Operations of UN FAO, establishing and chairing the Cotton R &D body, including developing GM cotton, and re-establishing the body managing the end-of-secondary school education. I was involved at various levels in developing countries, including work with my Canadian cousins setting up an orphanage for Rwandans in the Congo. Without thinking about it, I was awarded the Medal of Australian Agriculture, made a Member of the Order of Australia and listed as one of the top hundred agricultural scientists in the world.

I also published extensively in this period: several books and many essays. As can be imagined, I am very satisfied with the road my Bachelor of Agricultural Science degree has taken me and pleased to have pointed others down similar roads.

The late Dr David F Smith AM

Acknowledgements

This project began as a thought expressed to a few at one of our reunions in Melbourne, and has come to reality by encouragement from some who thought this would be a worthwhile contribution to our understanding of how a University education can foster and shape innovation for the benefit of society. Since that time, most of our Agricultural Science graduating class have generously contributed a brief autobiography, and my thanks go to them for this effort. Many said to me that they found it cathartic to reflect on their lives, others felt that they were saving others from writing their obituary. I am particularly grateful to John Cornish and Kristin Schneider for providing biographies for some of our colleagues who have passed on, Ian Fletcher, Roger Hart and Nat Italiano. My thanks also to Jan Auldish, Margaret Barger and Susan Patterson for providing biographies of their late husbands, my contact with them, after so long has been such a pleasure. Harry Burton and Barry Croke have also kindly written essays on their experiences at Dookie, adding to our fond memories of the time spent there.

Kristin Schneider and Gil Stokes have generously provided their services as editors for this manuscript, each bringing to the task writing skills that I have valued. Any errors of fact or omissions found are of my own doing. Thank you both for caring enough about this project by helping to make it a more readable document. My wife Jan has also pored over the document for many hours making valuable suggestions for improvement. I would also like to acknowledge Jan Daly (formerly Jan Falvey) for her tacit permission to use her skilful drawing of the old Agriculture building at Melbourne University for the cover of this book. I have included some of the work of much admired artist Leunig in the text for some light relief, and I have acknowledged this where appropriate. I am also grateful for the photos supplied by Kristin Schneider, John Cornish, Barry Croke, Bob Edgar, Barry Croke and Roger Parish, they add that extra dimension to the stories told.

I contacted David Smith in October 2016 with a request to write a Foreword to this book. David was our lecturer, friend and mentor at Dookie in 1961, and was responsible for encouraging the inclusion of more science in our Agriculture degree at that time. He enthusiastically agreed to contribute, so I sent him a draft document in December 2016. He has provided not only some reflections on the content of the book, but also written a brief autobiography in which he extols the virtue of both his training in Agriculture in South Australia and the program he helped develop for Agricultural Science students at the University of Melbourne. While his contribution is longer than a usual foreword, I think that the addition of his reflections on his own life, make for interesting reading. David Smith passed away in April 2017 only weeks after completing his foreword, and I would like to dedicate this book to his memory. Thank you David for your lifelong contribution to Australian agriculture, your legacy lives on through us, the graduates you moulded and encouraged to also make our mark in shaping the science of Agriculture.

Barry Norton, June 2017

Introduction

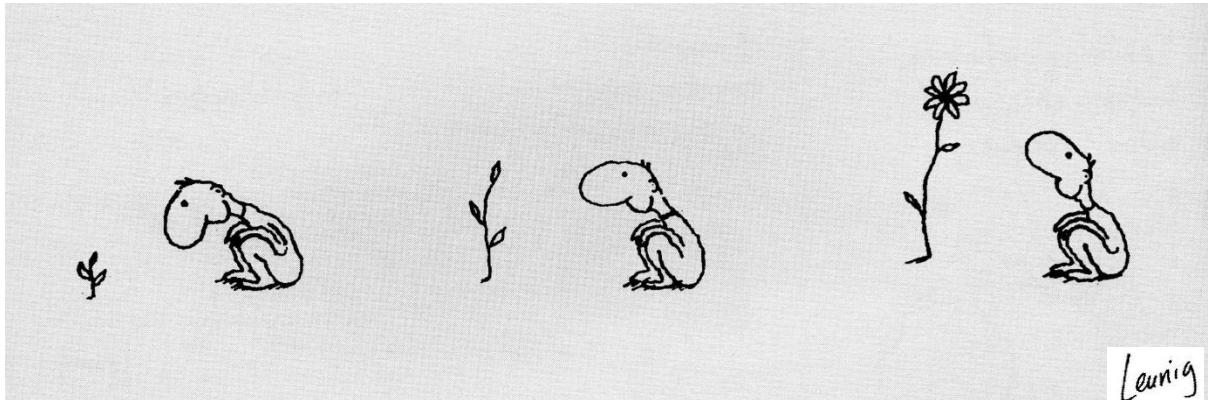
Youth is a time when the future beckons, and the unknown is pursued with great urgency. With the passing flush of youth and the inevitable arrival of middle age, the past is mostly viewed with rose-coloured glasses, and the future brings, in some, a morbid reflection of impending mortality. Middle age is a time for reflection. This was the unspoken intent of the first reunion of those who spent 1961 at Dookie College as part of their Agricultural Science degree. This reunion in 2001 provided an opportunity for this chance collection of people from the Dookie year to become reacquainted after 40 years of pursuing their dreams.

It was clear from this and subsequent reunions that everyone had an interesting story to tell, and that the Agriculture course we had completed had a significant impact on the careers of most. However, the time for discussion amongst the group was limited at each meeting, but from the snippets collected, it was clear that many of our class had, and were continuing to make, significant contributions to agriculture, science and society. The questions raised by this observation were many, was this a characteristic of those times and opportunities, was there some particular attribute of our training or was it simply the eager nature of the individuals who came to University at this time. I think that all these factors interacted in different ways to produce our eclectic mix of graduates in 1964.

Coming away from these reunions, my first thought was that it would be interesting to know more about our colleagues, particularly how their personal and professional lives developed after graduation, not for the purpose of comparison, but as a record of personal achievement. The focus could be on those who were at Dookie in 1961, and include those who had passed away. A brief autobiography was thought to be the best way to capture these stories. The reunions had also produced many old photos, and it seemed logical to also include a general photographic record of these times.

The Agricultural Science degree had been significantly revised in 1957, and unknown to us at the time, we were lectured by some who later rose to academic fame. Postgraduate training and research was now being promoted in Australian Universities, previously students went overseas for their training. It was therefore of some interest to describe the training received, and reflect on the philosophy which led to so many successful graduates. I believe that teaching the basic sciences in conjunction with practical farm work and providing advanced courses in final year is still the right mix for those interested in pursuing a career in the agricultural and environmental sciences.

This book evolved from the need to record brief biographies of our Agricultural Science colleagues to a full description of the courses taken and the social life of our colleagues as they progressed from first year to graduation. It is my hope that this book will be read by those contemplating a career in Agricultural Science, and that they will be led to a realisation that while the basic sciences have vastly expanded since the 1960's, the knowledge gained still needs to be applied to food production, soil and water conservation and the management of climate change, all for the betterment of the environment and humankind.



The Beginning

Stand ye in the ways, and see,
and ask for the old paths, where *is* the good way,
and walk therein, and ye shall find rest for your souls.
Jeremiah 6:16

The Formative Years

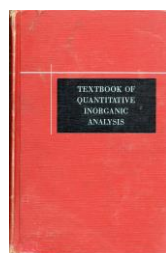
The year was 1960, Melbourne had not long established its place in the world by hosting the Olympic Games, and the war babies (1939-1945) were just entering the work force. The baby boomers and the new Australian immigrants were yet to make their impact on conservative Australian society. This was the social context in which 70 young fresh faced students enrolled for the Bachelor of Agricultural Science degree at the University of Melbourne. They came from towns and Melbourne city, many having rural backgrounds, some from family farms. For most, they would be the first in their families to come to University, their parents being those who endured the tough times of the 1930's depression and the devastating effects of the Second World War. There were very few scholarships available at that time, although the Education and Agriculture Departments were offering bonded cadetships for a few. Many parents spent their meagre savings to pay University fees for their children in those days, realising that education would secure their future. Few of us understood or appreciated at the time how important these sacrifices were for our parents, or how this education would secure our future.

First Year at Melbourne University

The quota for entry into the Agricultural Science first year in 1960 was 70. The only identification students had with Agriculture in this year was that Chemistry, Physics and Geology were provided as special courses for Agriculture students. This distinction suggested that we were either not smart enough to take the same courses as the Science students, or that we only needed to know selected parts of these disciplines which related to Agriculture. The experience of being lectured to in large groups by mostly unapproachable Professors was a daunting one. Practical classes were run with military precision, the results expected being pre-ordained and largely incomprehensible. Each course was offered over a year split into three terms, with one final examination at the end.

First Year Courses

Chemistry Part I (Agriculture)
Physics Part I (Agriculture)
Biology
Agricultural Geology

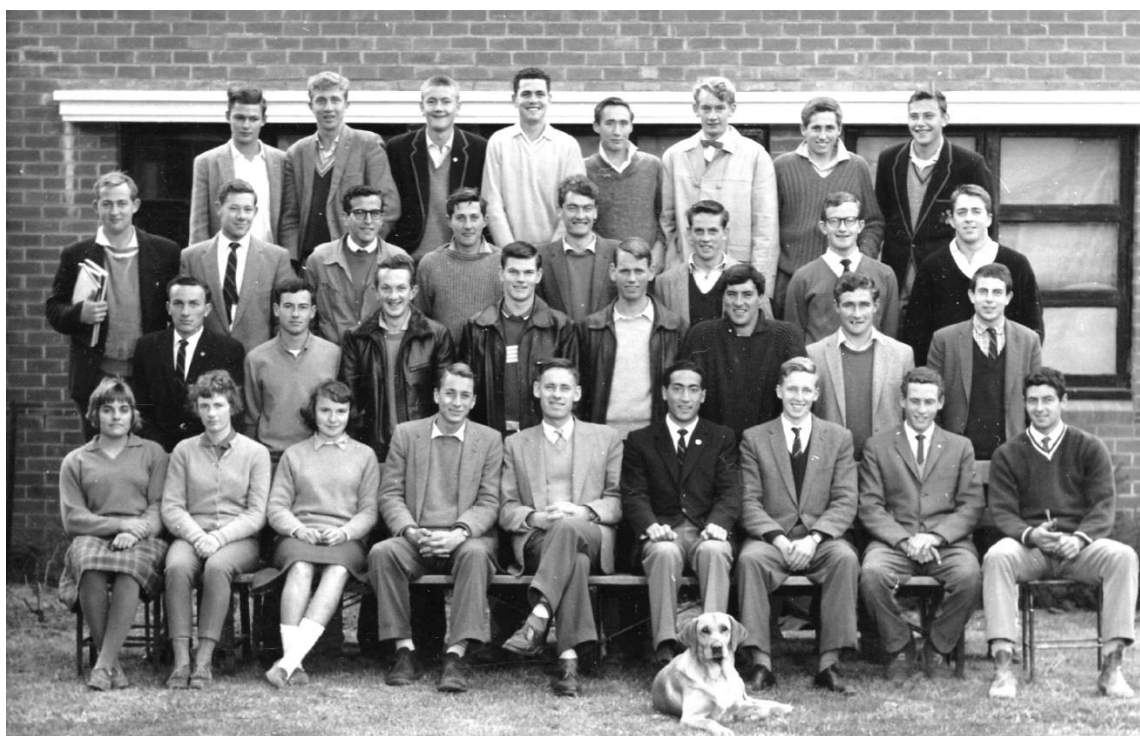


These courses provided an essential base for all subsequent knowledge needed to understand the soil, water, plant and animal relationships that are integral to the science and practice of Agriculture. The text book for Biology shown above covered basic topics such as genetics (including the new information on DNA function) and ecology, and was a wonderland, if not bewildering, source of new information for first year students of Agriculture. Chemistry was a stumbling block for many students, and many were surprised to pass. However this course was simply an initiation for Professor Leeper's sterner course on Soil Chemistry in third year. The lectures on Agricultural Geology by Mr Frank Beavis were a revelation to some, the forces that shaped the earth being related to the rocks that were formed and their relation to soil fertility and agriculture. He was appointed Professor of Engineering Geology at the University NSW in 1973. Physics was taught by Mr Graham Sargood in his second year at Melbourne, he would also rise to be a much respected member of Melbourne University staff.

Second Year at Dookie Agricultural College

Agriculture students at Melbourne University had spent their second year at Dookie Agricultural College since 1944. This year was intended to place students in a local area of diverse agricultural activity remote from Melbourne to bring them into contact with farming practice and farmers while maintaining a good academic standard. In 1958, the course was revised and Dr David Smith was appointed as resident University staff at Dookie to oversee a better integration of the “Dookie” experience with later years’ teaching in Agricultural Science at Melbourne University. The limitations of Dookie for research activity were later resolved by moving second year teaching to Derrimut Farm in 1963. There were only 32 students (from the 70 in first year) who qualified for entry to second year Agricultural Science at Dookie. Our year was the third last cohort to complete second year at Dookie College. After 1963, all students completed their second year at Derrimut Farm on the outskirts of Melbourne.

The Dookie Year 1961



Back Row J.Black, I.Barger, M.Foster, J.Aldrick, H.Joiner, A.Patterson, B.Sammons, P.Rogan
Second Back H.Burton, G.Stokes, J.Griffiths, A.Tehan, A.Lamb, B.Croke, R.Edgar, J.Bray
Second Front A.Eagle, J.Donnelly, I.Fletcher, R.Hart, A.Molesworth, I.Hore, H.Edgell, A.Humphris
Front Row Susan Simmonds, Kristin Schneider, Andrea Wilcox, J.Cornish, **D.F.Smith (Lecturer)**,
N.Italiano, R.Parish, I.Auldish, B.Norton

Second Year Courses and Lecturers

The courses shown below were presented on alternate days during the week, at other times, students were allocated to work on one of the following units, Agriculture and Stock, Piggery, Poultry, Dairy, Beef Cattle, Sheep, etc. Students rostered onto Dairy, Poultry and Pigs had to work weekends, which seriously impacted the Melbourne social life of some.

Agriculture Part I

This course, organised by David F. Smith, provided the University students with a general introduction to Australian agriculture. Topics such as crop agronomy, pasture management and soil fertility were approached from a practical point of view, these lectures being complemented by the knowledge students gained working on the farm, ploughing, sowing and harvesting crops.

Agricultural Botany Part I

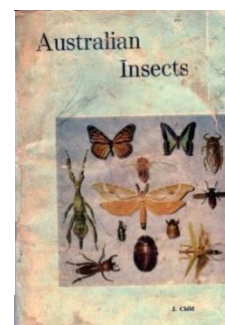
This course was taught by Mr G.T. (Bun) Levick (Deputy Principal, Dookie), and built on the basic Botany we had been taught in first year at Melbourne. We were required to make collections of pasture grasses, legumes and common weeds. This was a valuable lesson in plant identification and classification and encouraged a life-long interest in not only plants of agricultural importance but also general plant ecology.

Agricultural Zoology

This course also built on the cellular Zoology from first year, and was taught largely by Mr Ian McMillan, fondly known as “Ted” McMillan. He was not well liked by students due to his gruff and supercilious manner. However, it was here that we were given a solid grounding in Zoology which was to be essential knowledge later in our degrees. But who could forget those hot afternoon classes poring over the fermenting remains of a sheep’s rumen or the mysterious mess seen under the microscope purporting to be intestinal parasites from a pig?

Agricultural Entomology

The introduction to the collection, preservation and classification of insects and plants opened up new frontiers of knowledge to many. The diversity and complexity of the insect world at our backdoor at Dookie made this a living science, and this fascination remained with some of us for the rest of our lives (see Harry Burton and Barry Norton biographies). The battered book shown here is still being used to explore this interesting world.

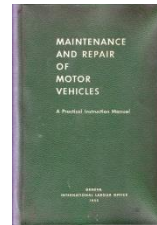


Animal Husbandry

This course was our introduction to both the principles and practice of animal husbandry and management. The integration of lectures and practical farm work was important for our later understanding of animal science. We were also first introduced to experimental studies with animals, in one case, the study of the suckling behaviour of new born lambs at pasture. Although not known to us at the time, Ian McMillan was a key figure in the development of the science curriculum and better academic standards at Dookie. Before his time, experimental studies were not considered part of the undergraduate curriculum, and we were one of the fortunate few groups who benefited from such training early in our degree. There was however no further “hands on” experimental work in the later years of the course in Melbourne, students were considered more as “observers” than participants in research activity. Ian McMillan became the Principal of Dookie from 1974 to 1983.

Farm Mechanics, Hydraulics and Surveying

This course introduced us to the principles and operation of engines, tractors, irrigation and fencing. The work ethic of the Australian farmworker was clearly demonstrated by “working” with the fencing contractor, and the mysterious world of chains and links was truly a new learning experience enjoyed by all. Surveying was taught by Mr Archibald Charles Kidman (Arch) Beavis, he would later become Vice Principal to Tom Kneen in 1969.



Residential Accommodation

On arrival at Dookie, male University students were allocated to quarters at two locations, the first being primitive huts relocated from the Rural Training Centre (RTC) at the Rushworth Army Camp (fondly known as the Ritz) to flat land near the College orchard. The second location was in older but more central huts near the main administration area. The three women were provided with a share house on campus, next to the Matron’s house, and set well away from the pre-dominantly male population. The rooms at the Ritz were very basic, no heating, no running water or fly screens. Showers and clothes washing were done in a communal block nearby. Radiator heaters were used to make toast and warm rooms in the winter. Dormitories were patrolled by staff to ensure appropriate behaviour was being observed at all times. This proved to be an impossible task, and rules were flouted as a matter of course.



Relaxing after work outside hut G



A resident of hut H soaking up the sun

University students occupied huts G and H in the upper College area, with hut H being only recently constructed. Again these rooms had only basic but adequate facilities. The swimming pool shown below provided a welcome retreat from the Dookie heat after work.



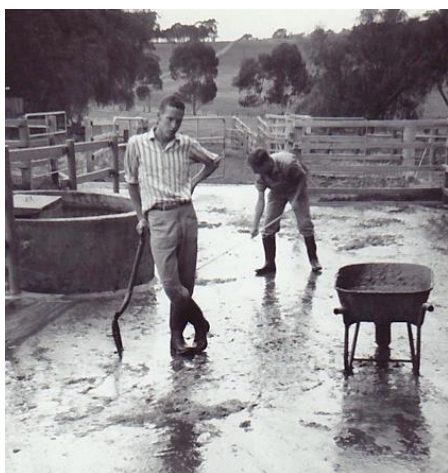
The swimming pool at Dookie College 1961



RTC (Ritz) Huts at Dookie 1946

Farm Work

Students were rostered to work on one of the seven Farm Branches listed above. This usually involved an early morning start, particularly for Dairy, where milking was started by 7 am. It must be said that the tasks were mostly menial as shown in photos below. The worst job was in the Poultry and Pig Branches where the kitchen waste was boiled up in large coppers, and our job was to fish the bones and other solid items from this festering mess, before feeding it to pigs. It was also a time when horses were used for many farm tasks, including stock work. The Farm Manager or Superintendent, as he was known, was Mr G.D. Brooke.



Ian Auld with helper



Harry Burton doing what he does best

The program of alternate days on farm work and lectures was a welcome relief from the previous year's pressure of daily travel to the University for lectures and practical classes, with many having to work at nights and weekends to support themselves.



Alan Patterson testing post hole depth



Meat workers in College butchery

Living in at Dookie and working and studying together created a bond between University students which, for many, has turned into life long friendships. This bond has been clearly demonstrated by the enthusiastic attendance at reunions held 50 years later (see later section).

NEW TECHNIQUE FOR PRUNING

At a short interview with Mr. Mick Foster, at Dookie recently, I learned of the most recent advances in pruning.

He claimed that the best time to prune was after a particularly riotous party when coordination is least, but when strength and enthusiasm are greatest. The method

is to try and rip the tree out by the roots. Usually the tree is firmly implanted in the ground and only the branches are removed before flaking.

Mr. Foster claimed that he had pruned six trees by this method for only three pounds.

Cars we have known

Dookie College was situated some 140 miles (220 km) from Melbourne, and about 20 miles (32 km) from the nearest large town Shepparton. There was no public transport to Dookie, and private cars were not permitted on campus. This situation posed a problem for the University students, who unlike the younger Diploma students, usually had a driver's licence and sometimes a car. Those with cars usually found a friendly farmer near the College who would allow a car to be parked on his property, from where students would walk to College after returning from Melbourne or some other nightly escapade. Without exception, the student cars were greatly aged, in need of constant repair and mostly jointly owned by needy students.



Tony Molesworth's 1928 Pontiac



Aldrick and Black's Dodge



That Pontiac again

Suffice it to say, none of these veteran cars lasted long on the road, they were either declared unroadworthy by the constabulary or abandoned on some country backroad after breaking down (yet again). There was an ageing Humber Super Snipe, six cylinder side valve engine, jointly owned by Barger, Black, Eagle and Norton which rarely made the trips to and from Melbourne without mishap. Shown below is a photo of a 1949 Humber which has been shown the care and attention that such a magnificent motor car deserves.



YOUTHS FINED FOR BEING IN POSSESSION OF UNROADWORTHY CAR!

The public is being made aware of the danger of old and unroadworthy cars, especially those driven by Agriculture students. Last week two of our number were apprehended by a country constable for being in charge of such a vehicle.

The car, driven by Gilbert Stokes, Esq. and navigated by the owner Harry Burton, had no brakes, no lights and no roof! It took some smooth talk by Burton to convince the officer that the said car was not powered by gravity.

The offenders were charged and eventually convicted and fined for being in charge of the car. In his defence, Burton pointed out to the Court that the conviction was unfair since he did not think that the Pontiac came under the definition of a motor car!

As a corollary, I heard recently that Al Humphris was ordered to remove his car away from its resting place in Faraday St., where it had been parked for over two months. Al confessed to me that the tyre was flat and that he could not be b - - - - - ed pumping it up.

Tours and Excursions

Bus tours to inspect farms and farming practice in different parts of Victoria and NSW were a welcome break from College life. While time has dimmed the memories of these tours, there are a few photos which remind us of these times.



Comfort stop on the Deniliquin plains



Hot, dusty and looking for the next pub

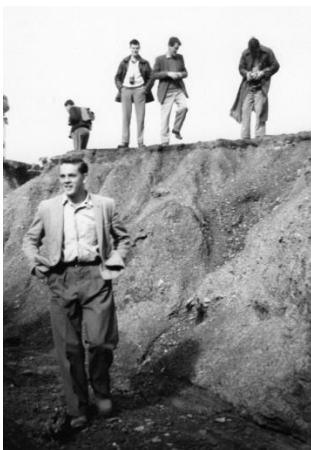
There were trips to Hay and Deniliquin in NSW visiting grazing properties and the CSIRO Pastoral Research Station to learn about Salt Bush in extensive grazing systems. There was also a trip to the Mallee to learn about the farming practices on wheat farm with low rainfall. Shown below are students showing great interest in a Belgian 1929 Minerva roadster which had been converted into a fire engine carrying water, pump and hoses. The photo on the right shows the same car in its pristine condition. Who now says that Mallee farmers were all poor!



1929 Minerva as a farm fire engine



1929 Minerva as it was



Barry Croke casually inspects erosion



The latest technology-two headers joined, Man's Farm 1961

Entertainment

If one can imagine a group of 20 year olds cooped up in a military style College like Dookie, it is not hard to understand that entertainment of any sort was a high priority. At the head of the list was 21st birthdays which were often celebrated many times, first in the rooms, then at the nearby creek and then in more salubrious surroundings such as O'Connors pub in Shepparton. The excerpt from AGROS below describes one such event. John Bray also received a special birthday present from his friends on returning from the celebrations, an angry sheep in the wardrobe of his room.



Jack Bray 1961

BUS DRIVER LOSES LOAD AT SHEPPARTON

Last night the bus driver from Dookie College was seen snooping in the back streets of Shepparton. Thought to be a suspicious character by the local police, he was apprehended and questioned.

It appears that the driver had driven a party of students into the town to see a picture show, and since it was very late he had become worried to the extent of searching for them.

Agros special reporter was on the scene and interviewed some of the students. They had come into the town to celebrate the coming-of-age of John Bray, under the pretext of going to a film, but unfortunately were waylaid by Father O'Connor at his inn.

One of the devout, Ian Fletcher, stated that he last saw Tony Molesworth with his back to a wall, trying to lower his lips to his glass by bending his knees.

The instigator of the whole sordid affair, John Bray, said three days later (when he was first able to speak) that he had enjoyed his twenty-first much more than his twentieth. (Half his luck!)

Another occasion required our group to stage a concert. Gil Stokes provided a lascivious drawing of a nubile maiden, Adrian Lamb played the piano and Barry Croke stole a petticoat and bonnet to add style to the event. I think that despite presenting a well lubricated performance, the cat-calls from an unappreciative audience confirmed the fact that there was little talent in the group, and that they did not have a bright future on the stage. It was considered a good choice that most had selected science rather than the arts as their preferred career destination.



A motley crew indeed

There were many other events for which we are thankful that there are no photos and little accurate memory. Occasions such as the busload of hopefuls that turned up at the Mooroopna Nurses Quarters for a dance. It was always understood that dancing was not the main item on the agenda, although Peter Rogan and Ian Fletcher were of another opinion. The bus leaving early scotched most of those ardent plans, the long walk home being a serious deterrent.

The College had three football teams, Dookie College and Dookie in the Benalla-Tungamah League and Dookie Collegians in the Benalla and District League. Our year contributed significantly to those teams, Ian Auldish, Jack Bray, John Black, Bob Sammons, Gil Stokes and others were in the A team, while Alan Patterson (Captain), Barry Norton and others played for the Dookie Collegians. This was clearly a B team which played only when they had sufficient numbers at the beginning of each year, they had not entered a team in the previous year (1960). This was an opportunity for University students to get to know the younger College Diploma students, and helped to integrate better into College life. In 1961 there were only 7 teams in the B competition, and it was a singular experience to play in Tolmie, a timber town in the hills north east of Mansfield. The boundary line was a ploughed furrow, the goal posts were recently cut gum saplings, and the players were mainly ageing timber cutters with little sense of fair play. At half time, we had oranges and water, they had bottles of beer and pies. They are times fondly remembered.

CON MAN REVEALED AT SHEPPARTON

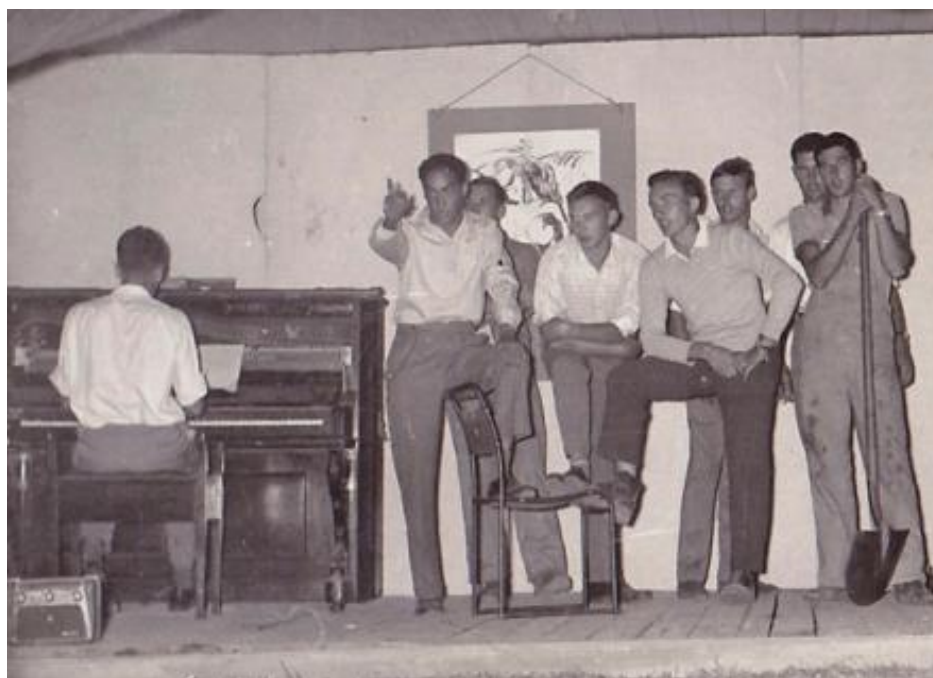
At the Court of Petty Sessions in Shepparton, last week, a local criminal, Bertie, was fined on two counts.

The first was for aiding and abetting inebriated students, in particular Agricultural, to illegally enter a dance hall. The second was for living off immoral earnings through the collection of two shillings from each student.

This well known con man was the supervisor of the dance hall side door which led to a public urinal. He would charge a two shilling fee to allow students to pass into the hall. In defence Bertie pleaded not guilty, and stated that his job was only to prevent indiscriminate micturation on the dance floor, and thought that the fee was reasonable in order to discourage such behaviour.

Moral—'It's never too late to micturate.'

* * *





A favourite University student pastime



Dookie College buildings c1927

The Dookie We Attended

A Personal view by Barry Croke, former Principal of Dookie College (1983-1989)

Second year Melbourne B.Agr.Sc. students attended Dookie from 1911 to 1963 (except for 21 years prior to 1943). Many of the notables of Australian and Victorian agriculture during the twentieth century, especially in the post WWII period, are found in the list of 560 names who did second year at Dookie. Our group of 32, culled back from about 70 in first year, was less than the 40 or so people usually engaging in the second year at Dookie after the mid 1950's. The experience we had at Dookie was shaped by several factors unlikely to be repeated again. The breadth of human ingenuities latent in our group soon became evident. Many of the challenges, apparent boundaries to daily life, hardships (by today's standards) and young people's inherent yearning for entertainment, created numerous memorable acts, particularly those dependent on the collective inputs of our group. We were essentially 32 individuals pre 1961 then we found ourselves embedded in a wealth of experiences that formed the matrix which made us the Dookie year of 1961.

Some of the notable experiences deserve mention. After a year of freedom of university life in Melbourne, we found ourselves part of a residential student community where "in locus parentis" was seen as the college responsibility, primarily because most Diploma students entered Dookie after Year 10. The day to day harmony in this community involved responsibility for "making good" most of our indiscretions. On reflection this was helped by the fact so many of the professional staff were ex-servicemen who sympathised with our predicament. So "adult" things like alcohol and motor vehicles were banned but could be enjoyed if you knew how, when and where. Even Principal Provan's letter to the parents of our members with cars kept on farms around the College, carried the threat "your son's course could be jeopardised severely" went without subsequent actions. On one occasion Dookie staff, probably at the insistence of Ian McMillan, required all students associated with the two football teams (Tungamah League and Benalla & District League) to be denied leave on a long weekend in June. It had been the turn of second year Diploma students to catch and slaughter a sheep for our Broken River BBQ. After a couple of weeks a downstream local farmer found the sheep's head and identifying marks that he presented to the College. This resulted in at least 60 people being detailed to chip the weeds along the eight mile internal ring round. In subsequent years the Field Superintendent, Geoff Brooke, often reminisced about the scores of hoes and shovels he delivered to us in his DeSoto ute and the success of this method of weed control. In reality this was just another catalyst to set the matrix which bound us together.

However the primary purpose of our presence at Dookie was to pursue training in Agricultural Science. The 'Agriculture' part was not evident in first year. The College's 2447 ha were able to engage us in probably more enterprises than any other single facility in the nation. Seven farm branches became a significant part of our weekly time-table. These branches displayed commercial farming practises. We were able to practise relevant skills and concurrently gain an understanding of how these enterprises and industries operated through a series of lectures each Branch Manager conducted. This contrasts sharply with that of most modern day agriculture students whose courses usually restrict them to brief visual experiences. The scope of the Dookie curriculum could never afford to be offered in one year by a tertiary institution today. Our course designers obviously thought we should be given a dose of virtually everything the Diploma students received over a couple of years with our academic days usually running from 8am until 5pm and also Saturday mornings. Some of the content was trite (tractors with solid spark plug leads ran on diesel, and we learnt the flavours

of ice cream). But for the most part we gained better than a working knowledge of poultry, pigs, cropping, horticulture, sheep and wool classing, beef and we were brought to a level where we could start to interpret and analyse these enterprises in the wider world. Our knowledge and comprehension of agricultural enterprises was supported by the subjects Agricultural Botany (Bun Levick's humble bumble bees work in red clover), Entomology (in Gartrell's taxonomic romp through Class Insecta), Agricultural Engineering (a quick exposé including Bernoulli's theorem), together with the methodical Arch Beavis' surveying exercises) and then Zoology (including Ian McMillan's trick question of asking us to identify a piece of inside out sheep intestine in a practical exam).

The real nature and process of Agricultural Science was brought to us in a knowledgeable and professional manner by David Smith. In subsequent years most of us reflected on the task David had to fulfil, being a full time member of the Dookie College community while being the sole provider of a university approach to the science of agriculture. This introduced us to the role of published refereed papers in advancing scientific and practical knowledge in agriculture. Moreover he did this in a way which shaped the approach taken in many of our professional careers.

The Dookie College community probably introduced us to more human diversity than most of us had experienced previously. The College had about 130 staff. Most of the "house" staff had come to Dookie from Bonegilla in the late 1940's to the mid 1950's. Bonegilla was operated as a 'staging post' for war refugees from Europe. Many of these people continued on at Dookie until their retirement and provided a valuable contribution to the College community. We also experienced and sometimes worked with many trade staff in motor mechanics, welding, carpentry, painting, butchery, plumbing and with the electrician. The College hospital, administrative area and the Dookie Agricultural College Post Office were other parts of the College which supported the delivery of the program and the life we experienced.

Our dormitories provided further unique experience in living, particularly if you were domiciled in the Rural Training Centre. The RTC had been a former army camp established behind Rushworth and it was quickly moved to Dookie in the late 1940's to provide living arrangements for returned servicemen taking agricultural programs. By the early 1950's these programs were over, but a heightened interest in agricultural education meant these facilities were needed to complement the rooms available up in the wooden dormitories of 'top College. The old RTC army huts, with corrugated iron exterior walls and roof, wooden floors with odd gaps and seriously deteriorated "canite" walls and ceilings kept inmates in immediate contact with prevailing outside temperature and air movement. No wonder they had been condemned. The ablution block across the partly sealed road had limited facilities that enabled us to enjoy communal showering. All this was achieved before we presented in the dining room one kilometre up the hill for the mandatory 7am roll check by the 'master on duty'.

The college teams benefited from the skilled football prowess of several of our number. The 1st XVIII three quarter time address by coach Mick Morris (butcher) stirred many a soul. This endeavour was only eclipsed by the 2nd XVIII when we pushed the old Bedford bus (driven by Tom Dempsey) about a kilometre up an unmade boggy road to the Tolmie ground so we could experience playing the last quarter in a snow storm. This has been a mere glimpse of what we experienced. Let us hope that the long term friendships that have endured for nearly six decades can afford a few more years to run so we can jointly embellish some of our treasured memories.

Selective Memories of our Dookie Days

It can take a very long time to realise even obvious facts if individuals have not actually seen them. We agricultural Science students came from all over Victoria and even some from neighbouring states. I had never travelled more than ~10 km west of the Yarra in my life. I only knew a little of south Gippsland and the drive north to Dookie was a revelation. I had never seen cereal crops planted and harvested or just growing. On either side were giant dry brown paddocks that suggested drought. Of course this sight was only the usual cropping sequence; but I felt thirsty merely seeing the brown ground shimmer. The green summer paspalum pastures of home were far south! In the first week we learnt that water was the key driver of farm operations. It was pumped from the Broken River to elevated storages on the College grounds from where it gravitated to sites of need.

This water added to good soil, and with usually abundant sunshine, produced amazing growth in the vegetable garden and to selected pastures. We students manned horse drawn farm water tanks in summer to maintain the attractive College gardens and road verges. The primal importance of water in dryland Australia was evident to us all as we rode our decrepit bicycles from one farm operation to another. The dairy, piggery, poultry, orchard and abattoirs all required reliable water for them to operate at all. Without this pumped water Dookie would be just another dryland farm.

And then the autumn rains came and crops were planted. The seasonality of growth was visible every day outside as well as being emphasized in David Smith's lectures. This knowledge was innate, at least from primary school days, for those from cropping districts but many of us did not have that background. Graphs showed how organic matter production plummeted over winter and this was emphasized by the need to supplement animals by feeding stored hay, silage and grain. Perhaps a major task of agriculture was to "even out" primary production through the year?

Winter was a salutary preparation for spring. Every day brought surprises. The early onset of barley grass and capeweed covered much of the college not prepared for other plants. And, with the realisation that a plant collection was required, the diversity of pasture grasses and legumes was explored. They grew in all manner of odd places. This was also true of weeds! The farmyard boasted healthy growths of shepherds purse, fat hen, horseradish and dock. These plant names, to our surprise, have often stayed with us and, at times, continue to be useful signposts in our lives.

Windmill grass was prolific on the verges of Dookie road I recall for no apparent reason.

There was a core of knowledge and outlook that formed the basis of teaching in second year and there were things not talked about. Now some 56 years later one can reflect about these emphases. It was sensible in ~1960, and based on the evidence of market demand from the 1950s for wool, that sheep husbandry was taken seriously and dealt with in detail. Recent research findings about pasture improvement had shown how well yield responded to superphosphate when combined with special varieties of subterranean clover suited to local areas. It was a time when large improvements in production could be obtained by judicious selection of fertiliser application rate, sub-clover variety choice, stocking rate and sheep flock type.

Much of this was still “new” thinking and we were being taught current views. We were the new generation that was expected to keep advancing on this front. However life is never so predictable!

A broader vision was delivered to us some two years later by Sir Samuel Wadham, Emeritus Professor from our faculty. He gave the last lecture of our course. Where had this exciting speaker been hidden in the four years of our course? He spoke of the challenge for Australian agriculture in the future being more about international markets and the equity of trade agreements than in the physical factors of production. I felt electrified by his lecture and wished I had heard it four years previously. But would I have understood it without an agricultural education and the experience of Dookie? Perhaps not.

Harry Burton
January 2017



A possible paradigm for the connectedness of Agriculture

In the 1961 AGROS article below, Dr David Smith provides a further explanation of the philosophy behind this year at Dookie.

THE DOOKIE YEAR

D. F. SMITH

Since 1944 Agricultural Science students have spent their second year in residence at Dookie Agricultural College. During the last few years a number of changes have been made in the course at Dookie with a view to increasing its value. Before discussing these, it might be as well to set up some sort of "ideal" at which those responsible for change should aim. There seems to be fairly general agreement that the year should—

- (1) be residential in an agricultural setting;
- (2) be spent in an area of (or near to) diverse agriculture;
- (3) be spent in an area reasonably remote from Melbourne;
- (4) be of good academic standard;
- (5) bring students into intimate contact with farming and farmers in as many ways as possible.

However critical we may be of the set-up at Dookie before 1958, we must agree that the first three aims were achieved, and that the year at Dookie was apparently a vast improvement on the previous system of spending a year at Werribee. We must also remember that Dookie only agreed to take the students on the condition that they were to be virtually completely identified with college students. Thus, in one sense the first three aims were achieved only by compromising on some aspects of the last two.

The recent changes, then, have been largely aimed at these last two points. To bring these about we have had to establish that:—

- (1) A University student *is* different in some respects from a college student. He is usually of a different age group, is usually of a higher academic ability, is at Dookie for a different length of time, for a different purpose and will probably do different work in later life.
- (2) Academic work done at Dookie is worthwhile, and must be integrated with third and fourth year lectures. In the past there has been a tendency for Melbourne lecturers to regard the Dookie work as mainly applied or practical and not academic.
- (3) The practical farm work is, in many respects, different from practical work as conducted on a farm. Dookie is primarily a large State educational organization and a student will, therefore, see little of the management problems characteristic of a multi-enterprise mixed farm and learn little about the mind of the farmer.

To be more specific about the changes, let us consider the academic course first. Agriculture has been "re-built", with considerable time given to pastures, especially pasture dynamics and management. Crop agronomy has been lifted from "wheat growing" to a more detailed study of our main Australian crops. A number of lectures and excursions are used to introduce soil science; with its variety of soils Dookie is, of course, the ideal place to do this. Frequent discussions with other lecturers in Agriculture and Agricultural Botany has integrated this course with their work, thus reducing the third year load.

All Entomology is now done at Dookie; this also resulting in an easing of the third year pressure. The time given to surveying at Dookie has been reduced and it is now included in a subject called Farm Mechanics, Hydraulics and Surveying. As its name suggests, this subject includes part of the course formerly included in Engineering in fourth year and also much demonstration work with farm machinery. This includes machinery from other farms in the district as well as College machinery.

The introduction of Biology as a first year subject has reduced the amount of Zoology taught in second year, but increased the amount of Botany. The latter has been included with what was Field Botany in a new subject, Agricultural Botany Part 1.

Animal Husbandry has been the least changed, except that Wool Clasing has been included, and at the same time is taught throughout the year, on and off the sheep's back. A brief introduction to the whole subject of Animal Husbandry is given by the College Lecturer in Animal Husbandry; all further lectures are given by the Branch Managers. Probably a better arrangement would be for one lecturer to cover most of the course, with Branch Managers giving demonstrations and discussions to illustrate application to the particular industry. Ideally, this one lecturer would be a University staff member with his own research programme and equipment integrated with student projects. This would offset the present unavoidable tendency for the Dookie course to become biased towards Agronomy.

D. F. Smith, M.Ag.Sc., is the University lecturer in Agriculture at Dookie College.

Present subjects then are:—

- Agriculture Part 1.
- Animal Husbandry.
- Agricultural Botany Part 1.
- Agricultural Zoology.
- Farm Mechanics, Hydraulics and Surveying.

In addition to this academic work, projects are carried out, usually by groups of two or three students. These cover a wide range from which students are able to select their own fields. In a typical project the group might measure phosphate response on a podsollic soil using a randomized block design, and measuring winter and spring production. Others might study some aspect of animal production or survey farming practice in a portion of the surrounding district.

Regular excursions have been a popular feature of recent years. These cover a wide range of industries—fruit, dairying, sheep, cattle and tobacco—both in the field and in the factory. All nearby research projects and stations are visited. Farmers—both prosperous ones and “battlers”—have been very helpful, especially in discussing their financial and organizational problems. The annual tour remains as a highlight of the year. We now include the Riverina saltbush country to widen its scope.

All of these changes have made Dookie a busier and, we hope, a more informative year. An attempt has been made to reduce the contrast between the academic pressure of first and third year and the casual atmosphere of second year. This has made it necessary to have shorter terms, so the year is now of three terms, each



of about twelve weeks. Examinations are completed and students leave just before Christmas. This eliminates the Christmas break and New Year “heat wave” exams—for long the bane of students’ lives. There is now only the one examination, in December, although tests are held in each of the other terms and marks may be considered. All this will make passing the Dookie year more difficult—but if the degree is to be highly valued this is necessary.

The practical farm work has remained largely unaltered—too valuable to cut out, yet often ineffective. Partly because of this and partly because the early finish may prevent students from seeing any harvest work, a period of six weeks must now be spent on an approved farm in the vacation between third and fourth years.

It is difficult to see how the standard of practical work can be improved at Dookie without demanding changes in organization and personnel which would be expensive and in some cases undesirable from the College point of view. For instance, although the use of University students for the delivery of meat, bread, etc., to residents appears undesirable, not to use them would seem unfair to the College students. Not to use students at all would require reorganization by the College. Students should learn much more of the reasons behind operations and the problems of management, possibly through being given more managerial responsibility and/or better individual attention. Failing this, a major reorganization, with less time spent on routine work and more on demonstration, is necessary.

As stated earlier, the recognition of the fact that the University student is different from the College student has been an important step. So far this has only been conceded in academic matters so that in terms of living conditions and rules of behaviour they remain identical. It is debatable whether this situation should continue, especially with regard to the famous Rule 19 on cars. Concessions on such rules to students who are inevitably at least 18 (this year’s average age at entry to Dookie was 19½) might be well worthwhile.

Finally, I believe we must ask the question, “Should we continue to use Dookie College?” There are several factors which must be considered.

Firstly, the College plans to increase its student numbers, and with an increase in our numbers too, organization may become very difficult, especially in practical work. Secondly, academic standards are likely to be difficult to maintain at times, due to vacancies on the Dookie staff. At such times the University teaching can be an embarrassment to their staff. The answer lies in the appointment of more University staff, which in turn poses problems for the College administration. Thirdly, the School of Agriculture needs a Field Station for research, and it is logical that our students spend their second year at such a station. Finally, we need to be able to develop a course and associated activities aimed to suit our own students without the complication of its effects on another very different group of students.

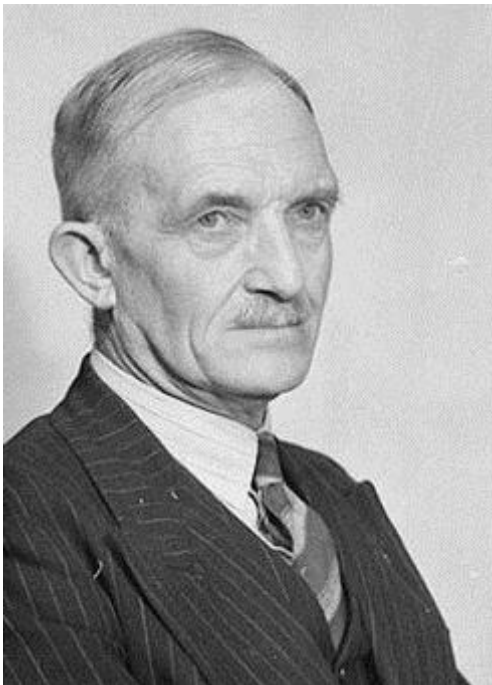
In other words, I believe that while we can continue to make improvements at Dookie, in the long run we must plan our own teaching and research unit somewhere in the country.

Third Year at Melbourne University

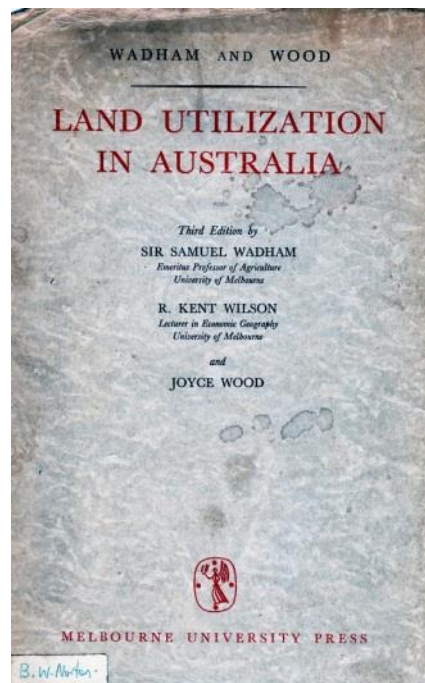
Our return to Melbourne in 1962 brought with it a reminder that we were only half way through the course, with the most difficult part yet to come. However we were also able to connect directly with the Agriculture Faculty and its staff, we had access to the Agriculture library and to the secluded Agriculture garden behind the Agriculture building. We shared this garden with Yvonne Aiken's glasshouse where she studied Subterranean clover, and a converted potting shed housing fistulated sheep in cages and a dissection room for cattle carcasses. The courses offered in this year were advanced levels of previous courses, but now requiring a greater depth of understanding.

Agriculture Part II

While Professor H. Carl Forster (Dean of Faculty) was the main lecturer for this subject in this year, we were given some occasional lectures by Sir Samuel Wadham. When Samuel Wadham arrived in Australia from England in 1926, he was the sole staff member of the Faculty of Agriculture, most courses were taught by staff from the Victorian Department of Agriculture. He was the "father" of the dynamic Faculty of Agriculture into which we were now accepted. The lectures were based on his book "Land Utilization in Australia", first published in 1939, with its third final edition published in 1957. His approach to the teaching of Agricultural Science was well ahead of the times, and the topics covered in our course were both historical and modern. We were introduced to the history of settlement, the development of Australian agricultural industries, agricultural economics and the concepts of land use and limits to expansion.



Sir Samuel Wadham (1891-1972)



Classic text on Australian Agriculture

The life and times of Sir Samuel Wadham have been recorded by Professor L. R. Humphreys from the University of Queensland: *Wadham: Scientist for Land and People* (Melb, 2000),

Agricultural Chemistry

Once again we were fortunate to have one of the leading soil scientists of the day teach us the chemistry and structure of soils. Geoffrey Leeper was encouraged to join the School of Agriculture at Melbourne University in 1930 by Sir Samuel Wadham. He was

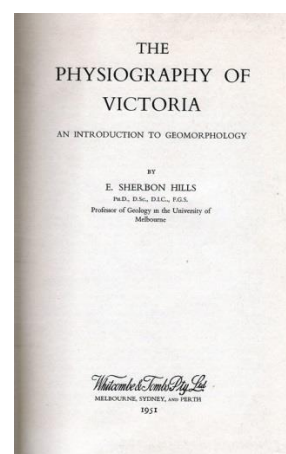
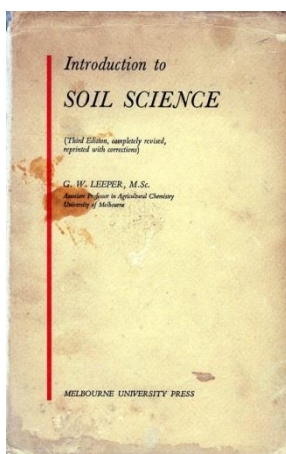
appointed Professor in 1962, but his retirement in 1969 was controversial as reported by Peter Attiwill in the *Australian Dictionary of Biography*, Volume 18.

“Angered by comments in Sir Keith Murray’s report on Australian universities (1957) about high failure rates, Leeper, as president (1966) of the university’s staff association, maintained a campaign against any external undermining of teaching and research. In 1969 his association with the university ended acrimoniously when colleagues in the school of agriculture, concerned that the failure rate in agricultural chemistry would be excessive, demanded a second examiner. His high standards were vindicated. Refusing an apology from the dean, Professor Carl Forster, Leeper withdrew from his planned retirement dinner and had nothing more to do with the faculty.”

It was well known in our time that his course set high standards, and while most received grudging passes, few ever gained Honours in his subject. Nevertheless, his text book “Introduction to Soil Science” was essential reading for us, as was the book on Victorian geomorphology and soil genesis by Sherbon-Hills.



Professor Geoffrey W. Leeper (1903-1986)



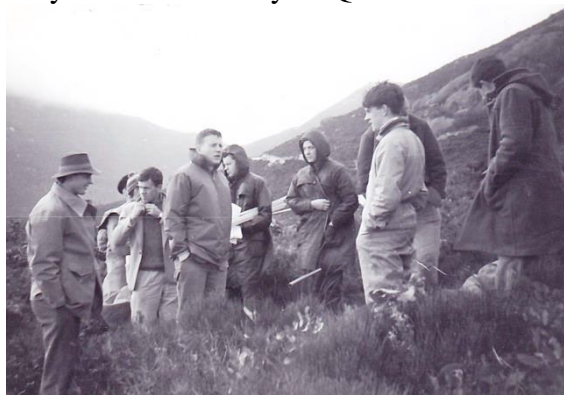
All will remember the field trips with Professor Leeper to inspect railway cuttings at Royal Park looking for fossils and soil profiles. We were challenged during a trip to Bacchus Marsh to speculate on how these soils were formed, and the simple beauty of landscapes was lost forever with this need to know how it came to be so.



Agricultural Botany Part II

The Botany Department was housed in a building behind the Agriculture building, and Botany has been a major and important component of the Agriculture degree for many years. As with other courses we were fortunate to have knowledgeable and innovative

lecturers. Professor J.S. Turner, appointed to the Botany Department in 1938 by Professor Wadham in controversial circumstances, was our lecturer in both first and third year. Plant physiology was taught by a young enthusiastic scientist Tom Neale, supported by his PhD student David Connor. David was later appointed as Professor of Agronomy in the School of Agriculture in 1983. Dr Ray Specht had been appointed in 1961 taught Plant Ecology. Our group had a memorable week long field trip to Wilson's Promontory to study heathland ecology (and inadvertently student behaviour). Ray Specht was appointed Professor of Botany at the University of Queensland in 1973.



David Connor lectures the "great unwashed" at Wilson's Promontory



Dedication to Dr Specht for a memorable voyage

Agricultural Economics Part I

This course was initiated by the Dean, Professor Forster, as part of the expansion of the School of Agriculture. Mr Alan Lloyd developed the course which exposed students to both the basic tenets of economics and to the particular issues in Agriculture.

Physiology and Biochemistry (Agriculture Course)

The course presented advanced our knowledge by integrating these two disciplines, combining an introduction to Biochemistry and its role in cell and organ function with physiological function. One of our tutors was Mr John Vercoe who was, at that time, completing a PhD in Animal Nutrition with Professor Derek Tribe. His approach to teaching allowed students to easily understand the relationship between the theory and relevance of this topic to agriculture and animal production. John Vercoe would later become Assistant Chief of Tropical Animal Production (1982-93) then Director of the Tropical Beef Centre (1993-1996). Vercoe and his CSIRO colleagues helped establish Zebu and Zebu-cross cattle in Queensland which lead to a boom in the Northern Australian cattle industry.

This course was the first of many to combine the disciplines of chemistry, biochemistry and physiology to explain function in plants and animals. Prior to this time, these topics were taught as discrete disciplines often bearing little relation to each other.

The Formative Years



AAAF Conference in Perth 1962

Can you spot Gil Stokes, John Cornish, Bob Edgar, Henry Edgell or Barry Norton in crowd?



Slave labour by students

Fourth Year at Melbourne University

All students were required to complete six weeks of practical work on a commercial farm before graduating. This was usually completed in the vacation between 3rd and 4th years. This was judged necessary because the farm work at Dookie was not considered the same as working on “real” farms. The lecture load on students in this final year was high, with 10 courses, again with much new information being examined in one final exam at the end of the year.

Agricultural Bacteriology

Dr Nancy Millis (and others) from the Bacteriology Department gave a course in bacterial classification, aerobic and anaerobic fermentation, the bacteriology of milk and cheese making as well as some health aspects of microbial infections. This course was our first exposure to this subject, and Dr Millis was a stimulating lecturer. She later became Vice Chancellor of Latrobe University.

Agricultural Botany Part III

Advanced aspects of Botany were presented in this course by Drs Turner, Neale and Specht, and for the first time, Dr Douglas Parbery gave us lectures on plant pathology and mycology.

Agricultural Economics Part II

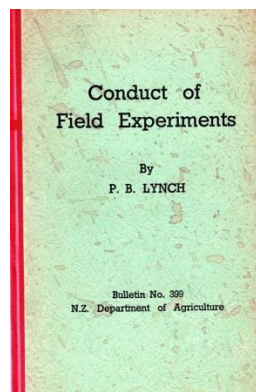
This course continued from the previous year with advanced topics in Agricultural Economics. Mr Alan Lloyd was the only lecturer for this course.

Agriculture Part III

Professor H.C. Forster, Dean of the Faculty, was a major contributor to this course. He had gained his PhD in Iowa in Statistical Methods were now being applied rigorously to experimentation in Agriculture. While his lectures on Statistics were a source of confusion to most at this time, it would be this knowledge that would prove most valuable to graduates in their futures.



Professor H.C Forster (1903-1981)



The only Statistics text in 1963

The other topic of significance introduced in this course was Agricultural Extension by Mr Hartley Presser. This was seen to be an important addition to the curriculum at this time, and postgraduate training in Extension was quickly developed by Mr Presser after this time.

Animal Health

Staff from the Veterinary Science School taught this course. We had gained much of this information from the Dookie experience and other farm visits, and yet it was still considered a valuable contribution to rounding our knowledge of animal production.



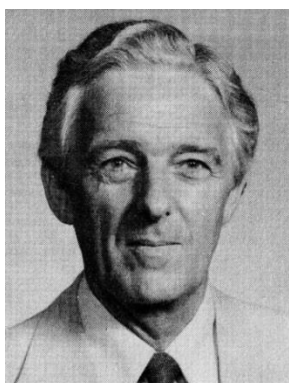
Memorable times during the Gippsland Tour



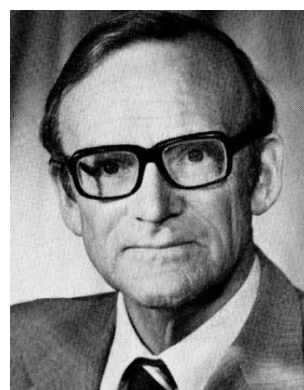
Alan Patterson telling us how it is! Sue not listening

Animal Husbandry

The main lecturers for this course were Dr Derek Tribe and Dr Norman Tulloh. Both were establishing their research careers at this time, and their stimulating lectures reflected the enthusiasm which they both had for their subject. Derek Tribe was researching the value of urea as a supplement for grazing sheep, urea and molasses was subsequently established as important drought feed for cattle and sheep. He became Dean of Agriculture in 1969, and went on to establish the International Development Program (IDP) and Crawford Fund to promote cooperation in international agricultural research. Further details of his career may be found in the book titled “Derek Tribe International Agricultural Scientist Founder of Crawford Fund” by Professor Lindsay Falvey 2012. Dr Norman Tulloh was at this time developing a new theory of growth and development in cattle and sheep with his postgraduate students. He also became Dean in 1975 after the retirement of Professor Stubbs. Their lectures stimulated the interest of students in research, and as shown later, many graduates of this year continued on to postgraduate studies and research careers in animal science.



Professor Derek Tribe AO OBE (1926-2003)



Professor Norman Tulloh AO (1922-)

Biochemistry (Agriculture)


Professor Frank Hird was the main lecturer for this course, he had graduated in Agricultural Science before joining the Biochemistry Department, and was a strong supporter of the degree and its graduates. His research at that time was into fatty acid metabolism and wheat proteins, and one felt, at the time, that our practical classes were also lessons in research techniques. The course offered a wide range of topics presented by lecturers who would become prominent scientists in their time, such as Dr Michael Birt and Dr Bruce Stone. Who could forget the lectures given by Professor Victor Trikojus on his discovery of the relationship between iodine metabolism and thyroxine function? Agricultural Science graduates had long been a source of postgraduate students for Professor Hird’s laboratory, and our year was no exception. There is no doubt that this course encouraged many to view

biochemistry as the basic science of life, and to apply these principles later to understanding agricultural production systems. The following quote from Dr Juliet Flesch's book *Transforming Biology*, a history of the Department of Biochemistry and Molecular Biology at the University of Melbourne, is a further testament to the quality training we received.

"There is no question that the Melbourne School of Biochemistry was an extremely important source of discovery for a very long time, it is a story that needed to be told and recorded, almost anyone who was anyone in Biochemistry had gone through Frank Hird's lab. The influence of the department has been significant, across disciplines and industries."

Some notable women graduates from Professor Hird's Department have been Professor Suzanne Cory, Molecular Biologist, Head of the Walter and Eliza Institute in Melbourne and Professor Elizabeth Blackburn who shared the 2009 Nobel Prize for "the discovery of how chromosomes are protected by telomeres and the enzyme telomerase".

Agricultural Engineering

Mr Gilbert H. Vasey, Head of the Agricultural Engineering Department at Melbourne University was the major lecturer. In our time, it seemed that much of the "engineering" content of his lectures had been superseded by the above development, and appears to have been replaced by his interest in urban architecture and the musings of Robin Boyd in his book "The Australian Ugliness". Roger Parish had a view on this matter at the time: 

The next lecture, I discover, is engineering, and the subject of housing, and suburban housing in particular, comes up a great deal. This angers Harry B. who has always condemned suburbia for the stifling effect it has on the imagination and creativity of men. I can see Harry B. rushing into town when the lecture is over and buying himself a loincloth (large) and a spear or two. Thank goodness he's going to New Guinea after graduation or he'd be bound to precipitate a fearful social revolution within a couple of years. These thoughts keep me amused until the end of the lecture when, to my gratification, I find it's time for lunch.

Horticulture

My recollection of these lectures is vague, I think they were taught by someone from Burnley. We had received lectures on this topic at Dookie, and this course added little to my knowledge at the time.

The Final Fling

Our final year was filled not only by lectures in dim rooms, but afternoon practical classes, Orientation week, sporting events, The Prosh, AAAF Conference in Armidale and finally the Rural Rort held in the Malvern Town Hall.

The “Prosh” was a procession of University floats through the centre of Melbourne, ostensibly to display the University contribution to society, but more often, embarrassing both ourselves and the University with a public display of childish behaviour. A packet of “magic” fertilizer (sheep manure) was prepared and handed out to unsuspecting on-lookers with the promise that this would solve all their fertilizing problems. We were also offering to fertilize at every chance. The event was usually preceded by a planning meeting at Naughton’s pub, and followed by a review meeting after the procession.



The other important event was the Rural Rort held in mid-year to celebrate the fact we had got this far. There were few thoughts of final exams at this time, although the presence of lecturers, particularly Professor Leeper singing “Tit Willow Tit Willow” from Gilbert and Sullivan’s Mikado did cast a shadow over the celebrations. However those shown below do not appear to have any sober thoughts on any matters.



A Salute to the Future

Extracts from

AGROS

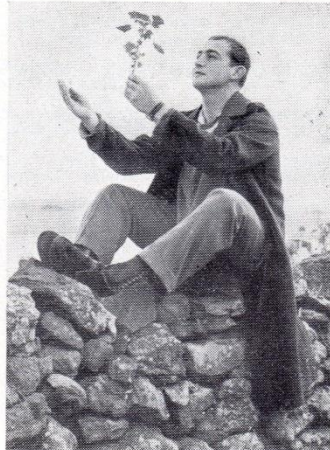
1963

The Magazine of the
Melbourne University Agricultural Students Society



Editor: HARRY BURTON

Business Manager and Assistant Editor: ROGER PARISH



AGROS was the magazine of the Melbourne University Agricultural Students Society. It was managed and produced by mainly final year students. The Editorial Committee invited students and staff to write articles, factual, cynical and/or humorous. In 1963, the humour of Harry Burton, Roger Parish and Ian Barger was thrust upon an unsuspecting audience of naive students. They were amazed at Harry Burton's erudite theory of Ketone Body Autogenesis, appalled at Ian Barger's solution to the population explosion, and confused by Roger's strange views about the definition of an Agricultural Scientist (see later).

The social events of the year are reported below in the President's Report written by Alan Patterson, and the sporting prowess of some reported by Alan Humphris.

President's Report — 1963

I was once told that the function of the M.U.A.S.S. was to "keep out of the red and to have a bloody good time doing it". While it is recognized that the Society, in many ways, is a social one the listing of some of the year's activities will give an idea of the more serious facets.

(1) Orientation Week: Several members of fourth year, acting as group leaders, introduced the freshers to the School and to the Staff members with good effect.

(2) Miss Ag-Physio: This year we combined with the Physiotherapists to raise over £110 in supporting Miss Judy Griffiths for the Miss University Quest. We are all grateful to her for the very charming manner in which she accepted this position. Thanks must be given to Joan Bilwell and John Black for the work they did.

(3) "Prosh": The Society was very enthusiastic to make its name known in the worlds of Tilling, Fertilizing, and Raping, and a good number took part in doing so. The money raised from the by-product of the animal game, as intimated to the public, was put to a good cause!

(4) A.A.A.F. Conference: Norman Welch took capable control for the second time in arranging for our representatives to take part in the Conference held this year, at Armidale. General reports would indicate that punters had a good day on "Lucky Star" but that they lost on the "Count".

(5) The Rort: Cocktail parties preceded the Rort which was held in the Malvern Town Hall on June 21. Thanks to John Black and his Social Committee who did a very good Job.

(6) Agros: As always the task of publishing Agros is a very considerable one, and we do not envy Harry

Burton and Roger Parish who have worked hard and enthusiastically on it.

(7) Open Day: This year Open Day is to be held on the 27th July. Plans are being made as to the form this shall take, as in past years it has been felt that too much emphasis has been given to the theoretical. A special organiser has been appointed, and he will work with the year representatives. A high standard, which has become commonplace, is expected once again this year.

(8) Sports: The usual sporting activities have been carried on this year and are reported elsewhere in this magazine. Thanks to Alan Humphris for his good work in organizing these sports, and the Pie Night.

Mention should also be made of Jim Stewart for presenting the lunchtime films, Adrian Lamb as Education Secretary, and Ian Fletcher as Cottees Machine Operator.

Although this Society does so well in undergraduate affairs, I feel that a great deal remains to be desired in the sphere of cultivating interest in post-graduate societies. The use made of the Institute of Agricultural Science especially is very limited. As members of a profession we should be prepared to look farther afield even in our student days. I therefore recommend all members of the Society to take a greater interest in the work of these bodies and to make use of the facilities they provide. I should like to thank the Society for giving me the opportunity to be its president this year. The work has been interesting and rewarding and I am grateful to all those who were so willing to cooperate with me.

Alan A. Patterson.

SPORTS REPORT

Agricultural Science was well represented in Inter-faculty sport this year.

Football—

"It is hard for thee to kick against the pricks".

Acts ix 5.

The outstanding feature this year was the high degree of fitness shown by the team. This was due largely to the good attendances at pre-season workouts held in Naughton's gym. Under the driving captaincy of veteran John Heath the Ag's fought out some close matches and were unlucky not to be in the final. However the spirited end-of-season 'pie night' compensated somewhat for this disappointment.

Results:

Agric. Science defeated Medicine by 2 points

Agric. Science lost to Education by 7 points

Agric. Science lost to Architecture.

Prominent players for the team were:

Heath, Bray, Rank.

Rifles—

"That they may shoot in secret at the perfect", Psa. 4.

The team performed well and were runners-up to Architecture in the competition.

Harry Joiner, Peter Rogan, John Bell and Henry Foster, represented Agric. Science.

Table Tennis —

"No man at the table knew for what intent", John 13-28.

With little preparation, our team took time off from Biochemistry pract. one Thursday, to be convincingly defeated by Architecture in a knock-out competition.

John Treloar, Henry Edgell and Alan Humphris represented Agriculture.

It was obvious that our defeat this year was due primarily to a lack of Asians in the faculty. This is something which must be remedied if we are to take-off the title in the future.

Tennis—

"My stroke is heavier than my groaning", Job 23-2.

In their section, the team scored comfortable wins over Science and Education but lost to Medicine after an interesting struggle.

John Cornish, Bob Sammons, Alan Humphris and Henry Edgell played for Agric. Science.

Inter-Varsity—

Several Ag's represented Melbourne University in Inter-varsity sport this year and are congratulated on their efforts.

P. Campbell—(Rugby)

J. Bray—(Football)

I. Auldlist—(Football)

H. Joiner—(Rifles)

P. Rogan—(Rifles)

H. Foster—(Rifles)

Alan Humphris.

Some extracts taken from the 1963 issue are shown below to provide a sense of student humour of the day. Many mentioned in the stories deny that these things happened, but reliable sources (HB, RP) claim to have actually witnessed these events.

BOARDING-HOUSE KITCHEN VIOLATED – STUDENT TAKES RAP

Last night the proprietors of the exclusive "Double Vision" guest house at Inverloch disturbed a desperate intruder in their kitchen. On the appearance of the proprietress in night-dress and hair curlers the terrified criminal fled, leaving behind a dozen large cans of Fosters Lager which he had placed in the refrigerator. The proprietress explained between sobs that this was the first time that strong drink had ever soiled her teetotal refrigerator. Subsequent investigations by Agros crime reporters showed that the culprit was one Anthony O'Hara Tehan, 21, an Agriculture student. Tehan explained that he had found the cans beside his bed when he woke up that evening and had placed them in the refrigerator for safe-keeping until he could trace the owner in the morning. Tehan effectively silenced all criticisms of his motives when he publicly stated, "Goodness gracious me, what use would I have for beer?"

BUN FIGHT AT RORT

Last night buns were thrown at the staff members attending the Rural Rort, in a shocking display of student manners.

The staff had begun a song accompanied by Professor Leeper, but they had missed the first few beats. Prof. Leeper, incredulous at such incompetence, inquired as to the cause of the vocal delay. His question was met with a veritable volley of buns of the hardest species available.

They went on courageously to finish the song to the tune of 'Tit Willow', with an added chorus from the students which sounded like 'Tit Tissue, Tit Tissue.'

The reporters feel that this type of behaviour is not to be expected from students in view of the present world food situation, and recommend that they choose a softer variety of buns in future.

Acknowledgements

This magazine is indebted to those many—usually unnamed—soulless helpers who have made its publication possible. However, we feel that a real effort should be made to acknowledge their aid and we accordingly present this list:

President Soekarno.
William Holmes (Prof.).
"Disgusted" (Moonie Ponds).
John Dawson, Trinity College.
B. A. Santamaria.
The Molesworth Chorus.
Don Berry, D.D.A.
Upotipotpon Parents and Citizens Assoc.
A. Hitler (dec.).
John Cornish, c/o Beggars' Health Institute, Calcutta.
Martin Wilmhurst, R.N.
Dopey Crow.
The "I love America League".
Knoppfelmacher, F.
Carter Brown.
The "Left wing Fowl Breeding Soc."
"Angry Mother", Black Rock.
Lou Richards.
The Unfortunate Raynor.
Miss M. Rice-Davies.
Anon.

And this list is not complete without warm recollection of those beautiful girls Pam, Gwen and Mary, in the Ag. School, whose typing and friendly counselling were so welcome.

"May disasters be averted from their path and kind experience into it; may their lives be made warm with faithful friendships and may the smooth flush of graceful womanhood long caress their cheeks".

ARGUS TUFT.



Dookie College main building 2001

Harry's Horrible Histories

Harry Burton had cast his undiscerning eye over his final year colleagues and decided that he should write a biopic of his fellow students as contributors to social events and a possible predictor of their future as responsible adults. The words shown are taken directly from AGROS 1963 without editing, and it is noticeable that many of the "Jacks" have now donned cloaks of respectability and become "Johns". I will leave the readers to decide on the accuracy of Harry's predictions, but must insist that the views expressed are definitely not those of the writer. (BWN).

Jack Aldrick

Jack is a well-liked fellow who has settled into the course very well. His escapades troubled the rank and file (the unbelievers) at first, but, as the years have slipped past, our faith in him has grown.

Jack has two great loves- the second is old cars. His most spectacular effort, so far, is a Chev. Roadster which has spread oil over a variety of Melbourne Roads and was a notable participant in "Prosh". (Jack put a lot of effort into cleaning off some of those slogans).

Although we don't see a great deal of Jack on our tours, he has been a source of interest on these occasions. He was joint discoverer with Ian Barger of "phosphorescence" on the beach at Inverloch, an "explorer" at Wilson's Prom. (although some would doubt this) and a night owl at Camperdown.

He intends to become a teacher, and we wish him continuing luck for the future.

Ian Auldish ("Schmoo")

A stabilising influence at even the most degenerate Ag. Orgies. Would have us believe that sex is a spectator sport. A brilliant footballer and bulldust artist, also famed for his incessant interruptions to lectures. Future uncertain, but will probably run a school for Wayward Girls if he can find enough girls willing to learn.

Ian Barger

Ian is a colourful member of the Faculty whose ready wit and unpredictable acts have been a continual source of entertainment. He has achieved notoriety this year as our treasurer and may regularly be seen counting dozens of sixpences (from the "Fletch. Cottees Machine") or furthering his feud with the tellers at the National Bank.

Once a Morris 10 driver, the great courage displayed in this machine (not shared by his passengers) has led him to graduate to a Vanguard truck – complete with an extra supply of courage (and no passengers).

His more notable exploits consist of a flying trip to Broken Hill (by V. truck), with only a salami sausage for company, and being the only member of the A.A.A.F contingent to turn 21 at Armidale (thank heaven!). He celebrated by standing on his head in the main street – a rather brave stunt for such a severe critic and student of social behaviour.

Ian divides his leisure between Benalla and Lake Tyers where he managed to break an ankle "playing sport". This gave rise to much comment and conjecture while Ian had his foot up for three weeks – a tragic fate for a young man during early spring.

Jack Black

Jack is a fellow with a great passion for dairy farms and the Mallee (or is it just great passion?). He did a splendid job organising the Rort this year for which we are all indebted (especially the Treasurer).

During the course, Jack had a number of astounding affairs with automobiles. At Dookie he was part owner of that incredible Humber Super Snipe (the thirstiest car in the

world) while, in third year, he “shared” an old Dodge with Jack Aldrick. The passenger door of this old wreck was held tight-shut with rope – purely as a safety precaution, according to Jack (we believe him!). Jack has also been seen driving a 1935 Reo down Brighton way, but his latest is a cheeky Chrysler roadster which was a bargain for £20 (big end knock and all) and has kept him broke since.

Rumour has it that Jack went to the A.A.A.F conference this year – in fact, some people claim to have actually **seen** him there, but Helen Mott maintains that just **seeing** is not good enough.

Jack Bray

With “everything in moderation, but play the game hard” as his watchword (who can forget that 21st) it is but meet that bebies of languishing maidens should constantly surround him. Let us not forget that Jack holds the record amongst Ag. students for the number of girls brought to a party – for himself - namely three. But is rumoured that his game style has changed; and that Jack no longer plays the field as was his wont, though he remains a most valued member of the Ag. – bated breath – football team.

Amongst Jack’s happiest foibles is an inability to reach parties, balls and whatever before Midnight (Yes, it was Jack who had to return to Greensborough for his Commencement Ball ticket); a predilection for nude bathing at St. Kilda and an ambition to be a cultured beatnik. His patience is legendary (someone, please tell him not to hit the books so hard). And who but Jack would wait for a quarter before returning a kick to the groin.

Harry Burton

The only perfectly sane student in the class, and therefore regarded as an eccentric by staff and students. Known as “Squalid” since his Dookie days, where his room featured wall-to-wall straw and a large population of spiders to reduce the fly menace. Enjoys such hobbies as skinning lizards, writing poetry, demoralising lecturers and making dramatic entrances. Drives an equally eccentric Pontiac. Intends to spend several years in New Guinea where he can pursue his interests in headhunting and cannibalism without police interference.

John Cornish

Currently engaged in wringing the last few miles out of a very sick sounding Morris Oxford (very good exterior, going cheap, £200 – suit mechanic). Secretary of M.U.A.S.S. and requires only another three weeks attendance to become a life member of Naughtons. Once believed that all women were bitches.

Hopes to get a job involving meeting people in country pubs.
F.S. The trouble is, I’ve got principles!

John Donnelly

“Chuck”. Our cosmopolitan Sydneyite who hails from W.A., but lived long enough in Tassie to be held personally responsible for all its faults. While at Dookie, he learnt first hand the harm that can come to a young lad who hitch-hikes with strange men. Once he was only prevented by an overdose of rum and Mortein from driving from Dookie to Hobart.

In spite of College food, he manages to eke out an existence at Newman.
F.S. It was the most chunderous meal I’ve ever tasted.

Alfred Eagle

“Wedge”. The silent onlooker at most dings. Could easily get a Ph.D. for a thesis entitled “The Behaviour of Ags. when irrigated with ethanol”. Likes Big Black Humbers, and

is overjoyed at the prospect of being a teacher. The only Ag. student to ever admit that he was in love and has never been allowed to forget it.

Robert Edgar

Descended from a long line of Pedigreed Afghan camel drivers. Looks almost human after a sleep and a shave, and is at his inimitable best early in the morning. Had the title role in the Dookie sport of "Let's wake up Edgar". Rob has a burning ambition to be headmaster of Chiltern High school. Such a fate seems inevitable.

Henry Edgell

Definite squatter material from Bothwell.

Only member of the year who makes no excuses for coming from Tasmania (perhaps he doesn't have any). Derives a fiendish pleasure from running-in (or running-out) a new Vanguard truck. Henry possesses considerable athletic ability but is unlikely that his sprint times will improve until the octane rating of Fosters is increased.

Aims to have gout by the time he turns 30.

Ian Fletcher

When Fletch came to the Ag. School; no longer did any Ag. bod have to hang his head in shame when questioned on the Faculty's lack of cultural feeling. If the mention of a name was not good enough to counter the sneer, a personal audience was! Armed with his guitar, Australia's answer to Buddy Holly has a fervency of delivery that Billy Graham would envy. But take away this much threatened instrument and a surprisingly normal and dedicated student, carefully attired in the latest blinding fashion is left blinking in the sun.

A firm believer in the proverb that looking after the pennies takes care of the pounds, Fletch never allows a lecture to pass unnotated. The care with which these undoubted pearls are recorded is shown by the repute in which Fletch's notes are held. In vice, he steers a moderate course; for though a firm supporter of the charms of youth; innocence is as equally prized. Who else would wait until his 21st for the first brush with the demon alcohol. This was will power indeed; yet perhaps the strain showed itself in a dedicated and highly efficient cigarette consumption during that long dry.

Robin Gray

Our able S.R.C. rep. who hit the headlines in "Farrago" this year with his Act Tough policies concerning elections. Looks under his bed for A.L.P. men and Communists every night. Was seen taking notes in Gilbert's lectures and is therefore regarded with suspicion by the "rotten core" of the class. Will probably end up a union leader.

John Griffiths

Known affectionately as "Crapper" to his fellow students. Reputed to be the author of Encyclopedia Britannica, and is a renowned authority on such diverse fields as politics, market gardening and birth control. Runs a red M.G. and a woman on a student-teacher's salary. Family influence rivals that of the Kennedy's.

Alan Humphris

A son of this fair State, but driven overseas by a cruel fate to Tasmania. Had an unfortunate encounter, early in life, with a Tse Tse fly and has spent all his subsequent waking hours apparently asleep. Capably organised our "spirited" but unsuccessful venture into interfaculty sport this year. Resides at Queens and as Al Patterson also hangs out there, Humph occasionally makes a first lecture; sometimes even breakfast.

Famous for the ability to consistently hold a beer glass at the greatest possible slope without spilling any of the contents.

Harold Joiner

One of the rifle-men of the year and in fact interested in most things that bang. Represented Melbourne in the Intervarsity Rifle Shooting in Sydney this year where he showed great intestinal fortitude by staying up all night to prevent an 18 gallon keg from getting lonely. His main interests at Dookie were explosives and sleeping under his bed. The highlight of his career, if it doesn't finish it, was an interview after an extended lunch hour at Jimmy Watson's.

Harry now believes that the only positions open to him are those of a fireman or a train driver.

F.S. Ah Souls

Adrian Lamb

To possess the ability and rationalisation to such a degree, one must be either supremely and constantly right or else superbly unconscious; although variable mixture of both could be allowed.

It goes without saying that most of us protest our innocence when apprehended by a cop for speeding, going through red lights, etc. But to subsequently question the time, opportunities and motives of said cop in exact scientific language for the space of weeks is going too far.

Adrian is the only person we know who would firstly; attempt to do more than 100 mph on a motor bike and secondly; on being pulled up, claim to be an off-duty cop getting medicine for his sick grandmother and thirdly; get away with it.

A basic attitude that most lecturers are incompetent and that any worthwhile notes can only be taken with due regard to one's own experience is an approach that is at least original and creative, and at best successful. Still, we would hate to see Adrian's shorthand of our wedding breakfast speech.

W. (Tony) Molesworth

Potential squatter from Ballan with a prodigious appetite for lager and Citroens. He became skilled in "blind" navigation while at Dookie and always brought the Pontiac home unscathed. Lives in perpetual fear of having photos, taken of the swimming episode on Wilson's Prom., used for publicity purposes.

Another foundation member of Naughton's Gym, his other address being Trinity College. The only person in the year to hold a bushfire party.

F.S. Tricky, tricky

Barry Norton

For a man so richly endowed by nature with dark picaresque suavity not to become a beatnik is a clear violation of predestination.

One is always expecting Barry to lunch off Sauerkraut and red wine – certainly not a pie and sauce or braised steak sandwiches.

Even his most ordinary actions are invested with symbolism and interest due to the curious intentness for which they are performed. We know no-one else who could mix a stock supplement of milk powder into coffee with such romantic piquancy.

Stability is given to the course by the dedication with which Barry pursues it. The hours of "sleep on the job" logged by this young man are fantastically low for an Ag. student. One somehow gets the feeling that he wants to pass. His method is frightening. In Barry we have one of those individuals who allocate living into work, sleep, women and sport; and

then stick to their timetable. But it is relieving to know that this single minded intensity has not stopped him indulging in the usual vices – it is impossible to conjure up that saturnine face without an accompanying smoke wreath –

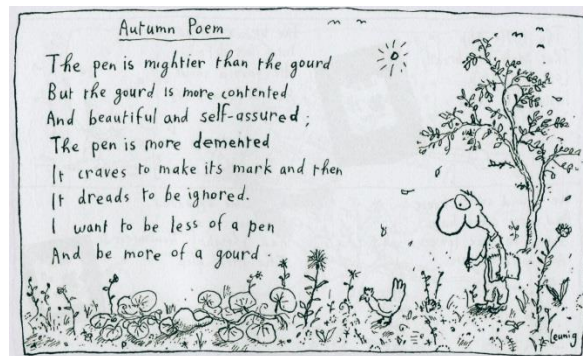
Roger Parish (The Count)

The Count believes that there is a joke for every occasion; and as likely as not he will adorn the moment with it. No man can liberate vast quantities of humour without having a variable distribution between good and bad. But we can be thankful that the Count's normal curve has its apex under good and that bad only creeps in several S.D.'s away. Perhaps the origin of this hilarity lies in his attempts to reconcile such diverse interests as cricket and Beethoven, the creation of vibrant poetry and the hunting up of advertising for Agros. He may be found at his most urbane when attempting to convince a seed merchant over the phone that a full page in Agros will effect the most satisfying change in the Sale's curve.

To glimpse candour in the Count you need only suggest a cup of coffee any time in the day or night to be instantly accepted and to learn that "it is talk that matters". Actually, he does this rather well. In fact, it's rumoured that he is paid retainer by local bistros to attract custom.

Motto: "The pen is mightier than the sword, but the tongue can lick 'em both!"

Another view of Parish's Motto



Alan Patterson

President of M.U.A.S.S. and specialises in persuading apathetic slob to participate in Open day, Prosh, Orientation Week etc. Has a vitriolic tongue which is used mercilessly on lecturers, barmen, Andrea and the afore-mentioned slob. Quite partial to sultanas, rice and rum as nightcap for his pre-breakfast sleep. Major feats this year getting Humph. to a 9 a.m. lecture.

Peter Quinn

"Quanga", the daddy of the year is often to be seen pushing a pram and walking with his wife through Toorak Village on a sunny Sunday afternoon. Of his wife he says "She's an aid to study" and of his daughter "She's replaced my wife as master of the house".

Peter joined the faculty after a successful Diploma course at Dookie where he's earned a reputation as the most "conchie" man of the year. He showed he had lost none of this ability by gaining an Exhibition in first year. He decided to crown this feat by marrying his "childhood" sweetheart at the beginning of last year. Described by some as an "Eternal Optimist", he has never considered failure and can speak without authority on any subject.

Peter Rogan ("Rocker")

Pete has the enviable ability to discern and exploit the humorous side of life. His quips are many and varied and particularly discouraging for lecturers less well equipped.

One of the most memorable occasions in Pete's career (memorable as far as everyone else was concerned) was a celebration in the Dookie river paddock after which there was vigorous betting as to who would die first – Harry Joiner or Pete.

Pete and Harry are both enthusiastic member of the Melbourne University Rifle Club (perhaps this is more than pure coincidence), an institution that seems to have a social life totally incompatible with its normal function. They both competed at the Intervarsity competitions in Sydney this year, a description of their activities being “shot well” (or was it the other way round).

Pete came to his nickname after our first ding with the Mooroopna nurses – seeing him dance being one of the evening’s startling events (ask Bob Sammons about the other). Pete followed up by purchasing a radiogram and many “jam sessions” were held in his room at Dookie – when to the delight of Alan A. Patterson, the dweller of the room next door (who doesn’t even dig Brubeck). Pete is interested in fisheries and wild life – the latter we can understand, but the former has us more worried.

Gilbert Begbie Stokes

Beware Gil when he has that earnest blinking look. It has misled squadrons of naïve students, male and female – especially the latter. Incredible how conversation can creep around from “religions of the world” to your pretty dress in the space of minutes with neither tempo or intonation changing. And, of course, lecturers and policemen are not exempted either. Classically satisfying in simplicity and purity was the “cover-up” gambit used on summer’s night on the Yarra Boulevard. “**But** surely, Officer, it’s rather hot – so my wife and I thought we would stop and cool off a bit before driving home”.

Ubiquitous to a degree and a firm believer in A.A.A.F. conferences (Gil was the only student at the Perth Conference with a leg in plaster) this man could surely be recommended as a P.R.O. – for he can become absorbed in that subject at the moment. Although by now most of the rough edges have been knocked off, we Ag. students must admit defeat when it comes to Gil’s dancing technique. A fanatical exponent of the Zoom Zoom style of dancing, Gilbert’s locus of movement along the perimeter of the floor delineates the amused from the bemused. For the first time it is startling to see and clock Gil’s outer orbital regularly occupied by that rotating couple.

Favourite statement: Obviously, but surely.....

Tony Tehan (Ants)

“Ants” must now surely be famous throughout the Metropolitan area and North east for his shattering renditions of “Allouette”, starting around 11 p.m. at most parties.

Tony is perhaps the most notable sportsman in the year. At Dookie, he participated in everything – from golf to the Ritz Milk Six – being one of the few survivors of that catastrophic event.

His efforts with the bat and ball are well remembered, his bowling in particular by those men around square leg. It is said that one day he tossed up an especially vicious ball and the batsman ran a sneaky single waiting for it to hit the pitch. Certainly he’s the only cricketer to bowl a maiden of three long-hops and five donkey drops and collect a couple of wickets on the way.

Tony startled us all by playing golf with right hander’s stance and a left hander’s grip but still seemed to find the hole fairly smartly (perhaps because he was often partnered by Bob Sammons whose advice would prove invaluable).

Tony was keen footballer, but shows remarkably poor judgement in being a Collingwood (They’re NOT dirty!) supporter. He also has an affection for the nags, but hasn’t cracked the perfect system yet, as far as we know.

His capacity vies with the Eildon Weir alongside which (and submerged by) is the family farm where “Ants” will return after graduation.

ARE YOU A GOOD AGRICULTURAL SCIENTIST?

ROGER PARISH, B.A. and BAR

Psychology has had a profound effect on the life of man and psychoanalysis has played no small part in this assault on our sanity. In some cases the psychiatrist's couch has been dispensed with and self-analysis has taken over. This step has been made possible by ingenious tables of questions and answers devised by people with a truly remarkable grasp of human nature. Such questions as "Am I a good wife?" or "Is my social status satisfying?" may be swiftly answered by the person concerned for the ridiculously low price of a popular magazine.

An awareness of these facts has led me to feel the agricultural scientist's need for such a "reckoning stick". I have attempted to provide for this need with the chart below.

QUESTIONS.

1. If you were driving along and noticed a cutting showing a superb soil profile, would you:
 - A. Study it as you drive by?
 - B. Stop the car for a closer look?
 - C. Keep your eyes on the road?
2. If you were invited to a party put on by a mob of Agricultural Scientists would you take:
 - A. A luscious blonde?
 - B. A plate of cakes?
 - C. Nothing?
 - D. A mug?
 - E. Refuse the invitation due to other commitments?
3. If a wealthy farmer came to you with a problem would you:
 - A. Be honest and tell him you didn't know the solution?
 - B. Pretend you did?
 - C. Marry his daughter?
4. An area has an annual rainfall of 60", would you recommend:
 - A. *Phalaris tuberosa*?
 - B. A row boat?
 - C. Selling out?
 - D. Dairying?
 - E. Stop irrigating?
5. Can an Agricultural Scientist marry his widow's sister?
 - A. Yes?
 - B. No?
6. A tractor refuses to start; would you:
 - A. Put some petrol in it?
 - B. Call a mechanic and take the day off?
 - C. Call the tractor a "b....." and kick it?
 - D. Laugh off your misfortune and sue the tractor company?
 - E. Take up extension work?
7. A grazing trial has been set up using hippopotami on a cocksfoot and rape (Giant Kangaroo strain) pasture. What would be your first step in determin-

ing the standard deviation from the mean of the results?

- A. Ignore the square on the hippopotamus?
 - B. Ignore the trampling effects of the cocksfoot?
 - C. Root the cocksfoot or rape?
 - D. Write to Prof. Forster?
 - E. Replicate?
 - F. Take away the number you first thought of?
8. Students are not allowed to have cars at Dookie Agricultural College; to overcome this would you:
 - A. Tell "X" they're bluffing and then use his car?
 - B. Buy a car to demonstrate your feelings?
 - C. Move to Derrimut?
 9. If a fellow agriculture student were to collapse would you treat him or her for:
 - A. Over indulgence?
 - B. Ovine prosthitis?
 - C. Black's disease?
 - D. Sclerosis of the liver?
 - E. Pregnancy?
 - F. Ignore the case?
 10. You are asked why you chose to take a degree in Agricultural Science. Would you reply:
 - A. Madness runs in the family?
 - B. You didn't know about Ag. Chem.?
 - C. It's the first course in the handbook?
 - D. Your uncle did Engineering?
 - E. Your ancestors "squatted" after kicking off their leg-irons?
 - F. Agricultural Science is a fine profession full of splendid people?

ANSWERS.

1. C; but only if you have passed third year.
2. That's up to you, but if A. was possible I recommend E.
3. Honesty is the best policy—marry his daughter. (Take an honest look at an Ag. Scientist's salary).
4. Uncertain about this one as, at time of writing, I'm still an undergraduate. But if doing Agriculture I you can't go far wrong with A., or if Economics II then C. is safe and D. taboo!
5. An Ag. Scientist can do anything—except that!
6. A. is not recommended as the tractor is a diesel, but the question is not really a valid one as no agricultural Scientist is known to have been in this predicament.
7. Any answer permissible, but those who say C. are nuts!
8. C., of course!
9. The correct treatment depends on the environment. During a lecture such a condition would not be unusual and F. is recommended. At any other time, treating for all the above conditions could well be warranted.
10. I like the sound of F.

Prophetic Words in 1962

EDITORIAL

In Australia today we hear almost *ad nauseum* — daily reports of “. . . the possible effects of Britain's proposed entry into the common market . . .” Suffice it to say that whether or not Britain enters the common market we are faced with problems of re-adjustment of production in our economy.

We also have an increasing public and governmental awareness of the need to develop the vast area known as Northern Australia: and looking beyond our own shores we realize our obligation as one of the world's more technically developed countries of helping underdeveloped and economically handicapped countries to prosperity — for our own good as well as theirs.

It is therefore clear that to a greater extent than in the past there will be opportunity of interesting and challenging employment open to able people in shaping Australia's future if not the future of the world.

But if we turn for a moment from looking at the problems as those of the country as a whole we realize that the problems are just as real and important to every individual primary producer in Australia, for in the end it is he who must produce to meet the market demands the government has created. It is apparent that at every level there is a need for people who have a knowledge of basic scientific principles and a training in the economic and sociological application of these principles to primary production.

There was a time when education in any discipline at University level (with subsequent experience) was considered to be sufficient qualification for tackling such problems. Today as any student of the sciences can testify there is little chance of gaining an appreciation of (not to mention formal training in) economics or psychology — or even the history and philosophy of one branch of science.

Here then is the particular value of the training for an Agricultural Science degree. It not only embraces the whole of biology but most of the other sciences to the considerable extent to which they affect the practice of agriculture.

Further than this it also devotes a large part of the course to economics, the history of agriculture, and the sociology of agricultural application.

While such a course can never produce graduates to compete on equal terms with those of specialized courses, it undoubtedly provides a very well-laid, broad foundation for later experience to build on. The graduate of such a course is well equipped to tackle our problems. The very least that could be said is that he knows where to find and how to integrate specialized knowledge from other sources.

And yet even though the agricultural scientist may have these qualifications he must not rest, self-satisfied and contented. It is in his own interest and in the national interest for the community to be shown that what many regard as the weakness of a broad training is in fact its greatest strength.

The surest way in which this can happen is for the practice of Agricultural Science to become recognized as a profession. The way is being pioneered at the moment.

At the international level we find the Agricultural Scientist in bodies like F.A.O. or directing the implementation of foreign aid operations. On the national level we have the growth of associations like the Australian Society of Animal Production, the Australian Agricultural Economics Society and more generally the Australian Institute of Agricultural Science.

But vital though these organizations are they largely preach to the converted.

The important task is to achieve acceptance by the community at large whom we will be serving, in the same way as the established professions like Law, Engineering, Medicine or Architecture are accepted.

We need the common meeting ground at business and personal levels, a need which the proposed establishment of such places as Clunies Ross House — a centre for all scientists — will help to fill.

To the individual, opportunity presents itself daily and it is this we must capitalise upon. Only when people fully realize the agricultural scientist's unique position in the country's economy will they seek his valuable counsel.

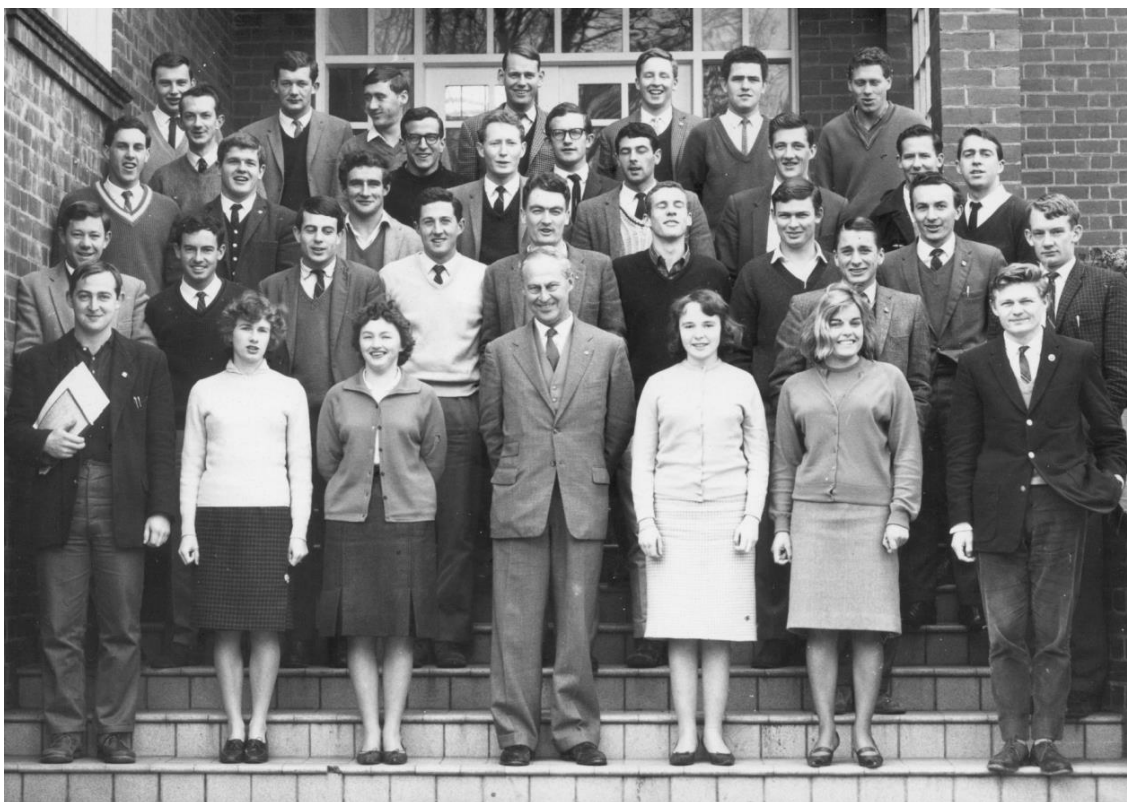
The future of Agricultural Science as a profession is in our hands.



Graduation

A total of 38 students completed the final year of Agricultural Science in 1963. The photo below was taken on the steps of the Agriculture building at Melbourne University shows 26 students from the 1961 Dookie year. Ian Barger, Barry Croke, Ian Hore and Bob Sammons were absent when this photo was taken. The other students shown were those who were completing their degrees from previous years.

Final Year Agricultural Science Students, University of Melbourne 1963



Front Row: H.Burton, Kristin Schneider, Rosalie Coomer, Professor H.C. Forster, Andrea Wilcox, Sue Simmonds, P.Quinn
Second Row: G.Stokes, J.Donnelly, A.Humphris, A.Tehan, A.Lamb, I.Auldish, J.Black, J.Cornish, A.Eagle, A.Patterson
Third Row: N.Welsh, P.Campbell, H.Edgell, J.Griffiths, R.Gray, R.Edgar, B.Norton, H.Birrell, H.Poussard, J.Bray
Back Row: P.Rogan, I.Fletcher, J.Treloar, H.Joiner, A.Molesworth, R.Parish, J.Aldrick, P.Towns

The final examinations at the end of 1963 were held in Wilson Hall for 41 Agricultural Science students (Numbers 11431 (Aldrick) to 11471 (Wilcox)). Exam results were published in the Sun newspaper in early December, and recorded by BWN at the time. My apologies if there are any errors here. Table 1 below shows that 21 of the 29 1961 Dookie Year passed, with another five receiving conceded passes. There were no final grades published for three students, although it is known that two subsequently passed the degree.

While there were no Honours degrees in Agricultural Science officially granted in those days, a ranking of graduating students may be calculated from the number and level of honours achieved. On this basis, John Black topped the year with Honours in six subjects closely followed by Andrea Wilcox with Honours in five of the ten subjects. These grades were important for the allocation of Commonwealth Scholarships and admission to Postgraduate training at that time.

Graduation

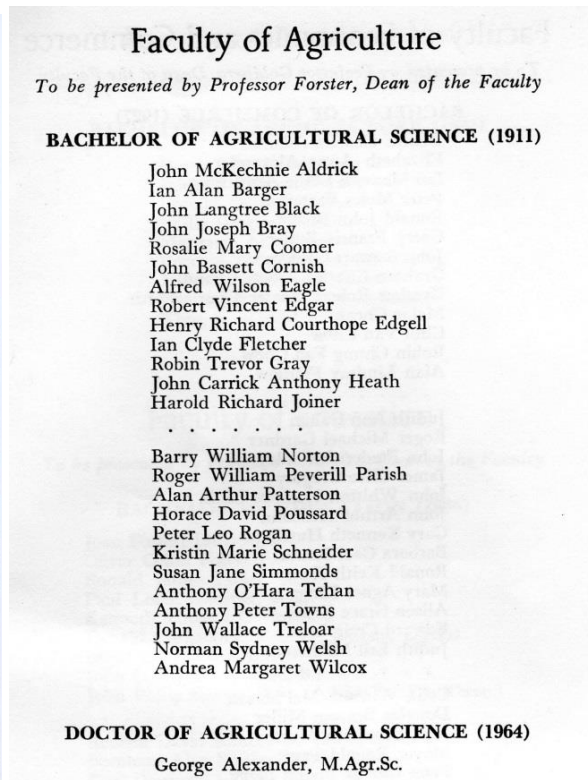
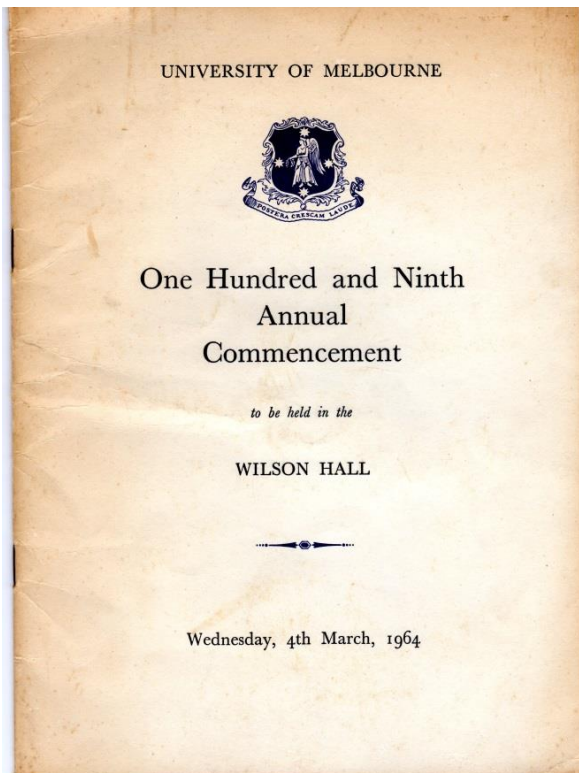
Table 1. Grades for Students completing the Agricultural Science degree in 1963

Surname	Forename	Agriculture	Agricultural Economics	Agricultural Engineering	Animal Health (P Only)	Animal Husbandry	Bacteriology	Biochemistry	Botany	Horticulture (P Only)
Aldrick	John	P	P	3 rd	P	X	P	X	P	P
Auldish	Ian	3 rd	P	P	P	P	P	P	3 rd	P
Barger	Ian	3 rd	3 rd	P	P	P	P	P	P	P
Black	John	2 nd	2 nd	3 rd	P	2 nd	2 nd	P	2 nd	P
Bray	John	P	3 rd	P	P	P	P	3 rd	P	P
Burton	Harry	P	P	P	P	P	P	X	P	P
Cornish	John	3 rd	P	3 rd	P	P	P	3 rd	P	P
Donnelly	John	P	P	P	P	P	P	P	P	P
Eagle	Alfred	3 rd	P	2 nd	P	X	P	P	1 st	P
Edgar	Robert	P	P	P	P	X	P	P	2 nd	P
Edgell	Henry	P	P	P	P	X	P	P	P	P
Fletcher	Ian	P	P	P	P	P	P	P	3 rd	P
Gray	Robin	P	3 rd	2 nd	P	P	P	P	P	P
Griffiths	John	X	X	P	P	P	X	P	P	P
Humphris	Alan	P	3 rd	P	P	P	P	P	P	P
Joiner	Harry	P	P	P	P	P	P	P	P	P
Lamb	Adrian	2 nd	P	3 rd	P	P	P	2 nd	P	P
Molesworth	Tony	P	P	3 rd	P	P	P	P	3 rd	P
Norton	Barry	2 nd	P	P	P	1 st	P	2 nd	3 rd	P
Parish	Roger	3 rd	P	P	P	2 nd	P	P	3 rd	P
Paterson	Alan	2 nd	P	3 rd	P	P	P	3 rd	2 nd	P
Quinn	Peter	P	3 rd	P	P	3 rd	P	2 nd	3 rd	P
Rogan	Peter	P	3 rd	3 rd	P	P	P	P	P	P
Schneider	Kristin	P	P	P	P	P	P	3 rd	P	P
Simmons	Susan	3 rd	P	3 rd	P	P	3 rd	P	2 nd	P
Stokes	Gilbert	P	P	2 nd	P	P	P	P	3 rd	P
Tehan	Tony	P	P	P	P	P	P	P	3 rd	P
Wilcox	Andrea	1 st	2 nd	2 nd	P	P	3 rd	P	1 st	P

Basis for ranking: Average grade over all subjects where P = 50, 3rd = 65, 2nd = 75, 1st = 85

* Correction: Kristin Schneider gained 2nd class honours in Botany

The official graduation took place in Wilson Hall on 4th March 1964. By this time, many students had taken up work, postgraduate study or were travelling to distant places, and not able to attend the ceremony. There were however 25 graduands who took part, 18 being from the 1961 Dookie year.



A total of 32 students completed the year at Dookie in 1961. Two of these students did not continue onto final year, Nat Italiano transferred to the Science Faculty and completed a Science degree majoring in Bacteriology and Organic Chemistry in keeping with his family interests in the Cheese Industry. Mick Foster did not continue onto 3rd year, and his whereabouts is unknown. Roger Hart did not complete the degree, failing to pass Agricultural Chemistry in 3rd year. However, the biographies of both Nat Italiano and Roger Hart have been included in the following section in remembrance of their Dookie years.

As shown above, there were 26 students who passed the final examination in 1963, but only 18 who were presented at the Graduation Ceremony. The missing eight graduates were granted *in absentia* degrees of Agricultural Science. The remaining three students from Dookie (Croke, Hore, Sammons) completed degrees at a later time.

Further details of the lives and times of these graduates may be found in their biographies presented later in this book.

Graduation

Reunions

After the end of final year exams in 1963, many graduates moved interstate or overseas in furtherance of their careers, losing contact with most of their colleagues. It would be 40 years since we had been at Dookie before the first reunion was held in 2001. John Cornish and Barry Croke were the organising force behind this and later reunions, the first being held at Dookie College and subsequently at the Downtowner Motel in Lygon Street, Carlton in Melbourne. It was decided after the second reunion in 2011 that, given our increasing age (and frailty), reunions should be held every two rather than ten years. The next reunion will be in 2017. Some photos and recollections from these reunions are shown below.



Back: J. Donnelly, H. Burton, J. Griffiths, I. Auld, T. Tehan, I. Barger, B. Croke, A. Patterson, B. Sammons, P. Rogan, B. Norton
Front: Sue Simmonds, Kristin Schneider, Andrea Lindsay, J. Cornish, David Smith, R. Parish, H. Edgell, A. Humphris

Reunion at Dookie College 2001

This reunion was held at Dookie College on Saturday 10th March with some 30 colleagues and their partners turning up. Some drove up from Melbourne and places distant on Friday and stayed the night in a Shepparton Motel, where they met long lost colleagues for the first time over breakfast the next morning.



Chatting with old friends



Barry Croke describing recent history of the College

A barbecue lunch was held on the lawns outside the Zoology laboratory where old friendships were re-established, and tales of life's experiences exchanged. Barry Croke, as

Reunions

past Principal of Dookie College, gave us an interesting tour of the farm, its facilities and recent history. Much had changed since our time there in 1961 (see earlier). We were also fortunate to have Dr David Smith, our previous lecturer, guide and mentor at Dookie, join in the celebrations.



The after dinner “tall” stories

A dinner was held that night and attended by most, after dinner entertainment being provided by telling each other stories, true or false, about one of our “Dookie” mates. Many closely held secrets about our lives at Dookie were exposed that night to the wives who could scarcely believe such stories of their respected and loving spouses. This meeting was declared a great success by all who attended, and it was decided that another reunion should be held ten years on, in 2011.



The long suffering partners as photographers

Record of Attendance: Sue Aldrick (Simmonds), Ian and Jan Auldish, Ian and Margaret Barger, John Black, Harry Burton, John and Jan Cornish, Barry and Margaret Croke, John and Christine Donnelly, Bob Edgar, Henry Edgell, John Griffiths, Alan Humphris, Barry and Jan Norton, Alan and Susan Patterson, Roger Parish, Peter Rogan, Bob Sammons, Kristin Schneider, David Smith, Tony Tehan, Andrea Lindsay nee Wilcox.

Reunion at Downtowner 2011

This reunion was held on Friday 18th November in the downstairs bar of the Downtowner Motel in Lygon Street, Carlton. Those from out-of-town and interstate usually booked in on Thursday night or Friday morning, staying overnight. The casual gathering started about lunchtime with light snacks being offered as the afternoon progressed. This was a time when John Cornish could organise, through emails, a wider audience than previously. There were again about 28 attendees including partners and wives, with some new faces and some old ones lost. Alan Patterson and Ian Barger had passed away in the meantime. Ian Hore and his wife Cathy attended for the first time .



Bob Edgar regaling the audience with tales fantastic



Enthralled listeners, Christine and John Donnelly

The Agricultural Science Graduate Class Reunion 2011



Back: R.Moran, A.Humphris, R.Parish, T.Tehan, J.Griffiths, H.Edgell, J.Black, I.Hore, I.Auldish,,
B.Sammons, B.Norton, R.Edgar, P.Rogan

Front Row: B.Croke, J.Cornish, **D.Smith**, Kristin Schneider, J.Donnelly, H.Burton

Dr David Smith also attended to share his stories with the group, having risen through the academic ranks to Director of Agriculture for Victoria, and advisor to Government on matters of agriculture and rural society.

After a short break, celebrations continued that night over dinner in the Downtowner restaurant, and all agreed that this was a most enjoyable occasion thanks to John Cornish and Barry Croke.



Free flowing libations at dinner



Wives compare notes

Record of Attendance 2011 – Ian and Jan Auldlist, John Black, Harry and Cecilia Burton, John and Jan Cornish, Barry and Margaret Croke, John and Christine Donnelly, Bob Edgar, Henry Edgell, John Griffiths, Ian and Kathy Hore, Alan Humphris, Ralph Moran, Barry and Jan Norton, Roger Parish, Peter Rogan, Bob Sammons, Kristin Schneider, David Smith, Tony and Joan Tehan.

Reunion at Downtowner 2013

This reunion was also held at the Downtowner Motel on Friday 11th October, where the afternoon was spent in the public bar catching up with old colleagues and friends. The atmosphere was casual, with some drifting in late, and others leaving early.



Bob Sammons, Ian Fletcher, Tony Tehan and Alan Humphris telling tall stories



Henry Edgell and John Donnelly chatting

Ian Fletcher attended our reunion for this first time, and commented afterwards to John Cornish that “it was a highlight of his later life”. Adrian Lamb also attended briefly for the first time having not long returned from Thailand to manage the family farm near Deniliquin, NSW.

The Agricultural Science Graduate Class Reunion 2013



Back Row: John Black, Ian Fletcher, Ian Hore, John Griffiths, Henry Edgell, Barry Norton, Bob Edgar
Front Row: John Donnelly, Tony Tehan, Roger Parish, Barry Croke, Alan Humphris,
John Cornish, Ian Auldlist, Bob Sammons

As usual, a dinner was held in the formal dining room of the Downtowner, and was well attended by those staying in Melbourne for the night.



The Support Team Poses

Attendees 2013 – Ian and Jan Auldlist, John Black, John and Jan Cornish, Barry and Margaret Croke, John and Christine Donnelly, Bob and Helen Edgar, Henry Edgell, Jan Foote (Derek Tribe's Masters student), John Griffiths, Ian and Kathy Hore, Alan Humphris, Adrian Lamb, Ralph Moran, Barry and Jan Norton, Roger Parish, Bob and Janise Sammons, Kristin Schneider, Tony and Joan Tehan.

Reunion at Downtowner 2015

The reunion was held again in the downstairs bar of the Downtowner Motel in Carlton on Friday 9th October. About 30 colleagues and their wives attended, and a convivial afternoon was spent catching up with friends. It was pleasing to see some new faces, Robin Gray and his wife and Gil Stokes came over from Tasmania to join in the celebration. A moment was spent remembering our colleagues who were no longer with us. In particular, Ian Fletcher had passed away in 2014, not long after attending our last reunion.



John Cornish welcomes the group



Gil Stokes and John Cornish catch up

A dinner was held that night following the afternoon celebrations, and plans made for another reunion in 2017. Thanks again must go to John and Jan Cornish and Barry and Marg. Croke for making this event happen for yet another year.

The Agricultural Science Graduate Class Reunion 2015

(Note: Less able to organise themselves into cohesive group)



Standing L-R: Henry Edgell, John Black, John Donnelly, Robin Gray, Barry Norton, Alan Humphris, Ian Hore, Peter Rogan, John Griffiths, Ian Auld, Roger Parish, Bob Edgar, John Cornish

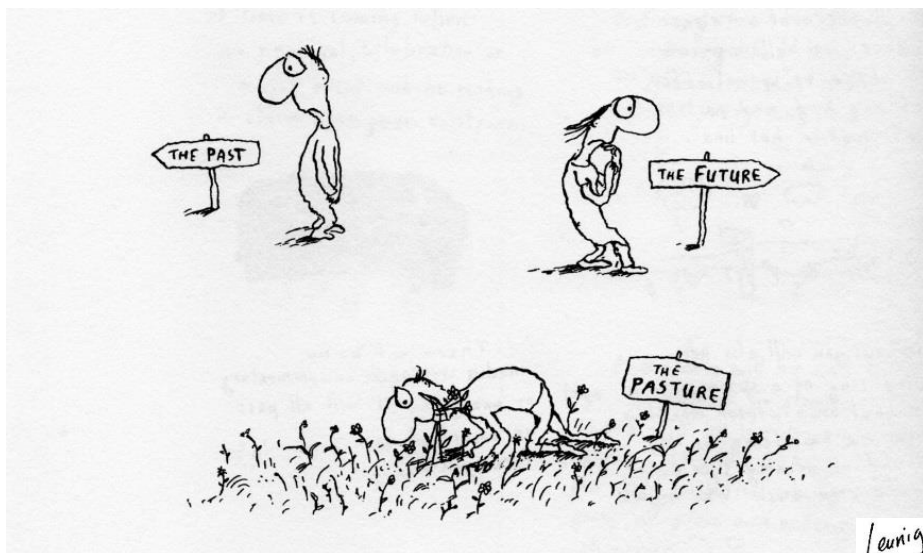
Sitting L-R: Bob Sammons, Barry Croke, Kristin Schneider

Reunions



The Support and Carers Team grows in number

Record of Attendance 2015 Ian and Jan Auldist, John Black, John and Mary Bray, John and Jan Cornish, Barry and Margaret Croke, John and Christine Donnelly, Bob and Helen Edgar, Henry Edgell, Robin and Judy Gray, John Griffiths, Ian and Cathy Hore, Alan Humphris, Ralph Moran, Barry and Jan Norton, Roger Parish, Peter Rogan, Bob and Janise Sammons, Kristin Schneider, Gil Stokes.



Autobiographies of Agricultural Science Graduates of 1964

There were 32 of us who spent the year at Dookie College in 1961 as part of our Agricultural Science degree. Since then seven of our number have passed away, and in honour of their memories, many of their wives and friends have provided biographies for this book. The only colleague missing from this list is Harry Joiner, no contacts could be found for him to make the list complete. Another seven colleagues could not be contacted (John Aldrick, Sue Aldrick nee Simmonds) or did not wish to contribute. There were also people who had attended Dookie at an earlier time but completed their final year with us. They were also invited to submit biographies for inclusion in this book. Consequently, Peter Quinn, Robin Gray and Henry Birrell have generously provided their life stories.

It is hoped that these autobiographies will highlight the significance of our graduates in the shaping of the science of agriculture in both Australian and International arenas, and recognise their contribution generally to the social and economic fabric of Australian society.

Ian H. Auld

Ian Auld was a man of many parts, generous, frank, sporty, hard-working, a loving family man, cynical, a scientist and environmentalist, but mostly a good bloke. His career as an agriculturist applied all these skills, using science to improve the practice and productivity of agriculture in both Australia and developing countries. His considerable achievements during his life time were not topics he liked to discuss, but they were recognised by all who worked with him. Some mention is made of these achievements in the eulogy shown below given by his son George. Ian Auld passed away in the Hay Hospital after a short illness on the 25th February 2016.



Dookie 1961



Ian in action with students from Western Illinois University who visited Hay and Shear Outback in March 2015



Winilba October 2015

In Memory of Ian Auld

Ian Auld was a gentleman, or more often described as a good man who will be genuinely missed by family, friends and the Hay Community.

He led a full and happy life of achievement. He was a dependable man who was tough, smart, annoyingly cheerful, and funny to the end. Kind and patient, generous and very energetic.

He did not waste a single minute of his life. Ian liked a joke, a play on words or a provocative statement just to get people thinking.

He was a modest man who was unwilling to draw attention to his own achievements or abilities. He also gave of his time generously and had an empathy with disadvantaged people and a great interest in people from all walks of life. He remembered fondly the names of most people he ever met and in particular all those he played footy with.

Ian Auld was born on September 3, 1942 to Presbyterian Minister Cliff and Elsie Auld. He was the middle child of five siblings and his childhood and early family life in Tasmania and then Frankston was one of well-founded religious instruction, academic discipline, sport and motivation to undertake a good and full life. This upbringing set him and his siblings up for a life of happiness and success. It may have contributed to his frugal way and love of simple things like fish fingers, dim sims and tartare sauce.

Ian's liking for farming and sheep started with many childhood visits to his cousin's farm in Birchip in the Mallee. This made a decision to study Agricultural Science at Melbourne University very easy and opened up unlimited possibilities of travel and adventure.

His first employment was with the Rutherglen Ag Department where he got the job as long as he played football. He went on to win the best and fairest for Rutherglen in the Ovens and Murray footy League. He also worked in Government roles in Brisbane and NT, which

also included stints at Sherwood Districts and Darwin Buffalos footy clubs. During his stay in NT he worked in Boroloola for two years on a station mustering and bull catching. This is where he gained his love for horses, in particular rodeo and his subsequent involvement with the Hay Rodeo Club.

Farm management and the lure of a football coaching job with Barham brought him south, where he won the Barham best and fairest and also met and married Jan. From here they, along with Kylie, went to Fowlers Gap north of Broken Hill to manage the property for the University of NSW. Seven happy years and three more kids, George, Jack and Bill.

In 1978 they purchased a farm at Hay – Winilba. Ian loved living in Hay, he always dreamt of owning his own farm and having a place the family called home. He loved being part of the Hay community, knowing everyone and contributing to it.

During the past 40 years while living in Hay, Ian also worked and lived overseas at different times in developing countries such as India, seven years in China, two years in Bhutan and two years in Pakistan. Essentially the jobs involved working with government projects in poor countries to teach farmers and advisory groups better farming techniques to reduce poverty. This involved advising and designing technical packages and policy for livestock production and marketing, environmental rehabilitation, poverty alleviation and sustainable land use management.

Jan and the family joined him for most of the trips where they experienced beautiful parts of the world and met many wonderful people. In 2006, Ian was awarded a **Certificate of Friendship by the Chinese Government** in appreciation for his long contribution to Chinese rural development.

Ian, with Jan's help, continued to expand the farming business at Hay while also becoming involved in other community activities. For over 40 years he championed sustainable agriculture and NRM issues in the Western Riverina where he was founding member of Hay Landcare. He was also a member of the board of Riverina LLS from its inception. He leaves behind a legacy of consideration and care in the management of agriculture and natural resources in the rangelands settings. Ian was generous with his time and enjoyed volunteering for things that interested him including Shear Outback and Hay Football Club which took up a lot of his time in the last few years.

He was acknowledged by the community when he was awarded **Hay Citizen of the Year** on Australia Day 2009.

He also had many interests, including music, playing the guitar, harmonica and singing with his daughter Kylie, Aussie Rules, cricket, tennis, reading, writing, sailing, photography and collecting endless agricultural newspaper cuttings. Ian never stopped learning, reading or thinking and did not believe retirement would be possible as he never considered what he did to be work. He loved working on the farm, he never got angry or frustrated and was always encouraging and positive.

Ian's motto later in life was "never tell anyone what to do" which served him well. His advice to his children was "if things get tough and you think you can't keep going and you want to give up, just remember, you can get used to anything".

Ian will be lovingly remembered by wife Jan, kids, Kylie, George, Jack and Bill, partners, Brett, Verity, Nadia and Jade, grandkids, Reg, Jimi, Joyce, Eddie, Archie, Grace, Joe, and Bobby. Siblings Marion, Alex, Jeanie and Alison. The family would like to thank Hay Hospital staff and many other wonderful people for all their kindness and generosity.

George Auld

March 2016

Ian Barger

Ian was born in Melbourne in May 1942, the eldest of four children. His father Alan was a civil engineer and his mother Ada was a teacher. Ian was granted a Commonwealth Scholarship and completed his Agricultural Science degree (1960-1963) and Diploma of Teaching (1964) at the University of Melbourne. He was bonded to the Education Department for 3 years, and with his wife Margaret, taught at Tallangatta for three and a half years. Although a city boy, he revelled in the abundant opportunities for shooting foxes and rabbits, and for fishing. In May 1968, Ian and Margaret went to Armidale, NSW, where Ian had accepted a position of experimental officer at CSIRO, Chiswick, working with Dr Bill Southcott. During his 28 years at CSIRO, he rose to be a much respected Senior Principal Research Scientist.

Ian combined scientific work with a lifestyle on sixty-five hectares outside Armidale. He grew his own vegetables (we even provided Coles with beans one year), killed his own meat (Murray Grey cattle), milked the cow and had fowls too. This was to drastically reduce living costs so that we could repay the personal loan on the farm as quickly as possible. We could not get a bank loan. Ian bought a business "Armidale Pest Control" which he ran in his spare time for three years. With his children, Andrew, Kate and Peter, he enjoyed blowing up tree stumps, target shooting, fencing, building cattle yards and breaking in horses bred on the property. There was never a dull or idle moment. These activities provided him with the time to think as he worked with his hands.

Ian contributed to the community by being president of the secondary school P&C, he even appeared in a fashion parade. He formed a Progress Committee to keep a park open and prevent cheap Government housing being built there. He was successful. He was noted for his laconic humour and practical jokes. He had an ability to communicate without offence, he could reduce aggressive folk to a speck of dust with his humour. He had a particular skill of being able to communicate complex scientific ideas so that they could be easily understood. In the late eighties, Ian implemented a short-term rotational grazing system to aid worm control in sheep and goats. This program initiated first in Fiji, and later, in many other tropical countries.

He travelled widely overseas, including a year's sabbatical research in Maine, USA. In retirement he continued his busy life, talking to farmer groups and conferences all over Australia. He joined a Sporting Shooters' Club, read extensively as he had always done (both fiction and non-fiction) and dabbled in the share market. He had a keen interest in current affairs and a formidable general knowledge. He was forever surprising people with quotes from a song (he loved country music), a poem or the Bible.

Ian loved his grandchildren. His delight in them was displayed with a quiet presence and involvement he brought to things that mattered to him. He was always ready to read them a story, take them for a ride on the tractor or motor bike. He had an ability to engage with them at their level, so that his devotion to them was reciprocated. They knew him as "Opa". His dogs also gave him great satisfaction. He had requested a Beagle from me for a wedding present. During 44 years of marriage, he always had a dog. He walked around our hilly farm daily for more than an hour with a rifle and a dog at his side.

Ian's calm reaction to the unexpected was reflected when diagnosed with a non-operable terminal lung cancer, saying "Well of course. I have smoked heavily for forty-five years". He died peacefully at home, on the farm. He called out my name, at 12.30 on Anzac Day. I held him in my arms, and he died, aged sixty-three years.

Margaret Barger September 2016

Vale Ian Barger

May 1942 – 25 April 2006

Ian Barger joined CSIRO's Chiswick Laboratory at Armidale in May 1968 to work in the Parasitology Group. He continued at Chiswick for the next 28 years developing a reputation in parasitological research that made him a highly respected expert in Australia and overseas. Ian's "larrikin" approach belied a genuine curiosity in science generally. "Down to earth", is another phrase often used, very aptly for an agricultural scientist, but it reflects Ian's real loathing for pretension. Ian's early research on the physiological and nutritional basis for impaired wool growth in worm-infected sheep was classical stuff – very well designed, conducted and interpreted. Equally significant was Ian's observation that sheep which were resistant to infection produced less wool when subjected to larval challenge. This spawned a whole sequence of investigations, and controversy, which continues to the present day. From the late 70s through the 80s, Ian researched the population biology of sheep nematodes and pioneered the formulation of mathematical simulation models. Subsequently, Ian's knowledge and creative ideas were crucial to the development of the "Wormworld" model and its application.

Ian's seminal work has been described as the "gold standard" for mathematical modelling and predictions. Among Ian's most important scientific legacies are his excellent scientific reviews. These are without exception, clear and complete interpretations of the state of knowledge, elegantly written and often containing thought-provoking ideas to challenge orthodox thinking. As well as being a gifted writer, Ian was one of those rare scientists who had the ability to explain complex theoretical concepts in understandable terms, and relate them to the practical issues of worm control. This was welcomed enthusiastically by graziers, extension workers, consultants and industrialists alike. His willingness to "travel the circuit" in Australia and New Zealand getting an extension message across was really appreciated.

Above all, Ian's hallmark was the dry wit and intelligent, sardonic humour with which he peppered his interactions with us all. His kindness, thoughtfulness and care in mentoring, and humility are all qualities that he brought in abundance to our scientific world and enriched our lives. In a farewell email to all staff in 1996, Ian's words describe his career memorably:

John Steel, CSIRO Chiswick



Today is my last day in CSIRO after 28 years service, which saw me progress from a junior Experimental Scientist to Senior Principal Research Scientist. How does it feel?

First, real gratitude to CSIRO for giving me the opportunity to develop an absorbing, successful and rewarding career doing research on the most economically important diseases facing the Australian sheep industry – those caused by worm parasites. Secondly, pride in the achievements of the team of which I was a member; a team that can be fairly described as the most successful multi-disciplinary team ever to address the challenges posed by parasites of grazing livestock anywhere in the world.

Thirdly, regret at the end of my professional association with some of the most intelligent, committed and dedicated people one could ever hope to meet.



Henry A. Birrell

Henry provided the following information about his life.



Henry Birrell 1963

It hasn't always been easy. However, I spent some productive years studying the way sheep grow wool at a Research Station near Hamilton in Victoria. I married Marjorie in 1965 and we have three children – Simon, Fiona and Elise – and now have seven grandchildren. We lived at Hamilton until 1972. I collected lots of data on sheep and wrote and published 30 research papers. An accolade about this research was extended to me by the late Professor Derek Tribe (see below).

During our life in Hamilton, I was diagnosed with Multiple Sclerosis. Heat stress became a problem, so we decided to leave Hamilton for Melbourne around 1982. After I retired in 1998, we moved to Tasmania's cooler climate.

LETTER FROM DEREK TRIBE



Executive Director:
Em. Prof. C. E. Tribe, OBE, FTS

Australian Academy of Technological Sciences and Engineering

THE CRAWFORD FUND FOR INTERNATIONAL AGRICULTURAL RESEARCH

OFFICE: Hilda Stevenson House
1 Leonard Street
Parkville, 3052
Victoria, Australia

CONFIDENTIAL

8 September 1988

The Manager, Personnel

Department of Agriculture and Rural Affairs,
165 Wellington Parade, East Melbourne 3003

Dear Sir,

I have been asked by Mr H. Birrell to write to you in support of his application for promotion.

I first came to know Henry Birrell when he was an undergraduate student in the Faculty of Agriculture at the University of Melbourne., and I have subsequently followed his career at the Pastoral Research Institute, Hamilton, and more recently at Werribee. He has worked in several fields (e.g. stocking rates, frequency of feeding, fodder conservation, animal behaviour, food intake, factors affecting digestibility, etc.) in which I have also been active and, therefore, I am familiar with his publications. Over the years we have visited one another and discussed research issues in which we shared an interest.

There are two general aspects of Henry Birrell's career which need to be emphasised before discussing him in relation to the specific criteria used by the Animal Scientist's Assessment Panel.

The first concerns the complex nature of the interactions between pastures and grazing animals.. These interactions, which have constituted Mr Birrell's main research interest for some 20 years, are of the first importance if we are to understand better the principles of grazing animal management. However their complexity means that it is extremely difficult to develop experimental designs for their identification and analysis. For example, even such a basic factor as the measurement of pasture intake by grazing stock is technically difficult and is still a topic of scientific controversy. This has meant that mathematical modelling techniques have had to be developed which depend for their accuracy on the quantity and quality of experimentally derived data on which they are based. Only a small number of research scientists have continued to work in this field for long because, one suspects, there are quicker and easier research "pickings" to be obtained in pasture agronomy or animal nutrition and so there is little incentive to tackle the more difficult "no-man's-land" of pasture:animal interactions.

Autobiographies

The second general point is that Henry Birrell is genuinely one of those unusual individuals who do not fit the normal criteria and cannot be easily typecast or placed into well-defined personnel classifications. His value as an extremely able, dogged and original scientific thinker is unusually high. However, that does not mean that he is necessarily an “easy” member of staff, a good team leader, an extroverted communicator or a tidy administrator. To be fair, I do not know about his skills in these areas and so cannot say how good he is, or is not, in these respects. The point I wish to emphasise is that, irrespective of them, his record of research achievement, in an extremely difficult and important field, is so good that he deserves promotion for this alone, and, in my experience, this can be said of very few people. I would not expect him to interview particularly well, but this can also be said of some other outstanding research scientists.

In relation to the key selection criteria used by the ASAP I would like to offer the following comments:

(i) Qualifications: Henry Birrell has a Masters degree and his research publications are much more than would be required for a Ph.D. Indeed, it would not be unexpected that Mr Birrell might submit his publications in the foreseeable future for the award of D. Agr. Sc.

(ii) Standing: There is no doubt that Henry Birrell is highly regarded nationally as a specialist in pasture/animal research, and increasingly his work is gaining him high respect internationally. For example, references to his work are commonly made in papers published in national and international journals. To confirm my impression of his standing as one of the “foremost experts” in his field, I have sought the comments of senior scientists in Sydney, Armidale and Canberra. Each of these persons, unhesitatingly expressed the highest regard for Henry Birrell’s research. Two stated that they had acted as referees for international journals to whom he had submitted some of his papers and they had strongly recommended that his work deserved publication. Another told me that he had used Birrell’s data in his own modelling research and found it totally reliable. All agreed that he is one of Australia’s authorities in this field.

(iii) Achievements: The above comments reflect Birrell’s achievements but it should also be acknowledged that his work on the biological interactions of grazing systems have made extremely important contributions to our understanding of such basic problems as: the control of food intake; compensatory growth; dietary selection; the use of food supplements; and pasture digestibility. In the development of his experimental techniques and the use of mathematical procedures in design and analysis Birrell has shown ingenuity and innovativeness of an unusually high order. Of course, in the course of his work, he has been helped by many others, particularly scientists in sister disciplines. However, credit deserves to go to Henry Birrell for the way he has master-minded his own research program and has used help in relation to his own research problems.

(iv) Knowledge: It must be self-evident from his publications and the above remarks that his specialist knowledge and breadth of understanding about grazing systems is of the first order. He is an inter-disciplinary scientist of unusual distinction.

(v) Creativity: Perhaps it is sufficient to say that I know of only 2 or 3 scientists in Australia who have shown as much innovativeness and originality in grazing systems research as has Henry Birrell.

(vi) Communication: In terms of scientific communications through published papers or personal discussion I rate Birrell very highly. However he is not the sort of person I would expect to have a big effect on farmers or on non-scientific audiences in general. Every organisation like DARA can, and should, afford to have a few specialist “boffins” whose value (and it is a high value) is in their specialist scientific skills. Such individuals should be confined to research stations as stimulators and innovators, to communicate with other scientists (research and extension), and they should not be expected to play an important role in “general communications”.

(vii) Leadership etc: From all the above I hope that it is clear that Henry Birrell is a respected and effective leader in research. His work, and his approach to it, has been extremely influential among research colleagues and has undoubtedly made a considerable impact. I cannot say to what extent he has participated in staff development programs but, in terms of influencing young research scientists, I imagine that he has been effective.

In summary, I strongly support Henry Birrell’s case for promotion and, although I regard him as an unusual case, I hope the Panel will have no difficulty in recognising his outstanding merit as a notable contributor to one of agriculture’s most important and complex research areas.

Yours sincerely

D.E. Tribe (Executive Director)



Post Script: Professor Tribe’s letter was high praise for Henry’s research which formed the basis for building models of grazing systems which are now used by both farmers and scientists to better manage animals and pastures in the Australian environment. BWN

John Langtree Black

I received a Victorian Department of Education scholarship and commenced an Agricultural Science course in 1960. The broad Agriculture degree was great as it covered so many disciplines combined with wonderful practical experience, particularly during the second year of the course at Dookie.

The year at Dookie cemented so many truly great and long lasting friendships. I worked on farms during university holidays, first on dairy farms in the Yarram district and then during the last two years of our degree with Barry Croke at Jack Vallence's farm in the Mallee near Pier Milan. Barry and I learned to do almost anything with farm machinery, from clearing mallee scrub with D8 dozers, ploughing virgin soil, harvesting wheat and oat crops, driving unregistered trucks to the local silo as well as working with sheep and other animals. The picture is testimony of the great time we had in the Mallee.



I completed the Diploma of Education in 1964, but instead of going teaching in schools, Derek Tribe, Professor in Animal Science, convinced the Education Department that I could serve out my bond being a Demonstrator at the University. I was awarded a Wool Corporation scholarship to determine the protein requirements for growing lambs. I had met Claire Moran, a great person and great dancer, during our degree. We married in January 1966. Our first daughter, Sandiellen was born nine months and ten days later!! Our second daughter, Penny-Jo was born at the end of January 1968. We moved to live in Werribee in early 1968 and I completed my PhD studies in early 1970 after spending one year lecturing full-time.



Graduation 1964

My PhD involved feeding lambs entirely liquid milk-based diets infused into the abomasum to determine their tissue protein, amino acid and energy requirements. In the last experiment, I infused the same amount of milk into either the abomasum or rumen of lambs fed lucerne chaff. Lambs receiving milk into the abomasum grew three times faster than those receiving milk into the rumen. This result greatly influenced my career because it reinforced the importance of the oesophageal groove in animals which fermented feed in the stomach to ensure suckled milk by-passed the fermentation chamber, which led to research with the hyrax in Kenya. The experiment also took me into modelling as a way of

explaining why there were such differences in protein and energy use by the lambs depending on whether the diet was fermented in the rumen or digested by animal derived enzymes.

Claire, the two girls and I had a great time in England. The work on amino acid requirements of calves was fulfilling and we saw much of England, Wales, Ireland and Scotland. A long-term legacy of the trip was our love of malt whisky, which has been satisfied with numerous more recent trips on whisky tours of Scotland; and this year, a whisky tour through Tasmania.

While at the National Institute for Research in Dairying, I accepted a research position at the CSIRO Division of Animal Physiology, Prospect in western Sydney. These were the halcyon days in CSIRO. The Chief of the Division provided me with an Experimental Officer (a scientist with a degree) and a technician and said 'go and research what you please so long as it is related to sheep and wool, and the general facilities for animal and laboratory needs are for your use'. The early days in CSIRO were indeed rewarding. I developed the

skills for computer simulation modelling and made the first model for a milk-fed lamb that explained how genotype, protein/energy nutrient input and hot/cold climates changed growth and body composition of animals. My research, in collaboration with many other scientists from Australia and the world, investigated the fundamentals of tissue/organ growth, wool follicle and wool structure development, the control of diet selection by sheep and the control of feed intake in sheep. The concepts were always integrated using computer simulation models to first show that the mechanisms were well understood and then to apply the knowledge to the grazing industries. During these years at Prospect we had two more daughters, Samantha and Christina and Claire pursued her career in social work establishing sexual assault and sexual disease clinics in western Sydney.

In 1985, I was asked by the Australian pig industry to develop a model for them to replace the static tables of nutrient requirements, which resulted in the development of a program called AUSPIG. This program integrated fundamental biochemistry and physiology for growing and reproducing pigs with feed-formulation software and an Expert-System to provide ready solutions to individual pig enterprises. The model was estimated to result in an NPV for Australia of \$40 million and a benefit:cost ratio of 16:1.

I achieved the highest rank as a Chief Research Scientist and became Assistant Chief and Acting Chief of the Division of Animal Production by the early 1990s. However, I came to believe CSIRO had become a schizophrenic organisation by trying to be 'an honest broker' while receiving 40% of its funds from industries. Consequently, I left CSIRO in 1996 and started a Research Management Consultancy, which I still operate.

I have been extraordinarily lucky with life: a great loving family and a wonderful career. I was awarded the Urrbrae Memorial medal in 1991 for outstanding contributions to the science and practice of Australian agriculture and an Adjunct Professor in Veterinary Science at Sydney University in 1997. I became a member of the General Division of the Order of Australia (AM) in 2001 for contributions to science and bushfire safety. I was granted the American Medal of Honor for contribution to Animal Science, and elected amongst the 2,000 Outstanding Scientists of the 21st Century. I have been made a Fellow of several Australian professional societies including: Australian Academy of Technological Sciences and Engineering; Australian Institute of Agricultural Science and Technology; Australian Society of Animal Production and the Nutrition Society of Australia. In 2016, the my colleagues provided me with a Festschrift at the University of Sydney, attended by many old and new colleagues.



John Black February 2016

I have also taken a special interest in preserving the wonderful rock art engravings, or petroglyphs, on the Burrup Peninsula in northwest Western Australia. Burrup Peninsula contains the largest concentration of rock art in the world, with over a million engravings. It has preserved in stone the life and spiritual beliefs of the first Australians living in a changing environment for more than 40,000 years. The oldest known images of the human face, thought to be over 30,000 years, exist on the Burrup. There are images of extinct animals including mega fauna, the fat-tailed kangaroo and the Tasmanian tiger. Rock art on Burrup Peninsula is one of the most significant archaeological treasures of the world, but it is under serious threat of destruction from a huge industrial complex in its midst. I am doing my best through governments and industry to save this Australian icon.

John Bray

I was educated at St Bede's College Mentone by the beach where I spent most of my free time. Latin was one of the more useful subjects offered. Singing lessons were conducted by an enthusiastic young man who had recently returned from a visit to New Zealand and taught Maori songs exclusively. Little did I know that one day I would end up in New Zealand.

I elected to study Agricultural Science at Melbourne University. I enjoyed the course work but was better at playing Aussie Rules football and was awarded "Blues" at Melbourne and Monash Universities. The most memorable year was at Dookie College where I got to know many fine fellow students who helped to celebrate my 21st birthday.



John & Mary Bray
New Jersey 1972

On graduating in 1964 I had no idea about what I wanted to do, so I took a job in the Biochemistry Department at St Vincent's Hospital analyzing patients' blood samples. After a year I realized that I needed to do a post-graduate course and enrolled for a PhD in Lawrie Austin's laboratory in the Biochemistry Department at Monash University. There were two other PhD students in the laboratory and a technician who later became Australia's Chief Scientist. We were assigned our research areas and left to fend for ourselves. This seemed to work because the laboratory produced some original findings in the fledgling field of Neuroscience.

With a PhD in hand in 1969 I set off overseas to USA with my wife Mary and two children for a research position in the Pharmacology Department at Rutgers Medical School, New Jersey, which was housed in temporary quarters at Camp Kilmore. A year later I was promoted to a better-paying lecturer's position and Mary got a job nursing at St. Peter's Hospital. After spending three and a half years in the USA and with two more children holding American passports, we decided that there was no place like Australia and packed our bags.

I was fortunate to secure a temporary research position in the Biochemistry Department at Flinders University in South Australia while I searched for a more permanent job. I was offered a lecturer's position at the University of New South Wales in Sydney and one at the University of Otago in Dunedin, New Zealand. I accepted the latter because I wanted to work with John Hubbard, a Professor in the Department of Physiology who I had met in New Jersey. So once again we packed our bags and headed for New Zealand.

We arrived in Dunedin in May 1973. The weather was freezing and the wall paper in the house we rented moved with the wind. Albeit we settled in, the children enrolled at local schools and Mary got a job at the hospital. I struggled to master teaching physiology to Science and Health Science students but enjoyed doing research with John Hubbard. As the years passed I set up a diagnostic assay for the disease Myasthenia gravis. In the early days this was a gruesome task because I had to extract acetylcholine receptors from human muscle of amputated legs; now it is done with human cell lines. I also co-edited a book called "Lecture Notes in Human Physiology" with my colleagues. It survived four editions and sold over 50,000 copies.

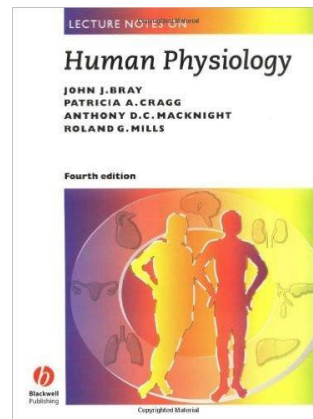
Autobiographies

Highlights of my career were the sabbatical leaves I spent at the Neuroscience Department at Johns Hopkins Medical School in Maryland, USA in 1982, the Medical Research Council Institute in London, UK in 1989 and the Biochemistry Department at Colorado State University in Fort Collins, USA in 1996. I retired as Senior Lecturer in 2001; Mary retired soon after from lecturing at the Midwifery School of the Otago Polytechnic.

By now we were firmly entrenched in New Zealand. We still considered ourselves Australians but barracked for the All Blacks national rugby team. Three of our children had moved back to Australia. We decided to move to a little town called Renwick at the top of the South Island in the centre of the Marlborough's vineyard region. This decision was predicated on many visits to one of my ex-PhD student's vineyard in the area - the Forrest Estate Winery. I extended the house to accommodate a Bed & Breakfast and we have enjoyed looking after overseas visitors, including Barry Norton whose idea it was to compile this series. We welcome other Agricultural Science colleagues of that Dookie year to visit us and explore the wonders of New Zealand.



John Bray Colorado 1996



Lecture Notes on Human Physiology

Harry Burton

A pleasure now, at age 75, is to begin to see myself more clearly within a variety of national and personal contexts. It's nice to have some improvements, at least in perspective, in a life at the later stages of waning physical abilities. Why we took on agriculture, academic or otherwise, as a start to a working life in the beginning of the 1960s is something that life experience helps us now to address. We were the post-war generation that was surfing into life with an eagerness and confidence all of its own. I was deeply confident but had no evident reasons to be so. I did have my father at home, alive and well, after five years in the Middle East and a German stalag. We first met when I was five as he had left on a troopship in the same week that I was born. My mother lived with my grandmother and me on a small orchard at Upper Beaconsfield, Victoria, for the duration of the war.

I took on agriculture from a unique blend of family traditions (my grandmother was a first generation daughter to a successful Irish cattleman who farmed in Keysborough, Victoria, from 1862) and from my own reading. Our second farmhouse at Upper Beaconsfield, bought in 1950, came with shelves of books from the Victorian era and these were my mainstay in self-education. Influential on me were Darwin's "Origin of species", Wallace's "The Malay Archipelago" and Jean Henri Fabre's "Life of the fly", "The Mason Wasp" etc.



Anne and Harry Burton 1967

The agriculture degree recalls for me a blurred period of learning interesting (generally) things and a confused sense of my social place. Not feeling nested in any group I drifted between groups and continued on even more as an individual. Thus I found myself in 1964 working as an agronomist at the Lowlands Agricultural Experimental Station, Kerevat, New Britain, TPNG. Then and now, Cacao production in Melanesia is bedevilled by the fungal disease Vascular Streak Dieback (VSD). In the 1960s we knew it as *Phytophthora sp.*, but since 2007 it has been determined to be the basidiomycete *Oncobasidium theobromae*. I note now that strict quarantine and modified cultural practices can provide "effective control". I am surprised by this as our 1960s group had little confidence by our changes to shade tree plantings, pruning and integrated control. Still, fifty years have gone by and the country is still growing Cacao so something has worked. I always felt that the only economic control measure would be the introduction of resistant varieties. Perhaps that has happened. We did try but plant breeding was a slow process in those days. Too slow for me so I left!

I had been seduced by that singularly menacing assassin bug, *Platymeris rhadamanthus*. It had been introduced to Kerevat from Africa to control rhinoceros beetles (*Oryctes spp.*), which damage the coconut tree meristem. A noble coconut tree, after many decades of life, can be destroyed by one adult beetle flying to the tree crown and chewing! A very small population of rhinoceros beetles can thereby cause significant economic damage. The jet-black and red-spotted assassin bugs have a "confident" air and virulent saliva. One of our farm labourers, whilst feeding them termites as a daily ration, was bitten and had to be hospitalised after his limbs ballooned. I found myself watching these masterly predators with respect and fascination. Next I became a tutor in the Entomology Dept. at the University of Queensland and met more species of the Reduviidae (assassin bugs) as well as many others from the giant variety within the Class Insecta. Brown Lake on North Stradbroke Island was our major live-away field site however; and here I entered the fascinating world of aquatic science. In this brown water (pH 4.5) coastal dune lake the abundant humic acids prevented

any fish species from existing in the ecosystem. This meant that insects, along with tadpoles, dominated the plankton. Diurnal migration, well recognised in the oceans, also existed here amongst the insects. It was clear that extreme environments support specialised, but less diverse, ecosystems. In my next job the ecosystem was as extreme as all but a few on earth. Deep Lake (maximum depth 36 m) in Antarctica is a simple ecosystem. After studying it for more than 30 years, with numerous colleagues, I believe that it has an ecosystem with just two species. The primary producer is the green alga *Dunaliella salina*, which provides for the needs of the red halophilic archaeobacterium *Halobacterium Lacusfrofundi*. Could this large (1 km diameter) and deep lake really have only two species? Yes it can!

I lived near to it for 3 years in spectacular climatic extremes. I measured the vertical temperature profile weekly after rowing out to the centre and recorded water temperatures from +12 to -20°C. This lake lies in the Vestfold Hills, Antarctica, and is the result of a coastal arm of the sea becoming isolated inland and the lake evaporating to a tenth of its original volume. The lake water is saturated with salt and there are beds of Mirabilite (hydrated sodium sulphate) on its bottom. The water freezes at ~-22°C and so the lake never freezes at any time of the year apart from snow freezing, temporarily, on its surface. While I was enjoying my boys own adventures in Antarctica, my wife Anne was running our little farm at Goorambat, Victoria, and producing and rearing our family. All on her own. Eventually we had four boys and four girls at a rate of about one every two years. Anne paid off the farm in three years following benign seasons and good cattle prices. Her cereal crops were the best in the district as that paddock had been previously at pasture for 50 years. She spent little and used the equipment (Fordson diesel Major, Sunshine harvester etc.) that came with the farm. She still harvested in bags in the first year.

When the Australian Antarctic Division was transferred to Hobart from Melbourne I was offered an extended job. This led to us selling the farm and buying a necessarily large house in the middle of Hobart. Thirty-six years later it remains the home base for the family. I have continued on, with retirement in 2007, working as a biologist in Antarctic science. Anne died suddenly due to a pulmonary embolism in 1989 and I then took on the family duties and began working harder with two sons still at home. Remarriage naturally was attractive and Dr Cecilia Eriksson was the lucky woman in 1997. We married in her home town of Uppsala, Sweden. She is another Antarctic scientist and we publish together. She gave a lecture last week at the Agricultural University in Tokyo on our behalf. It concerns the consumption by fish of narrowly defined size-ranges of microplastics from the southern ocean surface. Our Swedish connection has developed over the years and one son doing agricultural science at the University of Tasmania had a year's exchange at the University of Lund. A granddaughter had a year with us in Uppsala and attended school there. She now is hoping for an undergraduate exchange to Sweden in a year's time. My oldest son attended Dookie College in the reign of Barry Croke and went on to a life of adventure with Reuters News Agency. He was shot dead in Afghanistan in 2001, the year of our Dookie Reunion. Dookie and adventurous lives continue on together.



Deep Lake, Antarctica



With grandson Richard Henry 2015

John Cornish

Community Engagement in Irrigated Agriculture

John Cornish graduated with Honours in Agriculture, Biochemistry and Agricultural Engineering. He was offered a post-graduate place for a M. Ag. Science in Rural Sociology – Agricultural Extension. His thesis was awarded Honours. In post-grad years, he also studied Economics, Statistical Method, Psychology and Social Psychology.



The Masters project was sponsored by the then State Rivers and Water Supply Commission (SRWSC) looking to improve the adoption of efficient irrigation practices. This became his lifelong work. The SRWSC employed John to help develop their irrigation farm advisory services. This involved working closely with community and industry groups. This interest continued throughout John's career. John was inspired by the leadership of late WP (Peter) Dunk – M.Ag. Sc. In 1970 John transferred to The Victorian Department of Agriculture as an Irrigation Officer at Numurkah, in northern Victoria. This lifestyle choice led to the purchase of a small irrigation farm at nearby Katunga. John's wife Jan utilised her farming background and together they grew lucerne and raised stud beef cattle. It was their family home for the next 39 years.

During the 1970's salinity and drainage issues dominated in northern Victoria. John was appointed by the Department as the first co-ordinator of salinity programs across Victoria. In 1978 John travelled to the then Soviet Union on a scientific exchange sponsored by the Department of Foreign Affairs. He studied salinity, soil reclamation and irrigation development in Armenia, Uzbekistan, the Ukraine and Moscow. In the late 1970's John was part of a team which introduced and promoted laser technology for land levelling – a first in Australia. This revolutionised the efficiency of flood irrigation for pastures and cropping. In 1980 John travelled to USA to study the latest irrigation technologies being developed.

John conducted many applied research trials on farms, this included the development of new crops, including sunflowers and soy beans. To aid adoption, community groups were given ownership of the trials. Record attendances at field days (sometimes over 1000) were a feature of this work. In 1988 John was seconded from the Dept. of Agriculture to work for the Irrigation Association of Australia to write and co-edit a book titled "Irrigation for Profit" which sold over 2000 copies.

In 1994 John was to embark on state-wide training and co-ordination of irrigation projects, when he suffered a heart attack and had open heart surgery. John's "new" heart determined that early retirement was an excellent option, (a financially poor decision as his two daughters were still finishing degrees at Melbourne University!).

John received the following awards during his career

*Elected Fellow of the Australian Institute of Agricultural Science (AIAS) for services to the profession and to irrigated agriculture.

*Awarded Life Membership by the Irrigation Association of Australia (IAA) for services to irrigated agriculture.

Autobiographies

John has held positions in many organisations.

University years.

Dookie 1961 Melb. Uni. Ag. Students Society representative (MUASS).

MUASS 1962 Assistant Secretary.

MUASS 1963 Secretary (Organiser Rural Rorts etc.)

AIAS Victorian Branch Asst. Sec.

Melbourne Uni. Car Club – Rally Driving and Race Track Timing.

Naughtons Parkville Hotel – “life member”!

Post University years.

AIAS Northern Victoria Branch- secretary, president and committee member for many years

IAA National Director, treasurer and convenor of first National Conference and Exhibition.

Australian Sunflower Association – Committee member and convenor of International Conference.

Numurkah and District Irrigation Research Group - Secretary.

Goulburn Broken Catchment Authority- Community Representative.

Numurkah Rotary Club – Sergeant at Arms.

Katunga Fire Brigade – fighting floods!

Numurkah and District Tennis Assoc. – President.

Floridan Park Tennis Club – Secretary.

Goulburn Valley Grammar School – founding committee member.

Numurkah Friends of the Library – founding committee member.

The years since 1994 have been happily spent farming, travelling and particularly bushwalking with Jan and the family in Australia, Europe and USA. The drought years 2000 to 2009 meant a move in 2009 from the farm to 6 acres at Sunday Creek, near Broadford, Victoria – 45 minutes to the airport!!



John has maintained his penchant for organising. Recent re-unions of the Dookie 61 year bear his stamp. Indeed a happy career in agricultural science. His greatest reflection is the extraordinary bonding of like-minded souls in the exploration of the frontiers of science and the pursuit of social and sporting success, it was a fine balance!! Life-long friendship the result.

John Roland Donnelly

Most of my early life was spent in Western Australia where I was born in November 1941. I was the eldest of six children of whom three were sisters. We lived in Perth but holidays were spent either at the beach in Albany or on a wheat and sheep farm near York where the seed for my eventual interest in agriculture was sown. Towards the end of my secondary schooling the family moved to Hobart. The culture shock was severe and not only from the perishingly cold weather with snow greeting us as we arrived, but life in Hobart was something of a time warp. To us it seemed quaint and a little old fashioned coming from the warm, modern, bustling metropolis of Perth! I did reasonably well at school and was awarded a Tasmanian Government scholarship to study agricultural science. This came with a welcome annual stipend but also a bond to work with the Department of Agriculture in a discipline they would specify. What the job would be was always unsettling.



John at Dookie 1961

First year was at the University of Tasmania and later years at the University of Melbourne. Lifelong friendships were formed and while at Dookie I developed a mild interest in pasture agronomy something which was to have an enduring impact on my future career in grasslands research. Even so, after graduation I had no real commitment to spend my working life in either research or extension. With graduation however came the letter from the Department of Agriculture - I was to be a plant pathologist in Hobart to study lettuce necrotic yellows. My heart sank.

As much as I tried I was not cut out to be a plant pathologist, so as time allowed I read as much as I could about pasture research and the sheep industry. After six months I transferred to the Sheep and Wool Section as an extension officer although by now I wanted to be in pasture research. Brian Jefferies was the leader of the Section and he knew about my interests, fortunately something he encouraged. In 1965 I attended the ANZAAS Conference in Hobart and had a chance meeting in a bar at Wrest Point Hotel with Fred Morley. Fred, an Assistant Chief in CSIRO Plant Industry in Canberra, led a dynamic group studying grassland agronomy and had a reputation as a blunt speaking, fairly aggressive scientist. I must have impressed him about my ambition to work in pasture research because he immediately suggested I visit his group. I would be welcome for a day or a year but anything in between and I would only be a pest. Wow, talk about being blunt! The following day I had a meeting with Fred, George Moule (Research Director, Australian Wool Board) and Brian Jefferies to arrange an Australian Wool Board scholarship so I could work with Fred at CSIRO for 12 months. By February 1966, I was in Canberra starting my lifelong career in grasslands research.

In 1969 I was successful in applying for an Experimental Scientist position at CSIRO. Subsequently I completed a M.Agr.Sc at the University of Tasmania based on a study of the need for a systems approach to animal production from pasture. Several years later I was awarded a scholarship from Meat and Livestock Australia to enrol for a PhD at the University of Melbourne in the Veterinary Clinical Centre at Werribee with Fred Morley as my supervisor. My topic, the productivity of breeding ewes grazing on lucerne or grass-clover pastures, showed how the live weight of groups of animals can be used as an index of nutritional reserves permitting generalisations between flocks and seasons thus overcoming a major constraint limiting the value of earlier published work from stocking rate trials. It was this work that provided a key to the success I was to have later in developing useful decision support tools.

Meanwhile, life in Hobart had been pretty good. I did a lot of bushwalking, learnt to ski and in a very short sailing career was a crew member with John Cornish taking a 32 foot wooden ketch from Sydney to Hobart. To say the least this was an exciting trip. In 1973 I married a Tasmanian, Christine Tabor, and we set up home in Flynn, ACT, where we raised our two boys. As a family we enjoyed many long camping and skiing trips in Kosciuszko National Park and New Zealand. Over the years Christine and I also trekked in the Himalayas, the Swiss Alps, Wales, Ireland, South America and Japan. I also climbed Mt Kenya in Africa and spent an amazing week at the Serengeti Lion Research Centre. We both visited Antarctica and had a wonderful 3 week trip through seldom visited areas of Tibet including Everest base camp. Nowadays our spare time is spent either visiting grandchildren in Sydney or in Kunming, China, or relaxing at our bushland cottage near Braidwood in NSW.

Until retirement at the end of 2005, my research career in CSIRO included studies in drought management, climate variability and the ecology of free living stages of helminth parasites which underpinned CSIRO's highly successful Drench Plan program. I published equations to predict the body composition of live sheep from tritiated water space that had general application and I undertook a wide range of experiments to investigate the interactions of stocking rate with other grazing management variables. A major contribution was the synthesis of information from specific experiments and published data into a consistent conceptual framework for use in computer models. These models, which I developed with colleagues, form the basis of an integrated set of decision support tools designed to take the guesswork out of farming decisions. The primary aim was to help farmers manage risk and seize opportunities for a more profitable sustainable future. This suite of tools known as GRAZPLAN include GrazFeed, GrassGro, Lambalive, MetAccess and FarmWi\$e. They are still marketed by Horizon Agriculture Pty Ltd for use by private consulting groups, state government extension services, university educators and also producers. The tools have been used internationally, mostly in Canada and China where we developed successful research collaborations and to a lesser extent in USA, NZ and South America. In Australia, use has extended to helping assess grasshopper predation of pasture, grassland bushfire risk, dryland salinity, greenhouse gas emissions, evaluation of objective criteria for the definition of exceptional drought and to develop production benchmarks for Meat and Livestock Australia's PROGRAZE initiative. In 2002 I was elected a Fellow of the Australian Academy of Technological Sciences and Engineering and promoted to Chief Research Scientist.



John and Christine in NZ 2014

Apart from my research at CSIRO, I was a member of the Farming Systems Program Advisory Group at the Woolmark Company, a board member of the Centre for Plant Biodiversity Research which was jointly sponsored by CSIRO and the National Botanical Gardens and I also served as Tasmanian branch secretary for AIAS. From 1993 until I retired I was Program Leader of a large multidisciplinary team undertaking research in pasture plant breeding, the molecular basis of plant nutrition, crop agronomy and integration of grazing and cropping systems.

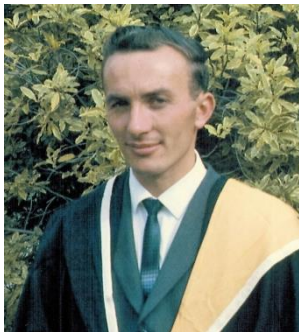
Looking back, my chance encounter with a leading grassland scientist in a pub in Hobart in 1965 had led me to a very productive and satisfying career in agricultural science.

Alf Eagle

Where did I grow up? It's hard to say. I was born in Castlemaine but lived on a dairy farm at Harcourt. At age five, my parents moved to a dairy farm in the Strezlecki Ranges, adjacent to Tarra Valley National Park, 16 miles from Yarram in South Gippsland. By the time I was 16 I had lived on another three dairy farms in the Yarram district. The nearest school was several miles away, so when I started school, I had to board with a local family during the week. I started school when I was seven and attended five different schools during my primary years. I completed Forms 1 to 4 at Yarram High School. As a typical farm boy, I was expected to help around the farm. During my Form 3 and 4 years, because of my father's ill health, I had to help my mother milk the cows before and after school. During peak season, we were milking over 100 cows, large numbers in those days but small by today's standards. During 1957, the family left farming due to my father's continuing health problems and moved to Coburg, Melbourne.

Despite financial hardships, my parents insisted I complete my secondary schooling at Coburg High School and move onto university. I wanted to leave school, get a job and provide some financial assistance for the family. But that was not an option, nor was failing a year. If I had failed, I was to repeat the year. I had a paper run after school. I was one of the lucky boys who had a good run and was well paid. But I never saw any of that money for my own use. My mother worked in the canteen of a large hosiery factory. She would bring home left over food for the family. My two brothers and two sisters never went beyond Form 4.

The only way I could afford a university course was to obtain some form of scholarship. I was able to obtain an Education Department Teaching bursary. In accepting that, I was bonded to teach for three years after graduation. Because of my farming background, I chose Agricultural Science. This was followed by a Diploma of Education.



Alf Eagle Graduation 1964

My first year of teaching (1965) was challenging. I was posted to Daylesford THS for one day per week and Ballarat North TS for the other four days. At Daylesford, I was given the task of introducing Agricultural Science into the curriculum. I had a class of Form 3 (Year 9) boys for six periods straight. Ballarat North did at least have Agricultural Science. However, there were very few students from farms to choose this subject. I taught very small classes or combined classes. One year I was teaching some basic book-keeping to some Form 5s. One student from the Mallee went home told his father who thought what I had taught was good idea. One success story!

In 1970, I was posted to Cobden TS in the Western District. This was another challenging experience. I had no experience or any expectation of being in charge of a Science Department and having administrative duties, but that is what I got. The school was in its second year of operation on the local football oval – a couple of portables and change rooms for classrooms. It was also developing a radical philosophy and different approach to teaching. I found it difficult to adjust to this approach and at the same time introduce Agricultural Science into the curriculum and build up a Science department. Cobden was situated close to the recently developed Heytesbury land settlement scheme, which was primarily dairying. The principal was very keen to get a dairy farm attached to the school. His intention was I would live on it and develop appropriate courses of study. I was in the invidious position of having to support the principal, but in my own heart, not wanting it for many reasons. The last place my wife, Jeanette – a city girl – wanted to live was on a dairy farm. After four years, I transferred to Bell Park TS (Geelong), then in 1997 obtained

promotion to Corio TS where I remained until 1994, 18 months before my retirement. The move to Geelong saw the end of my Agriculture teaching days. I concentrated on Science and Biology. My last 18 months was at Norlane HS, where I was instrumental in developing Marine Studies and Horticulture subjects and establishing a school 'vegie patch' and aviary.

I never aspired to be principal of a school. During my time at Corio, I held a number of different leadership positions, including Acting/Assistant Vice-Principal. Because of this variety, I was satisfied with the way my career progressed. I would like to think that I had a positive influence, either directly or indirectly, on the development of the large number of students I was associated with. When I reflect back and think about students whom I helped, some come to mind very quickly. It is moments like these that made teaching, building relationships and being able to help students in need a worthwhile vocation. It is pleasing to meet former students and discuss life at school, their career paths and life in general.

Reflections on the Agricultural Science course and Dookie:

* It was (as I did it) an excellent course for prospective Science teachers because of the number of disciplines it covered e.g. chemistry, geology, biology, bacteriology etc. In my opinion, it was far better than a straight Science degree majoring in one discipline.

* Dookie:

- Having grown up on a dairy farm, I was surprised that a teaching institute didn't have a modern design dairy.

- Dr Smith's excursions were interesting. I remember going to a wheat farm (Man's) in Quambatook. He was a leader in the industry and had joined two headers together to make harvesting more efficient. What would they think of modern day machines or what would modern day farmers think of the Man's effort?

- Students were not permitted to have cars on the campus. Hitch hiking was the way to go. However, a nearby friendly farmer allowed students to leave their cars on his property. Ian Barger, John Black, Barry Norton and I went equal shares in buying a 1948 (?) Humber Super Snipe. It had a big, six cylinder, side valve engine in it. It was sometimes a case of – fill her up with oil and check the petrol. What happened to it? I think it was in Ian's name and at the end of the Dookie year; he drove off into the sunset and got what he could for it.

- I lived in H2 dormitory. I returned to Dookie a few years ago for a residential conference. H dormitory is still there. It was sad to see the condition some of the buildings are in – abandoned and derelict. Nothing like the Dookie we knew!!

On a personal level, I have been able to find plenty of things to occupy myself since retiring:



* Volunteer Red Cross Emergency Registration team member for many years. This involved registering and tracking people who have been displaced in disasters. I was involved in the Black Saturday and Yasi cyclone disasters.

* Volunteer at Red Cross Blood Bank for 20 years and a regular plasma donor.

* Keen gardener – ours, church's and an elderly lady's garden; canary (ordinary variety) breeder

* Helping a friend prepare his Simmental cattle for local shows

* Active in Probus – treasurer for many years and now in second year as president

* Active church member – worshipper and administration

* Have been married to Jeanette for 50 years, have two daughters and three grandsons. The elder daughter and the three boys live in Texas, USA.

* Jeanette and I have lived in Leopold, 10 km from Geelong, since 1974.

Robert Edgar - A Victorian Journey

My family owned a small sheep and wool farm outside of Chiltern in northeastern Victoria. It was operated by my father and brother in conjunction with an apiary of about 400 bee-hives. Using an axe with some help from arsenic pentoxide. My interest in agricultural science was stimulated by the challenge of growing exotic pastures on the leached, granitic soils of the family farm. Super phosphate and sub clover greatly boosted pasture production and my father had tried out a commercially available self-administered trial program with fertilizer mixtures containing various trace elements. Molybdenum showed promise.

I completed primary school in Chiltern and matriculation at Wangaratta High School. I had hoped to obtain a scholarship with the Department of External Affairs for later work in agricultural development in New Guinea or the Pacific. However my time at University was funded by a secondary teaching bursary. Although the Education Department provided support and accommodation the bursary came with a requirement to study for another year to complete the Diploma of Education. This proved to be a most unsatisfactory year as the course gave a scant insight into the history and philosophy of education while providing few strategies and skills that are required by an effective teacher.

After leaving University I was appointed to Benalla Technical School to teach agriculture, maths and science. The agriculture stream was difficult as the course had been developed 20 years earlier for farmers' sons with the view that they would return to work at home but rising expectations and education standards meant that some students who wished to continue to agricultural college or university did not have the subjects required to meet entry requirements. However, on a recent visit to Benalla I was pleased to learn that many who had returned to the farm had been successful in their farming pursuits.

During my time in Benalla I was recommended for a teaching position at Tonga College in the Pacific. Unfortunately, the offer was subsequently withdrawn as I had requested secondment from the Department. I was told that Victoria could not do without me. I taught at Benalla for four and a half years until Barrie Croke made a late night visit to my room at the Commercial Hotel to encourage me to apply for a lecturing position at nearby Dookie Agricultural College. My appointment to Dookie coincided with my marriage to Helen and we settled into a new house on the College. The seven years at Dookie were extremely enjoyable and educational. The teaching program including planning and leading visits by second and third year students to a wide range of farm operations was the key to developing an insight into the varied agricultural enterprises of Northern Victoria and Southern New South Wales. The regular meetings of the Northern Victorian Branch of the Australian Institute of Agricultural Science gave access to many other professionals and agricultural resources across the region.

While at Dookie I completed the Graduate Diploma of Agricultural Extension at Melbourne University. Helen, daughter Julie and I settled into a small 3-bedroom house in the "better" part of Coburg. In contrast to the Dip Ed, this year provided extremely valuable understanding of farming communities and a range of strategies for working effectively with rural clients. Although there was some recycling of the 4th year subjects, Rural Sociology and Economics, it was a valuable year.

Soon after returning to Dookie, I was appointed Extension Services Officer at the Keith Turnbull Research Institute, Frankston. This position involved the coordination of a post-secondary training program for vermin and noxious weeds inspectors in the Department of Crown Lands and the provision of a state-wide advisory service. Professional activities while at Frankston included two years as President of the Weed Science Society of Victoria

and receipt of the Dalgety Travel Award from the Rural Press Club. The award provided a two-month travelling scholarship through western USA and Canada to study pesticide extension, publicity and the resulting conflicts. My community interests included three years as President of the Karingal High School Council and work with Frankston City Council in the coordination of local conservation groups.

After 8 years at Keith Turnbull, I joined a team working towards the formation of the Department of Conservation Forests and Lands. Our task was to develop the structure and staffing for the Land Protection Service from the parts of three former agencies. Merging of the different departmental cultures was a precursor for the development of the Landcare program with me as the Manager of Landcare Services. Following two years of rapid expansion the Victorian Landcare was adopted as a National program. I was also executive officer in the establishment of the Community Advisory Committee for the Murray Darling Basin. This was achieved despite the cultural differences between the States and the diverse range of communities across the Basin. Unfortunately, the community advisory committee has not matched the success of the Landcare program.

I returned to the Keith Turnbull Research Institute as Director in 1993. The Institute had a major program of biological control of weeds and I was able to negotiate membership of the CRC for Weed Management Systems and this provided funding for a significant expansion of the research program and effectively the life of the Institute by 14 years. However, the only trace that now remains (apart from a deserted Frankston campus) is the Keith Turnbull Room in the joint Departmental/Latrobe University Agribio centre at Bundoorra.

In 1996 I accepted a package from the Department and took up a part time Senior Research Fellow position at Melbourne University where I completed a Master's degree in Agricultural Science. I undertook a series of consultancies including writing the Victorian Weed Strategy and subsequently developed a long term working relationship with Phillips Agribusiness. This has presented a wide range of experience including rural planning, the assessment of the impact of developments on agriculture, and a range of pest management strategies. I was finally able to pick up on my interest in working in the Pacific by working with Rotary International to establish of agricultural projects in Tonga.

Helen and I have recently moved to Strathfieldsaye near Bendigo as Julie, her husband Joe and grandchildren Patrick and Ellie live nearby and it is convenient to the airport for visits to our son Andrew and his wife Sylvia in Sydney. My interest in international development has been maintained through Rotary projects in Nepal, Samoa and Tonga and by membership of the Victorian Committee of the Crawford Fund. I am also involved in the establishment of a Bendigo cluster of the Australian Institute of Agriculture. We were all fortunate to have access to the broad based experience that the Ag degree provided and I believe that even in retirement we have an obligation to continue to use these learnings for the benefit of the Australian community.



Bob Edgar Dookie 1961



Bob Edgar Strathfieldsaye 2016

Henry Edgell

Being a farm boy and an only son, I was always going to be a farmer.

Having left school, deciding to do Agricultural Science was a bit unusual for my situation but I suppose I felt the need to do something a bit challenging before retreating to the double backwater of rural Tasmania. The Australian Agricultural Council was awarding two Ag Sci scholarships in each state each year. This comprised a fairly generous and regular injection of cash to go on top of the Commonwealth Scholarship and made me financially independent throughout the course. Who, I wonder, got the other Tasmanian one and the two Victorian ones in our year. The degree was achieved with a faculty pass. After some overseas travel it was back to the farm. The degree furnished me with arguments for management changes. Out with showing the Polwarth stud sheep, in with a shiny tractor, piling on the sheep numbers, developing many acres of flood irrigated pasture (with help from John Cornish).



My family had a long tradition of involvement in farmer organisations. I followed suit and was appointed to the Pesticides Advisory Committee. This body registered all pesticides sold in the state. 2,4,5 trichlorophenoxyacetic acid was used widely on woody weeds but as the major component of Agent Orange used by the US in Indo China it became controversial. The US manufacturers had been careless with temperature control which resulted in high levels of poisonous dioxins. Luckily the batches used in Tasmania proved to be free of dioxins.

The University of Tasmania instituted a degree course in Agricultural Science a couple of years after we went through. Subsequently I was appointed to the Faculty. It was interesting but I am not really proud of my rather lacklustre contribution. But I did volunteer some acres for a stocking rate trial. This demonstrated we were seriously understocked. It seems then that management had not appreciated just how much extra production was engendered by years of superphosphate application and better pasture species. Also we made space for a PhD student, Mick Statham, to investigate iodine deficiency in sheep. He found that iodine deficiency was most serious on sandy soils in years of good pasture growth. A routine annual drench of iodine before lambing is now widely carried out in Tasmania.

Another appointment in the 1970s was a three year term as Chairman of the Hydatids Eradication Council. This was a government funded campaign started and inspired by Dr Trevor Beard. Hydatids was rife in the sheep population and was a scourge in the human rural community. (My sister had a cyst removed at age 4). It was made illegal to feed offal to dogs and all rural dogs were purged and tested annually for many years. It was a long arduous campaign to change community attitudes and was eventually successful. Tasmania remains free of hydatids. A Tasmanian branch of the Australian Society of Animal Production was formed, with me as Chairman. It became a good vehicle for farmers to rub shoulders with University and the Ag Department. We helped organize speakers, bus trips and field days.

With a friend and neighbour we bought a semi-developed grazing property in the far north east of Tasmania of 2000 ha. It was a rugged and windy place with lots of potential, only some of which was realized during our tenure. We had it for ten years during the 1980s and managed to get out without losing too much skin. I gravitated towards the Tasmanian Farmers and Graziers Association and took on various roles which culminated in two years as President 1990-92. The organization had been recently formed from the merger of two bodies known for their bitter rivalry. But thanks to the fine diplomacy of John Allwright (then President of the National Farmers Federation, itself a new body) there was a surprising fund

of goodwill. Membership was high and we had persuaded the brokers, agents, dairy processors and others to deduct a membership fee from sale proceeds. A major recession hit the rural industries when I was in the chair and meetings were often fiery. Farmers have a lot to get off their chests, they have spent many solitary hours on tractors, stewing on their problems and often without the benefit of group discussions. When Robin Gray was Premier he dominated the Tasmanian political scene, but during my run Robin was in opposition and the TFGA had to deal with a Labor government kept in power by the Greens. This latter party were keen to put into practice their high ideals on animal welfare, soil degradation, land clearing and, of course, forestry. Their views did not always align with those of our members.

During the 1990s I was chairman of the body which expended wool industry funds for extension and research projects. We established a Quality Assurance Scheme for wool growers and we had a positive impact on clip preparation standards. This led to a project to differentiate Tasmanian wool in the market and in turn this required some overseas travel, visiting wool processors in Italy and Japan. We had some success in establishing a Tasmanian brand but these things are ephemeral and the world moves on. I was also involved in the corporate world from 1994, being on the boards of two publically listed companies. The first, a small trustee company which administered wills and loaned its deposit funds to, mainly, farmers. The other, Robert's Ltd, was one of the two Tasmanian pastoral houses which had managed to keep the mainland wool brokers at bay for generations. A change in direction by our rival, Webster, created an opportunity to acquire their stock and station agencies and all their rural supplies outlets. After consolidating this we merged with a smaller mainland company, Ruralco. This company is now a major force on the national rural scene. I ended my 14 years on the Roberts/Ruralco board as deputy chairman.

As well as being paid, I found being on commercial boards a satisfactory activity (providing solvency prevails). Setting corporate strategy, assessing potential mergers and acquisitions, choosing the right CEO and deciding how to pay him/her are very demanding on the intellect, particularly mine. During the 1990s the Liberal State government felt the need for advice on energy policy from independent people (rather than the dominant Hydro Electric Commission). I was appointed Chair of this new Energy Council (RT Gray was the relevant minister). The National Electricity Grid and the Market was just being set up after a decision of COAG. I used to attend meetings of such arcane bodies as the Consultative Working Group of the National Grid Management Council. A steep learning curve is an inadequate description but it was a fascinating four years or so of rubbing shoulders with

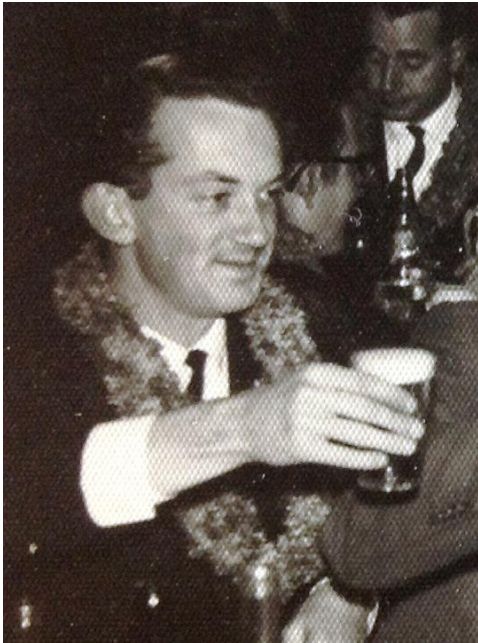


highly qualified and experienced professionals (and some dickheads). I have put in two stints as a local Municipal Councillor totalling 14 years and have taken on the usual local community jobs. Three years on the Churchill Fellowship Selection Panel opened my eyes to the diversity of talent in the State. A turn as President of the somewhat conservative Tasmanian Club is something I am pleased to have done. Currently my only public job is Chairman of the River Clyde Trust, the manager of irrigation water for our valley.

Felicity and I have two sons and a daughter and seven grandchildren. Oldest son Tom, father of three daughters, now manages the farm, and does it much better than I ever did. He and his wife are both B. Agr. Sci. Melbourne. graduates. My daughter Chloe with husband and their three boys live in Hobart. Son Edward and partner live in London with number seven grandchild and they are a great excuse for travel. We are spending half our time in Hobart and I have more time for tennis, fly fishing and grandchildren. Living in Tasmania's small pond, I enjoy all the diversity and opportunity it provides.

Ian Clyde Fletcher

Ian worked for ICI after graduation in Victoria before moving to Perth. He worked for many years in farm chemicals with ICI. A constant cigarette smoker for many years. Ian died of lung cancer in 2015, aged 72. After retiring Ian returned to Victoria to live in Rosebud, helping his sister and brother-in-law with their nursery business. Ian's great hobby and interest was model trains. He is survived by his daughter, Rosemary. John Cornish talked him into attending our reunion in 2013. Ian was reluctant to attend - but afterwards he declared it to be a highlight of his later life.



At the Rural Rort 1963



At the Reunion in 2013

Ian FLETCHER
Obituary

FLETCHER (Ian Clyde):
21.03.1942 - 26.02.2015
Left us in his usual unassuming way, aged 72. Taken quickly, yet not quick enough, by an illness undeserved. Now without pain and forever at peace, 'playing trains' to infinity in the big railway yard upstairs. Remembered by all as a truly gentle man; generous, measured, encyclopaedic, eternally patient, maddeningly fastidious and oh so stubborn!

Cherished Father of Rosemary.
Dad, you encouraged and guided me wisely, expressed pride in my achievements, listened when I just never shut up, and laughed at my stupid jokes. Above all, you showered me in more love than a girl could ever need, so much it hurt sometimes. I'll forever hold you tight in my heart, but every day with you gone will be lonelier and more challenging. Please stay with me, you Pre-Carbon-Dating Fossil, you, and keep tucking me in at night in my dreams, Dad.

Forever your adoring Tinkerbell, Rosemary. Love you, Hooroo!

Published in The West Australian on Mar. 2, 2015

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IAN FLETCHER

When Fletch came to the Ag. School; no longer did any Ag. bod have to hang its head in shame when quizzed on the Faculty's lack of cultural feeling. If the mention of a name was not enough to counter the sneer, a personal audience was! Armed with his guitar, Australia's answer to Buddy Holly has a fervency of delivery Billy Graham would envy. But take away this much threatened instrument and a surprisingly normal and dedicated student, carefully attired in the latest blinding fashion is left blinking at the sun.

A firm believer in the proverb that looking after the pennies takes care of the pounds, Fletch never allows a lecture to pass unnotated. The care with which these undoubted pearls are recorded is shown by the repute in which Fletch's notes are held. In vice he steers a moderate course; for though a firm supporter of the charms of youth; innocence is as equally prized. Who else would wait till his 21st for that first brush with the demon alcohol? This was will-power indeed; yet perhaps the strain showed itself in a dedicated and highly efficient cigarette consumption during that long dry.

AGROS 1963

Robin Gray

Fourth day of March 1964. Wilson Hall Parkville. No doubt many of you were there but my main recollection was Jack and Mary Bray canoodling in the cloisters of the Law Faculty. Jack resplendent in his gown.

Nineteen days later I set sail for London on the “Orsova” leaving behind the Beatles on their arrival in Australia. The plan was to gain experience in England for two years and hopefully do some post graduate study.

That night the 40,000 tonne Orsova rocked and rolled. Down on “F” deck the hold was full of sheep skins. I awake early but vomiting violently. Eventually I made my way to the dining room and found my allotted seat. Luck changed. Next to me was the prettiest, chirpy girl ,an Alfred Hospital Nurse who described my face as green as the jumper I was wearing. 52 years, three kids and seven grandchildren later Judy is till dining out on the story.



They were marvellous times for young Australian Graduates visiting London. Judy arranged accommodation close to a flat full of Alfred Hospital friends with a Lawyer and Dentist both of whom considered themselves superior to us dirt scientists. The pay for so called science teachers on “supply” was six pound a day. Henry (Edgell) who I hardly knew at Parkville (partly because he was only partly sober) was paid the princely sum of one pound ten a day to drive a Harrods van when he arrived to share a flat with me about six weeks later. In July Judy and I set off for three months holiday on the continent and Henry went off to work on the farms. Homesick I flew back to Melbourne in January 65 followed by Judy who detoured via South Africa.

I can’t remember how I made the contact but by the end of my first week home I had an appointment with a great character, Jack Makeham, one of Australia’s first private Agricultural Consultants. He had a team of five spread from Hamilton to Leongatha and wanted a lackey to take notes and draft reports after each visit to his clients. After a two hour interview I had the job – start Monday – be at the office in Colac at 9AM.

For a young bloke whose only real experience was chooks and goats in our suburban backyard at Mont Albert and a swim through the manure sump at Dookie and what we learnt from our books and “Dewek” and “Heatherbell”, it was a great learning experience.

In April 1965 Jack was invited to address a Farmers School” at Deloraine in Tasmania. Tasmania had an outstanding Agricultural Extension Service but that didn’t deter Jack. When he returned he told me there was a great opportunity to start a Private Practice in Deloraine. Would I like to see if I could round up some clients. The options facing me were Hamilton, Walpeup or Sale or somewhere equally remote. Deloraine wasn’t my choice but was only 30 miles away was Launceston.

Judy, as she always did, enthusiastically supported the proposal so off I went, drove all over Tasmania. At the end of four weeks, with some great help from Henry Edgell I had rounded up 60 farmers. By the end of August, Judy and I were married and arrived on September the tenth with our home and office rented and shingle up.

It was the start of a really good and happy life. A Farm Consultant who knew nothing that these 60 farmers didn’t know about farming. I kept my mouth shut, analysed their farm records and learnt as I went from farm to farm.

After about three years I bought Jack out. Luckily I didn't foul my nest. The business expanded to include clients like Lactos Cheese, The Dairy Manufacturers Association, All the Vegetable Associations, The Tasmanian Farmers Federation, The Milk Board and the Egg Marketing Board and the Hop Growers Association. Tasmania was a great place to bring up kids. Judy had part-time Nursing which gave her fulfilment and I was working in a field of work which gave me a lot of satisfaction. We bought a rough bush block at Deloraine and later in partnership with my the Business Partner and post war AgScience Graduate Bobby Griffin and a couple of clients, a 3000 acre block on King Island.

By 1975 I was becoming a little exasperated with Governments and became interested in politics. No doubt that was spurred on by my experience on the SRC at Melbourne, a mother who campaigned with Jesse Street and a father who had been a padre until he was gassed in WW 1 and understood how poor people suffered in Australia right up to the fifties.



Robin Gray, Premier of Tasmania 1982-1989

The Liberal Party asked me to nominate for the 1976 election and Judy and I entered into it with as much enthusiasm as we had started our consulting practice. In 1979 I became Deputy Leader of the Party, 1981 Leader and in 1982 lucky enough to become Premier. I was the first Liberal Premier in Tasmania to be elected in my own right and out of 47 Premiers, I was the third longest serving. It was an honour. At times we had continuous police guards, death threats, massive demonstrations against the building of Franklin and Colebrook Dams and the aborted attempt to build two Pulp Mills to use our great wood chip resource but nearly all the time with the overwhelming support of Tasmanians. We met some great people and some interesting ones. Fraser, Hawke, Keating and Howard to name a few. Your faith in politicians on all sides of politics gets sorely tested

Like all good things they usually come to an end. From 1989 until 1991 I had another stint as Opposition Leader and 1992 to 1995 served as Minister for Primary Industry and Minister for Energy. I retired from politics in November 1995.

I look back on my consulting years as some of my happiest and my political years as some of the most rewarding. Being Premier I was able to do a lot more than just a Minister or Private Member could. The development of the States irrigation Schemes, wine industry, dairy industry, the salmon industry, the Passenger Shipping Service, the road and airport developments and the growth in Employment over the seven plus years I was in office were most satisfying.

In 1995 I went back to Agriculture overseeing the management of an 18500 acre super fine wool property at Ross and from a 14000 acre beef and wool property in the North East. In 2005 we bought our own mixed farm at Scottsdale, growing potatoes, onions, 1000 fat lambs and a few cattle now doing what I have wanted to do since I was five years old. There is no money in it, but it is a great lifestyle.



Robin and Judy Gray with family (c1976)



Judy and Robin Gray 1995

John Griffiths

I completed my Agricultural Science degree in 1965, and after gaining a Diploma of Education, I taught in the Victorian Technical School System in Warragul and then Wodonga, where I was involved with vocational agriculture curriculum and assessment. During this time I bought and operated a small walnut and chestnut orchard at Stanley (Victoria). I was also involved with operating a family owned peach orchard at Albury.

1972 – 1988. I decided to go full-time farming in 1972. We cashed our assets, created budgets (?) for the bank and bought an undeveloped Coleambally (NSW) area irrigation farm (550 acres). The farm was fully irrigated, but rapid and on-going development of infrastructure and machinery was an urgent economic necessity.



Jack Griffiths, Dookie, 1961

Production consisted of rice, irrigated winter cereals, sunflowers, onions and some live stock. Teaching science for a couple of years at the local Central School helped with cash flow until a series of good crops occurred. In 1983, I developed an additional 1000 acres of lease country for irrigated production of winter cereals and pasture. The Coleambally community was vibrant at this time, and involvement in local organisations was very satisfying. I was a Councillor (1977-87), Vice President (1980-81) and then President of the Jerilderie Shire Council (1982-83).

I sold the farm in 1988, possibly now experiencing a mid-life crisis. Why work your guts out when long term survival is determined by forces off-farm? For example, high interest rates, high machinery cost, predation by “agri-business”, de-mutualisation by co-operatives, water rights being separated from land titles allowing re-allocation and speculation were some of the issues that led to my disillusionment with farming.

1989-91. Bought and restored yacht at Coffs Harbour NSW. Enrolled in part-time post-graduate Diploma of Land Economy at the University of Western Sydney. This only became of use 24 years later in a dispute on resumption of a house! I was contracted for a short time as a field officer for the Australian Bureau of Agriculture and Resource Economics (ABARE). This was painful since many farmers were being severely hurt by high interest rates, low product prices, etc. After this, I became a partner in a plant propagation nursery in Gympie, Queensland. This enterprise was not a success.

1992-2013. I then established a hydroponics and greenhouse business on the Sunshine Coast and Brisbane. It involved retail, manufacturing and consulting. While quite profitable, a lot of energy was expended on basic education and extension activities. Many farmers lacked a basic understanding of the scientific principles behind this fairly technical endeavour. The backyard hobbyists were usually much better informed. Where possible, I indulged in my main passion, sailing. I retired in 2014, now doing much more sailing and boat maintenance, and more “extend your life” pills.

Autobiographies

Married twice, divorced twice. Twin daughters, Bronwen (New Jersey, USA) and Megan (Melbourne). Both successful academically and professionally. Five grandchildren.

I was never comfortable working for a boss or the bureaucracy, the challenge of “do it yourself” has been my basic motivation. The Agricultural Science degree, with its breadth and depth has been an exceptional foundation particularly remembering that “an education is what is left after forgetting all you have learned”.



John Griffiths Melbourne 2013

Roger Hart



Roger Hart 1961

Despite several attempts, Roger kept failing Ag. Chem. in 3rd year – Professor Leeper was his nemesis.

Roger was a brilliant student, especially in botany and horticulture. However, he never graduated.

Roger went into a number of businesses, including selling sportswear - never to any great success.

Roger was working for a Melbourne firm of receivers in 2005 – when, on July 26, he died of a massive heart attack Parliament Station (Melb.) on his way home from work.

He had an impish sense of humour and was always great company.

Good lifelong friend of John Cornish.

Nat Italiano

Nat Italiano had a beautiful name which translated means Christmas Easter Italian. Natale Pasquale Italiano. He was the youngest son of a traditional Italian migrant family, and the first in his family to ever attend university.

He started Agricultural Science in 1959, failed first year, repeated and passed in 1960, doing the Dookie year in 1961. There he made Kristin's acquaintance as they were often on farmwork together. He then failed third year, and subsequently changed to a BSc, majoring in Organic Chemistry and Microbiology, which he completed. These subjects were more suited to his later employment as a cheesemaker in the family-owned very successful Perfect Cheese Co.

He seemed to be often in strife with his family for 'breaking the shackles'. He with John Cornish and Gil Stokes had decided to buy a 1948 Ford Anglia tourer, to travel between Melbourne and Dookie College. Before this could happen, John and Gil were invited to Nat's home to be quizzed by Mr Italiano on their backgrounds, intentions and suitability to be partners with Nat in this enterprise. Apparently they passed the test, as the Ford Anglia arrived at Dookie.

After University Nat worked in the family business and developed an innovative sheep milking enterprise at Seville, in the hope of making sheep-milk cheese. There he, with Kristin and Peter Towns as well as other friends, planted grape vines as dreams of red wines spurred them on. He was the godfather of Kristin and Peter's son Michael.

Nat had a good life, a beautiful house in a street in Balwyn along side his brothers' and parents' houses, and fast cars. He was a true gentleman and a dear friend.

Nat, his wife Claudia and three little boys were killed in a tragic head-on collision at Rosedale in Gippsland on the 15th December, 1975.

Kristin Schneider 2016



ALAN (AL) HUMPHRIS

Why Agricultural Science?

This is a reasonable question. I completed first year BSc at the University of Melbourne in 1959 and at the year-end sought career advice concerning the selection of a science major for the BSc. In the proffered advice I was encouraged to switch to Agricultural Science ('AgSci') to gain wider career prospects after graduation. I followed this advice and commenced first year AgSci in 1960 with the benefit of certain subject credits from my prior year. It was a curious decision to change faculty since, while I had demonstrated some capability in maths and physical sciences, I had not previously studied biological sciences nor did I have a strong interest in agriculture.



I completed AgSci over the scheduled four years in 1963. With the exception of third year, I had not found the course content to be particularly interesting or fulfilling; this contributed to a mediocre academic performance over the four years in which I gained one third-class honour and recorded a pass in all other subjects. I did find it enjoyable being in a small faculty though being resident in College (Queen's) limited the time I could devote to faculty matters. On completion of the course I was disappointed to find the professional structure for agricultural scientists was not well developed despite the important scientific advances that had been achieved over the two decades. I did not regret completing AgSci and undoubtedly benefited from doing so. However, I could not see an exciting career path opening and decided that I would try to build a career outside of science/agricultural science.

I had begun to read widely, and with considerable interest, about London's merchant banks, which prompted me to aim at establishing a career in merchant banking, ideally as a corporate advisor specializing in mergers & acquisitions ('M & A'). During the 1960s and early 1970s merchant banking in Australia was in its infancy and I had to assume that there would be limited opportunities to 'break in'. First, I needed to get a job and immediate opportunities for new AgSci graduates were mainly in the government sector after which I could move to the private sector and gain experience in commerce and industry. Secondly, I needed to broaden my academic qualifications by undertaking further study in order to become well equipped for merchant banking. Fortunately, I was able to achieve high grades in all subsequent academic studies, undertaken on a part-time/full time study mix.

Academic Summary

- BAgrSc., University of Melbourne.
- BEc. (Econ.), BEc. (Acc.), Monash University
- Master of Laws (Dist.), School of Law, University of Leicester, UK
- Fellow of Certified Practising Accountants (FCPA)
- Undertook short courses taught by Harvard's Law School and Business School while employed at J P Morgan, as part of Continuing Professional Development.

Career Summary

- 1964 Research Officer, Bureau of Agricultural and Resource Economics, ACT
- 1965 Research Officer, State Department of Agriculture, Victoria
- 1967 Assistant to Managing Director, Phosphate Co-op Company Ltd ('Pivot')
 - *developed a successful strategy which resulted in the acquisition from Cresco of its fertilizer manufacturing facility at Portland Victoria
 - *assessed the possible acquisition of another major fertilizer manufacturer

Autobiographies

- 1969 Advisor to Nauru Government (based in Melbourne)
*worked on the acquisition by Nauru of the island's phosphate rock mining assets owned by the UK, NZ and Australian governments as contemplated by Nauru's independence in 1968
*helped to establish Nauru's phosphate rock business in the Asian region
*travelled extensively in the region (principally to Tokyo) while working as an advisor on a range of Nauru's commercial activities
- 1978 Executive Director, J P Morgan Australia Limited (JPM)
*responsible for corporate advisory services (including M & A) to JPM clients within the top 20 ASX listed companies and multinationals
*made initial visit to Beijing in 1984 and met with CITIC Chairman Rong Yiren, (later Vice President of China) and senior members of China's leadership group to finalise a mandate for JPM to advise CITIC on its proposed major investment in Alcoa's aluminium smelter which was being constructed at Portland. CITIC reported to China's State Council and had authority to invest abroad as part of China's 'open door policy'
- 1989 Executive Director, Hambros Australia Ltd (subsidiary of a long established London based merchant bank). Initially Melbourne based but relocated to Sydney in 1991 as Deputy MD of Hambros Australia and national Head of Corporate Advisory/M & A.
*retained CITIC as an advisory client and also formed a joint venture between Hambros and CITIC which established one of the first foreign investment Funds to invest in China's fledgling securities markets
*listed CITIC-Hambros joint venture Fund on ASX. Frequent visits to China
- 1996 Founder (and MD) of Balmoral Capital Limited in Sydney, a firm licensed by ASIC to provide merchant banking advisory services. The decision to leave Hambros and set up Balmoral was prompted by the pending global sale of Hambros Bank and by the demand for independent and ethical corporate advice on a fee-for-service basis.
- 2006 Sold Balmoral Capital to an ASX listed company and commenced a 'career' as a non-executive director of public companies, joining the boards of four mid-size listed companies with activities principally in the resources sector. Alan Humphris was regularly retained to prepare expert reports for proposed litigation including class actions, the most significant being for the 'James Hardie' trial in the Supreme Court of NSW, an action initiated by ASIC which was ultimately heard on appeal in the High Court of Australia.
- 2015 Retired from all company boards and ceased being available as an 'expert'



Personal

Married Elizabeth (Liz) Symmons in 1966 having met at Melbourne University in 1963 when Liz was a first year law student; they have two children, daughter (Sally) an economist and son (James) a lawyer.

Current interests: reading (mainly history); selective travel; watching test cricket; family activities; walking. Stopped playing tennis and golf in 2008 owing to the onset of Parkinson's Disease.

Barry W. Norton

After stumbling through high school to eventually matriculate, I had no idea about what I would do if I could get into Melbourne University. My first choice was Law, and second choice Agricultural Science. Fortunately I was not clever enough to get into Law, but was delighted to get an offer and Government Free Place to do Agriculture. My mother's family came from Yea, and I had spent much of my youth on relatives' farms throughout Victoria. I was the first in our extended family to go to University, and I was determined not to disappoint. I worked as a sewing machine mechanic to support myself through High School and University. I graduated in 1964 with a creditable degree, but again faced with choices, go farming (no money) or work for the Government (no desire). Fortunately, there was another avenue, I was offered a research assistant position with Dr Donald Walker in the Department of Animal Husbandry at Sydney University. Shortly after arriving, I was granted a Commonwealth Postgraduate PHD Scholarship to study the nutrition of the milk fed lamb.



This was an exciting time, working with colleagues Len Cook, Karl Jagusch and later Gil Stokes, exploring the changes in the body composition of lambs fed milks of different protein, fat and energy contents from birth to 12 weeks of age. In a time before automated laboratory equipment, we all learnt how to wash glassware properly, use Kjeldahl apparatus and to pipette by mouth accurately and safely. These studies established relationships between energy and protein intakes and tissue growth which were subsequently used to establish the nutrient requirements of young lambs for maintenance and growth.

In 1964, I married Jan Sharpe in Melbourne, and in 1966, our first daughter Letitia was born in Sydney. While waiting for my PhD to be examined in 1968, with a young daughter in tow, we spent three months catching butterflies and exploring Papua New Guinea. This interlude stimulated my life-long interest in tropical agriculture and animal production.

In 1970, Professor Ron Leng from the University of New England (UNE) offered me an ARGC Scholarship to work with John Nolan on modelling nitrogen (N) metabolism in ruminants using stable and radio-active isotopes. Our second daughter Kirrily was born in Armidale. The UNE project was most challenging and interesting, a time when the mathematical modelling of biological systems was first being explored. We produced the first quantitative model of N metabolism in the rumen, and extended the use of isotopes to explore the nutrition of sheep at pasture in Julia Creek, to measure supplement intakes of grazing sheep and cattle and to compare N conservation mechanisms in Buffalo and tropical cattle in Darwin. This was the time when another Melbourne graduate, John Vercoe, was establishing in Queensland, new breeds of cattle for northern Australia. The lure of the tropics was strong, and in January 1973, I took a position as lecturer in Biochemistry and Animal Nutrition in the Department of Agriculture at the University of Queensland (UQ).

At this time, staff in the Department were mostly young and focused on teaching and research in the rapidly expanding field of tropical agriculture. Solutions to the problems of tropical soils, the introduction of new crop and pasture species and the breeding and selection of plants and animals for tropical conditions was in vogue. I quickly became involved in Departmental development projects in Thailand and Indonesia, while establishing research on the nutritive value of tropical forages for sheep and cattle. My field laboratory was the Mount Cotton research station some 40 km south of Brisbane. In 1979, I was granted sabbatical leave, and with the family, spent 3 months in Chiang Mai, Thailand working with PhD student Lindsay Falvey, and then the rest of the year with Professor David Armstrong at the

University of Newcastle-upon-Tyne in Northumberland. This was a chance to meet colleagues from prestigious UK institutions such as Reading University, the Rowett Research Institute and Hurley Grassland Research Institute. Like many other Australians visiting England, we bought an old Ford Transit Van fitted for camping, and for a month, travelled the length of Europe, from Stavanger in Norway to Clermont Ferrand in the Auvergne France.

In 1981, UQ won a \$12 million Australian Development Assistance Bureau (ADAB) project to assist the development of the Prince of Songhla University (PSU) in the south of Thailand. This project was to provide training for staff, as well as, infrastructure such as analytical laboratories, glasshouses and farms to support teaching and research. I was Animal Science advisor, and later Director, for this project which was completed in 1993. At UQ, I had commenced research with the Australian feral goat, with a view to evaluating its potential for cashmere production. In Thailand, we also initiated research into village goat production, with the expert assistance of John Milton, Barrie Restall (NSW Agriculture) and Bill Pattie (UQ). The project trained more than 20 staff who now hold senior positions in the Thai bureaucracy. I was promoted to Associate Professor in 1984.

During the 1980's, my research was focused on goats, fodder trees and tannins. In 1988, the Dawkins Report recommended that Gatton College and UQ be amalgamated. In 1993, I was appointed Head of Department, and in 1998, Head of the School of Land and Food Sciences, charged with merging UQ and Gatton agricultural teaching and research. While this task was not completed under my guidance, today, there is an effective School of Agriculture and Food Sciences operating across both UQ campuses. Before retiring from UQ in 2006, I had developed two projects funded by the Australian government. The first was a Goat Improvement Project (2004-2011) with scientists in Vietnam. We surveyed goat farmers in three provinces, and provided strategic interventions to control disease, improve nutrition and reproductive rates. The second project (2005-2013) was at the University of Lae (UNITECH) in Papua New Guinea where an ACIAR scholarship scheme was used to successfully promote staff development, postgraduate training (PG) and research.



During this most satisfying career, I have met many interesting people, including undergraduates who never forget their time at UQ. I have trained more than 40 PhD and Masters students, published over 200 books and scientific papers and travelled the world doing what I most enjoy, bringing science to farmers. I was awarded Fellowships of the Australian Society of Animal Production and the Australian Institute of Agricultural Science, and in 1995, received from the King of Thailand, the award of “Companion of the Most Noble Order of the Crown of Thailand”

for my services as Director of the PSU Development Project. In 2004, the University of Melbourne awarded me a Doctorate of Agricultural Science for my studies of the biology of Australian rangeland goats. I have also enjoyed sports, baseball, football, squash and tennis, with Tae Kwon Do (Black Belt), Wing Chun Kung Fu (Brown Belt) with surf fishing in the middle years, and more recently gardening and Tai Chi as a gentle martial art.

In retirement, Jan and I enjoy travelling the world and returning to our bit of paradise in the rainforest at Mt Glorious, Queensland. Our daughters, their husbands and five grandchildren live nearby, and after visiting, wonder how we ever had the energy and time to raise children. I have native bees, native orchids, some Cashmere goats and genealogy as hobbies, and, of course, my loving and supportive wife, Jan, to guide me towards maturity and old age.

The friendships and broad education received during my years at Melbourne University have stimulated and sustained me all my life. I have used this experience to foster the same excitement for science and agriculture in all those I have mentored over the years.

Roger Parish

I selected Agricultural Science as a course because a school friend of my mother (met by chance) praised it for its breadth and variety of career opportunities. Dad was a Collins Street Cocky with a sheep farm near Melton and I spent most holidays helping out on a neighbours farm. So I knew a bit about the Ag world. First year did not excite me greatly and for a variety of reasons only about 40% of the class came into second year. Dookie was one of the most enjoyable years of my life thanks to a remarkable group of fellow students, so different in many ways but invariably generous, creative and great fun. Some of the skills learnt at Dookie such as sheep shearing, pigsty cleaning and eating a three-course meal in less than ten minutes have not proved particularly useful but the social interactions, the friendships made etc. have helped shape my life. Back in Melbourne, one of the strengths of the course, I believe, was that we were taught from the various disciplines by leaders in their fields.



After finishing my degree I was keen to travel and work overseas. I wrote to FAO and received a response saying I would be better off to do a PhD and then reapply. The research project that caught my eye was in the area of plant biochemistry and cell biology and involved studying lignification in wheat. Prof. Turner (Botany) was my main supervisor. The work initially found that higher levels of phosphate reduced lignification, weakening the cell wall and resulting in lodging. Hence, too much superphosphate was to be avoided. The subsequent breeding of lodging resistant wheat varieties made my work “irrelevant”. I began to study the enzymes in the cell wall involved in the final steps of lignin formation and also the location of related enzymes inside the cell. We identified and isolated, for example, the peroxisome, an organelle protecting the cell from damage by hydroxyl radicals. Unfortunately, we were beaten to publication by a US group. My first taste of the vigorous competition in the research world.

As my PhD work neared completion I wrote again to FAO and it was suggested I apply for an office job in Rome. So much for that! I then worked for six months at the CSIRO Division of Protein Chemistry in Parkville but really wanted to go overseas. Gus Nossal put in a word for me with a group at the Rockefeller in New York working on animal lysosomes and their function in disease. However, there were no positions free for 12 months and I would need to wait. I was lucky in that the Head of Plant Science at the Federal institute of Technology (ETH) in Zurich was visiting Melbourne for the ANZAS Conference. Prof. Turner introduced us and I was invited to spend the year in Zurich before going on to the Rockefeller. I was to work with Professor Phillippe Matile who had been a postdoc. at the Rockefeller with Christian De Duve, the Belgian scientist who six years later was to win the Nobel Prize for the discovery of animal lysosomes and peroxisomes. Matile was of the opinion that the plant

vacuole was actually a giant lysosome as well as a storage compartment which indeed turned out to be the case.

A condition of my scholarship was to learn German. The three month course was an excellent one and consequently I was then able to lecture to the undergraduates in Zurich. After a year I was offered a position and never got to the Rockefeller. Three years later I was offered a more senior position at the University of Zurich and it was there that I began to work in the area of molecular biology.

I was appointed Professor in Zurich in 1977, became a Swiss citizen in 1980 (thereby losing my Aussie passport) and expected to remain there for the rest of my career. I enjoyed Switzerland and living in Europe enormously. Moreover, the research was well-funded, the facilities excellent, students and postgraduates very good, etc. I was active beyond the University being, for example, a member of the Committee reviewing Swiss tertiary education, President of the Swiss Cell and Molecular Biology Society and for five years (until I left) Chair of the Committee advising/lobbying the Federal Government on research funding. However, in 1985-6 I spent four months sabbatical at the University of Melbourne and began to think about coming home. I applied for and was subsequently offered the Chair of Botany at La Trobe University in December 1986. I arrived to take up the position in November, 1987. I have loved working at La Trobe and filled a number of positions including Head of Department, Head of School, Dean, Pro Vice Chancellor and Acting Vice Chancellor. I also have had responsibilities outside the University such as many years on the Scientific Committee of the Victorian Anticancer Council and being a member of the Circle of Leaders advising the State Government on Biotechnology. I retired at the end of 2012 but still have research grants and PhD students. I suppose my most visible contribution to La Trobe has been the recent establishment of the \$300 million AgriBio Centre which aims to be among “international leaders in agricultural bioscience research and development” and is already well regarded. Since its inception (1967) La Trobe has had an Ag. Sci. degree similar to the old Melbourne University degree in that individual subjects are taught by the areas of expertise (eg. biochemistry by the Biochemistry Department, etc). In 2016 about 70 students enrolled in first year.

I won't go into the details of my (and my PhD students'!) research projects. Suffice it to say we have studied various aspects of cell differentiation in plants and other organisms. The work has included gene regulation, plant hormone mechanisms of action, mycoplasma induction of cancer, cell-cell interactions, etc. Living through the biotechnology revolution has been a highlight. Currently my major project is unravelling the genetic pathways giving rise to pollen formation. These highly conserved pathways are especially sensitive to abiotic stress (heat, cold) and this sensitivity underlies the stress-induced reduction in crop yields (ie. is reflected in the greatly reduced numbers of viable pollen grains). We are also identifying genetic changes that make plants more tolerant of these stresses with the aim of providing breeders with useful selection markers.

On the personal side, I have had two partners, Judy for 12 years (a medical doctor who trained in Munich) and Eveline for the past 32 years (a biochemist/physiologist who did her PhD in the BioCenter in Basel and worked at Melbourne University). I have four children: three boys and a girl, none of whom are scientists! Unfortunately, they are spread across three continents and so we are rarely all together.

Alan Arthur Patterson OAM

After graduation, Alan taught at Melbourne Grammar School. He had had an interview with the headmaster, having answered an advertisement for a mathematics and physics teacher, before his final examinations. After much discussion, he was offered a position teaching biology, chemistry and general science, as a cadet under-officer in the cadet corps, a room in the boarding house in return for duties, a year in which to do an M.Sc and then an exchange at a public school in England. Then we married! And all those things happened



Dookie

He worked with Dr. Tom Neales in the Botany Department gaining his MSc in that one year, 1967. His work, together with that of his supervisor and other colleagues, was published in *Nature*. His thesis was entitled “Some Aspects of the Physiology of Plants Possessing a C.A.M.” (A Crassulacean Acid Metabolism). It was early days using an electron microscope and one memorable day the team flew to Canberra to use the several in ANU’s laboratories.

Some years later, on our return from nearly three years away, a younger scientist told him his work was very ordinary. Alan explained how huge strides had been made in the provision of highly technical equipment in that short period. The Botany Department had one electron microscope, I believe! He had spent a lot of time in the Computer Laboratory near the Union building feeding in all his info. Such changes!

AT MGS Alan introduced a radical science programme at Year 10 level. Smoking, drinking, sexual and dental health were tackled. He became the leader of the school’s outdoor education campsite at Licola in the Alps. He coached rowing and football, and generally, was very active in the school’s affairs. We had nearly six months in India in 1968. Alan taught at Mayo College, a school set up along English public school lines for the sons of the princes of Rajasthan which opened in 1870. That was a learning experience for us both and he determined then and in England to develop ideas for running a school if ever he had the chance. He was always enthusiastic and rather impatient to get things done, the way he wanted them done!

We spent two years in Sherborne, Dorset from whence we explored as much of England, Wales and Scotland as we could. We had a long holiday on the continent, camping, in the summer of 1969. We returned from overseas in 1970 with two daughters and immediately Alan started at MGS by going camping with the cadets at Gisborne. He woke one morning to find the whole camp covered in snow and had difficulty in finding the boys’ tents!

After another five or six years at Grammar, Alan was ready for another challenge. He started an Agricultural course at Ballarat and Queen’s Anglican Grammar School which he loved. It lasted for only two years because the government introduced a scheme for apprentices working on farms. The Headmaster offered him an administrative job and he became the Director of Studies. He looked at the syllabuses, introduced core subjects until year 11, demanded high standards of staff and students and ensured that examinations and reports were of the highest standard. This all stood him in good stead for his appointment as the inaugural headmaster at Mowbray College in Melton, a satellite city on the west of Melbourne, which he started towards the end of 1982.

Alan had developed his ideas for a school for children from working families. He believed they should have as exciting an education as children at wealthy independent schools. He engaged Norman Day, an architect in the city, and they spent a day driving around Melton looking at the brick houses whilst talking about the physical aspects of the buildings in which children could learn, positively.



Alan Patterson Dookie 2001

The death of our baby son from Sudden Infant Death Syndrome led Alan to be aware of the grief suffered by children and adults on the occasion of sudden deaths and he developed an awareness of pastoral care as the most important aspect of school life for a student. Home-groups were established where two teachers progressed through the school with the children in their class. Great friendships between students and staff developed. The school grew quickly, both in the number of students and the number of buildings and became very successful in the greater Melton area. Seventeen active years there led to his decision to retire.

He had ten extremely happy and fulfilling months at Trinity College, in Melbourne University, in charge of the College's overseas students' programme, before his sudden death in November 2002.

Susan Patterson October 2016

Alan Patterson was posthumously awarded an Order of Australia Medal in the Australia Day Honours, January 26 2003 "For service to education, particularly in the areas of student support and curriculum development, and to the community of Melton". The following tribute was paid to Alan by one of Mowbray College's former students.

Alan Patterson Mowbray College

Mourning for a lost school

by Guy Murphy

"To those who knew it, closing Mowbray College made as much sense as abolishing grandmothers. Its uniqueness started with its founding headmaster Alan Patterson. I met him when I was nine. He was tall, energetic and impossible to ignore. He was usually the sharpest mind in the room and had a rare facility for language, making him a superb orator. His interests spanned arts and sciences. Mowbray's founding school council asked him to create a private school at Melton North. He brought organisational wisdom from old established schools such as Geelong Grammar and Ballarat Grammar. Mowbray's motto was "We Learn and Grow". I started there in 1985.

As singular as Patterson was the appearance of the new school. Outsiders called it Legoland. Architect Norman Day created a village of scattered buildings linked by walkways. The campus was dotted with courtyards, niches and friendly spaces where teenagers could perfect hanging out. It was colourful, human scaled and inventive. Schools are staffed by a mix of personalities and, among the variegation, the Mowbray staffroom contained many inspiring people. Mowbray teachers were dedicated and all had qualities a student might want to emulate. This amounted to an enriching, tolerant, supportive, safe environment for young people. A happy place. You could be a dag, a nerd, no one cared. Students were given opportunities they would never otherwise have had. They could find out their talents, and things about themselves they might want to improve.

Peter Quinn

Graduation from Dookie and then Melbourne set me up for graduate studies at Sydney University where I completed a PhD and a year post-doc in 1967. Christine, and by then our 3 children embarked on what was intended to be a 2-year stint in the UK and a year in the States to return to an academic position in Australia.



Dookie October 1959

Our first port of call was the Babraham Institute in Cambridge. My salary, paid in \$US by the Population Council was enhanced by a 25% devaluation of the £/\$ leaving us with an income that exceeded that of the Director of the Institute! We used this revenue to travel extensively throughout the UK and Europe and to extend our family to another son. Flying the Atlantic in one of the first 747s (the crew outnumbered the passengers) we arrived in St Louis in 1970 to take up a visiting instructor position in the Department of Psychiatry of Washington University. The interests of the Department were to seek biochemical lesions responsible for mental illness rendering any Freudian experience in my possession unnecessary.

We travelled extensively throughout the National forests of the mid-West in our camper van culminating in a 6-week sojourn through the remote regions of Mexico. We moved to Chicago in 1971 where I took up a position in the Medical School of Northwestern University. While continuing to explore the forests during weekends we managed to travel the entire length of Route 66 returning via Yellowstone and Mount Rushmore along the Northern highway network.

When time came to return to the fold, to the great disappointment of my family, Australian science had no place for my experience. I was obliged to return to the UK where I took up a senior MRC post in Oxford with a part-time lectureship at Worcester College. Christine, while managing all our domestic affairs, obtained a double first and a post-graduate degree from Oxford University as a “mature” student which launched her career leading ultimately to the upper echelons of the Administration of Social Services in the UK.

After 3 years in the Biochemistry Department at Oxford I got a proper job as a lecturer in Biochemistry at London University in 1974. The family continued to live in our Oxfordshire home which was a 15th Century Inn acting as the second staging post on the way from London to Bristol in the West and Birmingham in the North (Oxford was just a ford!). We divided our lives between The Old Crown and a flat in Notting Hill in the period when all our children became independent. Meanwhile, I climbed the academic tree receiving promotions to senior lecturer, Reader in Biophysical Chemistry (rather an irony considering I was awarded Faculty passes in first-year Physics and Geoffrey Leeper’s Chemistry course in third year) and along the way picking up an MSc in Immunology and a DSc in 1980. In 1989 I was appointed to a personal Chair in Biochemistry of the University at King’s College. I held this position for 20 years eventually achieving emeritus status where I am now tolerated by my younger colleagues in the performance of all atomistic molecular dynamics simulations of membranes and their transporters and mining my Synchrotron X-ray diffraction and neutron scattering archives for the hidden nuggets.

I took an active role in my professional body after election to the Biochemical Society in 1976. Over the years I chaired a number of committees and served on the Council of the

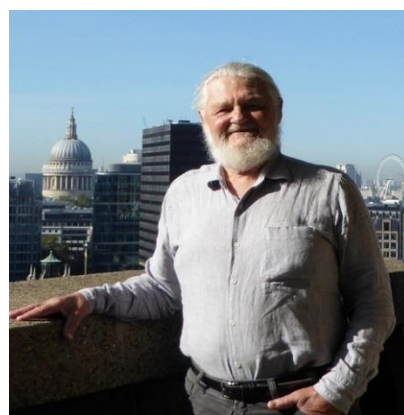
Society as well as the British National Committee for Physiological Sciences. I was appointed to the Editorial Boards of numerous International journals and was Assistant Editor of Subcellular Biochemistry for many years.

I am a firm believer that academics have a responsibility to identify and assist in the exploitation of their inventions. My experience taught me that Academic Institutions lacked business acumen in the 1980s so I set up my own company. Polytechnology Transfer Limited traded successfully for nearly 20 years in the capitalization and exploitation of the inventions of others. My own patents include one of direct application to farming, “Spray method and formulation for use therein”, doubtless inspired by my rural background. Much effort over the 1990s was devoted to the exploitation of other of my patents involving homogeneous catalytic hydrogenation to avoid production of *trans*-fatty acids in the processing of vegetable oils, detection of analytes on molecularly-imprinted polymers and non-linear optical devices to monitor immune and enzyme reactions. This involved setting up and project management of multinational industrial/academic partnerships under the auspices of EU Programs.

Our lives took a new turn in 1993 when I undertook sabbaticals at the Medical School of Pittsburgh University where I had held an Adjunct Professorship and as Monbusho Professor at Nagoya University in Japan. In 1994 we returned to Melbourne where I worked with my old colleague from Dookie days, Bill Sawyer, at the Russell Grimwade School. This allowed Christine and I to reconnect with our heritage which was consummated by the purchase of an 18ha bush block on the South Cathedral Range side of Buxton Peak. By the millennium we had constructed our residence with assistance from itinerant helpers and settled into a three-way commute between Oxford-London and “Quinn’sland”. Alas, Black Saturday laid waste to our dreams and we relocated to within a stone’s throw of the Fitzroy Gardens in East Melbourne. This was a convenient location to the Peter MacCallum Cancer Institute where I have been a patient for the past 10 years. We subsequently consolidated our UK residences to a Barbican Tower in the City of London where all manner of cultural pursuits is on offer.

My scientific career has been charmed by unfettered opportunities to pursue curiosity-driven research. I always regarded myself as an experimentalist and exercised a hands-on approach to all my endeavours. This is reflected in the fact that one in eight of my 550-odd contributions to the scientific literature are single author works. My strategy of attracting the brightest minds to join my research teams proved crucial to my education. I learned to bridge the divide between biology and physics to garner, for me, rich personal rewards. These adventures are set out in a valedictory lecture (under publications) I delivered five years ago (www.kcl.ac.uk/quinn).

It must not be left unsaid that I have enjoyed the unstinting support and often indulgence of my family. Over the past few years I have enjoyed fishing and sailing in the Whitsundays with family members and crewing 12m yachts with former students off the West of Scotland. Shortly, when time comes to retire I have resolved to involve myself more in family activities and play the role of the old duffer amongst my 11 grandchildren.

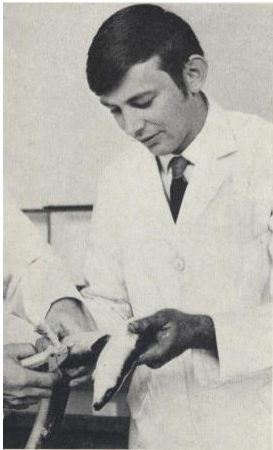


Barbican Tower, London, October 2016

Peter Rogan

I grew up in a working class family with two older sisters. My father was a tradesman in the building industry. Although my two sisters became teachers, I was the first in my immediate family, and only the third in a very large extended family, to attend university, thanks to Commonwealth Scholarships.

I was probably the youngest in our university year and very immature and shy when I began the Agriculture course. The year at Dookie was a huge growing up experience for me, both personally and in terms of developing close bonds with the group. The course as it was then was a wonderful broad science course incorporating pre-med, heavy botany and biochemistry components, elements of zoology, bacteriology and ecology plus a grab bag of subjects such as entomology, geology, economics, engineering and a host of topics more directly related to agriculture. In the mid 1960's, with many areas crying out for graduates, it put us in an enviable position. I initially accepted a position with the then Bureau of Agricultural Economics in Canberra, but after only a few months, was offered a position with Victorian Fisheries and Wildlife, for which I had applied earlier. I took up this position in June 1964 and remained there until I took early retirement in 1997.



“Fisheries” was then a relatively small department with an enthusiastic and closely knit staff and was a rewarding work environment. My initial task was to investigate the development of Macquarie perch as a fish for farm dams and to develop aquaculture systems for the species. However this depended on the provision of fertilized ova from fish trapped on a spawning run from Lake Eildon. Unfortunately this program did not yield the expected results and I found myself diverted to a study of the Macquarie perch population in Lake Eildon.

As a raw graduate in an unfamiliar field, this was a daunting task, but over a four year period, I managed to document the major environmental requirements for spawning, describe spawning behaviour and get a good picture of the population dynamics. Unfortunately it was a picture of rapidly dwindling numbers and inevitable extinction. Rather than simply document the decline, for the next few years I attempted to provide both artificial spawning environments and artificial stimulation of spawning. With the small number of fish available and their reluctance to take anything but natural food, the result was inevitable. However, it was an attempt that had to be made and it was a valuable learning experience. It was not till several decades later that Macquarie perch were successfully bred and raised, utilizing what was then a relatively abundant population in Lake Dartmouth in NE Victoria.

During the next 15 years I managed the State's inland recreational fishery, a surprisingly complex and rewarding experience. It involves 30% of the population, and is a passion for about 10%. Unfortunately it took me most of that 15 years to realize that recreational fisheries management is as much about applied psychology as it is about biology. The highlights of the period were establishing the chinook salmon fishery in the western district lakes, and co-authoring “A Guide to the Inland Angling Waters of Victoria”, which became a bible for anglers through 6 editions over the next 20 years.

During this period, increasing awareness of the impact of environmental changes on aquatic environments led to us to set up a River Management Unit. This unit worked with land managers to identify activities that impacted on aquatic environments and addressed these by such measures as education, the provision of tightly targeted funding or sometimes just a change in the timing or sequencing of management practices within or between agencies. Solutions ranged from such things as direct restoration and revegetation of eroding areas, to buying a chisel plough that was loaned by Land Protection to landholders to permit the sowing of deep rooted perennial plants in groundwater recharge areas.

Concurrent with this, I was involved in the Standing Consultative Committee on River Improvement, and the Fish Management Advisory Committee of the Murray Darling Basin Commission. These bodies and activities played a significant role in raising awareness of integrated catchment management and preparing the ground for the establishment of Catchment Management Authorities.

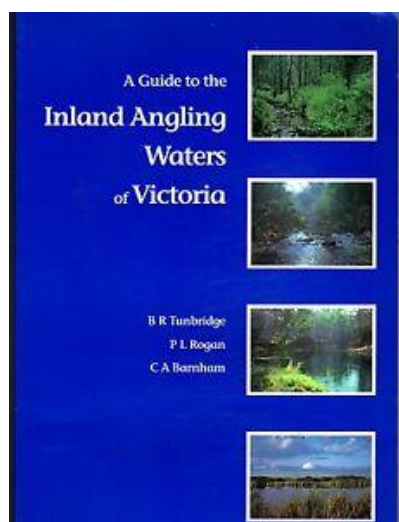


Other significant activities during this period were re-writing the Recreational Fisheries Regulations, providing evidence for the enquiry into eductor dredging for gold, and developing the initial management plan for the commercial eel fishery.

My later years became progressively less joyful as the public service became more “rational” and politicised, and was progressively stripped of resources. I responded to the reduction in job satisfaction by taking early retirement in 1997.

On a personal level, my first marriage went sour after seventeen years and, after three odd years as a single parent to three kids, I remarried a wonderful American lady who was in a similar situation as I, but with two sons. Our Brady Bunch experiment has been highly successful, and although I am somewhat disillusioned by what successive governments have done, or permitted to happen, to the aquatic environment, I am very happy and satisfied with my current life.

My time now, rather self-indulgently, involves a lot of travel to natural places, bushwalking, cooking and enjoying my family, particularly the grandchildren (4 plus one on the way).



Bob Sammons

All I ever wanted to be was a farmer, but I was encouraged to study agricultural science at The University of Melbourne. What excellent guidance. Although a slower learner than some, this outstanding and full education has stood me in great stead throughout diverse careers and living environments. The Uni 61 Dookie team was the most wonderful group of people I have known, and perhaps my one great regret in life has been my failure to maintain close contact with this group.



Bob Sammons early 1960's

Immediately after completing my degree, (a year late), I commenced work as a Livestock Research Officer at Ellinbank Dairy Research Station, where I spent two years working on the relative merits of hay and silage, and the effects of stocking rates on milk production. Living near Warragul provided a very enjoyable lifestyle for work, sport and social life for a newly married man. In 1967 I moved to Sydney, to the position of Nutritionist with a small feed supplement company, Rural Chemical Industries, and provided nutritional advice primarily to poultry and pig farmers, and formulated feed supplements.

This was a challenging and naive move but it provided a valuable introduction to commercial enterprise, and with a wise veterinarian as mentor, I became confident that I was providing a valued service to those producers I interacted with, and my employer. After two years I was presented with the opportunity to work as a nutrition adviser and field research officer with William Cooper and Nephews. A role I enjoyed for some eight years and for the latter period I also managed to moonlight as a nutrition consultant for the best run and largest cattle feed lot in Australia.

Had I the courage, I would have started a private consultancy as a nutritionist, but I continued with the shelter of employment where the risks are spread and shared. In 1977 I accepted the position of Professional Services Manager with Uncle Ben's of Australia (UBA), based in Wodonga. This was the Australian pet food business of the large international corporation owned by the eccentric Mars family. This was fortuitous for me. I had an incredibly exciting and rewarding 20 years with Mars, in two separate stints.

My competitive nature held me in good stead in UBA and my roles moved quickly from external relations, to brand manager and then Marketing Manager. UBA were very successful and I claim some credit for moving their market share to a dominant position in the dog food market. I thoroughly enjoyed the satisfaction of successful product improvement, new product and new concept development, brand positioning and brand development, and the management of people. Working in a highly competitive, fast moving consumer goods company, with private ownership, presented many stressful and many rewarding moments. Learning the disciplines of marketing presented an interesting challenge for someone trained as a scientist, but I was strongly aided by the marketing discipline of the company, and skilled support from friends in the external agencies with which we worked. In 1985 I was asked to move to Toronto, Canada, for a six month project to develop the marketing strategy to support the development of a new factory. At the successful completion of that project I was asked to stay in Canada as Marketing Director, but for personal reasons I returned to Australia.

Soon after returning from Canada, I resigned from Mars and returned to Sydney to take up the position of Marketing and Sales Director with Coopers Australia Limited - the newly formed merger of my old employer, William Cooper and Nephews, and the animal health division of ICI. This provided the opportunity to work back in the rural industry and attempt to adapt some of my Mars learning to this industry. Another challenging and stimulating role with a large team to manage, two different cultures to merge and two product ranges to rationalise, whilst driving the new business ahead as clear market leader. I thoroughly enjoyed this role for some three years and believe we made some significant progress.

In 1989 I received an invitation to re-join UBA, and as I was by now divorced, single, homeless and penniless, the substantial increase in salary was impossible to resist. Over the next five years with UBA, I was variously the head (Director) of Marketing, Marketing and Sales, Marketing and Research and Development, with marketing oversight for Mars' Asian pet food businesses, and represented the Asian-Pacific region in global debates on marketing strategy. During this time I met my second wife.

In 1994 I managed to win the position of Marketing Director for the Mars European dog food business, which at the time was worth more than USD 1.5bn. Bremen, Germany became my new home but the business was spread over some 22 different markets/countries. My role was to "Europeanise" the marketing for a business which had previously been highly competitive between the various country units, particularly UK, Germany and France. Constant travel across Europe, countless European and country meetings, certainly challenged my resilience, my strategic thinking, and marketing, persuasion, and management skills. This was probably the most, stimulating, frustrating, challenging, tiring but enjoyable role I ever had, but success was extremely satisfying.

My next move was to Stupino, Russia, (some 120 km South of Moscow, where temperatures ranged from -36°C to +36°C. This was a two year assignment as Marketing Vice-President for the new Mars business, which included substantial confectionery sales, rapidly growing pet food sales and a start-up food business. An exciting time with challenges in strategic marketing, and people development, with rewarding results in the early development of this now substantial Russian business. My assignment finished early when Russia reneged on their International debts, and the Ruble crashed from 6/USD to 28/USD. I returned to Europe as Marketing Director on the European Management team of the Pet Food business, and based myself in London - a great city.



Bob Sammons, Italy 2016

I retired from Mars at the end of 1999 at the ripe old age of 58, and whilst I did some consulting work with Mars in Asia, and with some other parties, I have primarily been happily idle. I did, however, find my third wife, the wonderful Janise, some 12 years ago, and life since then has been outstanding. Janise and I love travelling and we visit Europe each year, as well as other destinations. Africa has provided our greatest travel experiences. Whilst home I enjoy playing 3-4 rounds of golf each week, and spending time with my son and daughter, and my two grandchildren.

At 75, I am fortunate to be happy and healthy, grateful for my training in Agricultural science, and for a fortuitous working career - and I love retirement!

Kristin Schneider

Surprises have always had the ability to change and charm my life. Whether from me to others, or from them to me.

One day in my final year of university, as I was driving home I was surprised by a question that popped into my head. ‘What do you choose? The material life or the spiritual life? At that time I was immersed in C S Lewis’ ‘The Problem of Pain’, a gift from Harry Burton. I was taken by Lewis’ clarity and his rejection of Church dogma. My answer to this question was ‘Spiritual of course!’ Then another surprise, my life became overwhelmed with the material life. The Spiritual almost disappeared for thirty years. Sometimes I would wonder about my answer then, and how that squared with the pain of the material phase I had to confront and endure.

I graduated in Agriculture with a third class honour in Biochemistry, and a second-class honour in Botany, my absolute favourite subject. I should have taken honours in Naiveté, because that is where I was. I married soon after graduation and almost immediately fell pregnant. I missed study, or should I say my purpose in my life. A second child came thirteen months after the first. This child, an asthmatic, brought many challenges. But I went back to work at this time, demonstrating in Botany classes at Monash University. For a short while I was happy in this role, but had not emotionally cleared the Catholic dogmas surrounding working mothers. More challenges stored away, waiting their time to be revealed.

The next year, pregnant again, my second child repeatedly ill with asthma, I began to be jostled by the ever-increasing trials, and by the time my third child was one year old I succumbed to a nervous breakdown and panic attacks. However I worked my way through this over the next five years, with the help of psychotherapy and without drugs. What a rich experience this turned out to be! I grew up, shed my naiveté, and began to live as a mature person. Looking back, this time was peppered with surprises, and frequent changes in direction.

I kept on with academic work throughout these five years, taking on extra demonstrating jobs in botany, biology, animal physiology and biochemistry. In the biology class I met another demonstrator who taught me about politics and the Vietnam War. Another great surprise to realize that religion did not hold credible answers to the current wars.

What did this have to do with my Agricultural training? These experiences gave me solidity, strength, and helped me to understand others, how to help, how to ‘be there’ when necessary; all suitable attributes for a teacher. They melded with my academic studies and rounded out my personality.

In 1970 I joined the staff at the new Agricultural Faculty at La Trobe University. Meeting these people who accepted me as a colleague rather than a junior assistant was another surprise, and as I worked well, I was accepted as a candidate for a Masters degree,



Graduation 1964

and after that for a PhD, on the gastrointestinal physiology of the sheep. I was still demonstrating practical classes to the new students, and really enjoyed their contact. There were times when I saw a lad struggling, and in a down-to-earth conversation I could give him different perspectives on his troubles, and help him to turn the corner and start to do well.

This type of work continued for about fifteen years, until I was in my mid-forties. Suddenly there came another big surprise, I was no longer required in my Principal Demonstrator's position at La Trobe University. At the time this was hurtful, but in retrospect a Godsend. Looking back, I remember with great affection various lecturers and colleagues. In the undergraduate years, Professor Norman Tulloh, and Professor Derek Tribe seemed to understand me and were kindly. At La Trobe University, Professor Bob Reid and Dr David Leaver were also good to me, and steered me on through the hazards of university life.

I took up a research appointment at the University of Melbourne in the Department of Pharmacology, but fortunately for me this lasted just one year. At this time the spiritual life began to reemerge, though tentatively at first. I studied hypnosis and Reiki, alternative-healing techniques, while in my day job I was testing contrast agents for X-Rays. These were not comfortable bedfellows, and soon I left the University.

For many years I have had close contact with clairvoyant women, and this delivered another huge surprise. To be able to greet people after death, and at times to assist them to move on began for me when I left La Trobe University. I eventually moved to Benalla and became a consultant to hobby farmers. After many twists and turns, consultations on Biodynamic farming, a visit to the Findhorn Foundation in Scotland, seven years spent at a sister Foundation in Sweden, I returned to Australia and started writing books. The first, an autobiography called '*On Earth As It Is In Heaven*', then a biography of my great uncle Lt Colonel Charles Denehy, entitled '*Pompey Elliott's Left Hand Man*'. Denehy led Battalions in the 15th Brigade during the First World War. The ten-year research time I spent for this book put me in close touch with the soldiers who had served. There were very few who did not suffer immense damage, mental or physical, whether or not they were killed on the battlefield or brought their broken bodies home.



Kristin at the Shrine Gardens, 2015

Later through clairvoyance we realized that after death these souls were still suffering and that we could assist them to find healing and move on. To understand the types of conditions that prevent a normal progression after death, and to use counselling techniques allied to unconditional love has brought my skills into play. Working with my clairvoyant friend, we are now able to contact these suffering soldiers, and offer relief to them. This work has been recently published in '*Unveiling No Man's Land*', with Annie James. It is available on line as a Kindle. To be able to help these soldiers out of their despair has been the greatest surprise so far. However, I am sure that life has many more surprises just waiting to be revealed.

Gilbert Stokes

From my earliest memories, when asked by an adult what I wanted to “be” the answer was always “a farmer”! So, from Primary School days, I was enrolled at Dookie. In those days the Diploma took 3-years after completing Intermediate Certificate. When I reached that stage, my mother encouraged me to stay on at Box Hill High to complete the Leaving Certificate when the Diploma now required just more 2 years – no lost time, but more academic opportunity. Then with 5th Form passed, she convinced me to continue to Matriculation with the option of a Degree – and that is how I entered the B.Agr.Sc. program at the University of Melbourne in 1959.



In my younger days

During first year University, when the amount of information required to pass exceeded my ability to retain it from lectures, I failed both Chemistry (my favourite subject) and Geology and repeated the year in 1960. In those days each subject was examined with a written 3-hour exam and often a Practical exam too. There were no semester exams, or marks aggregated during the course of the year: you were up for it or you failed! ... That is when and how I joined these fellows!



As a cool undergraduate

In the lead up to Finals in 1963 I was enjoying a coffee in the Caf with Adrian Lamb when he challenged me with an offer – to postpone my Ag Sci career in order to join him on a motorbike trip, riding overland from Singapore to Europe!

We were away for almost 2 years of amazing adventure – the only visitors at Angkor Wat (and sleeping onsite), advice from Phnom Penh not to travel back up into Thailand via Vietnam (shortly before the war broke), 3 months across northern India, the next 4 months through Afghanistan, Iraq and Syria before the wars and finally on into Europe.

With the northern winter now approaching and funds low (we had lived up to this point on \$1/day!) we signed on to a German trawler as *novice Fischwerkers* processing cod off the coast of Greenland and were at sea for 3 months.



Bystander, Adrian and Gil

The trip provided much time for reflection and I realised how much I enjoyed teaching and decided on return to Australia I would pursue an academic career. Animal nutrition really appealed (I felt that the MU curriculum had too little emphasis on livestock). Back home I contacted Barry Norton, then doing his PhD with Don Walker at Sydney and with his support I landed a position and small stipend to study *Fat in the Diet of the Milk-fed Lamb* at Masters level.

Two years on and now married, I realised that I was more interested in the action at the molecular level and headed off to North Carolina State University to enroll for a PhD in Biochemistry & Nutrition. That was when I really hit my straps and became the first Research Triangle Foundation Fellow and was inducted into the Honor Societies of Phi Kappa Phi and Gamma Sigma Delta.

With PhD in hand I spent the next two years at UC Davis on a postdoc fellowship with Paul Stumpf before landing a Post Doc position in the Biochemistry Department at UWA and within the year was appointed to a tenured Lectureship. My boys were born in North Carolina I loved the teaching and research but experienced great difficulty adapting to University

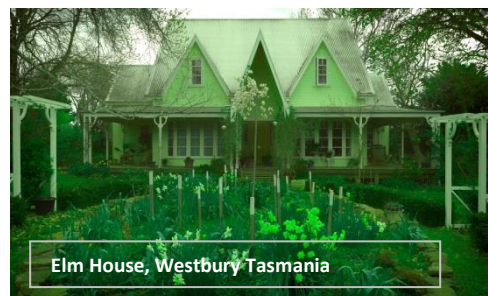
politics. The two PhD students I supervised have achieved much: one went on to be Head of the School of Biomedical Sciences at Curtin U; the other recently was awarded an Order of Australia for contributions to the understanding Alzheimer's disease.

But I felt there was more to life than academia and resigned in 1987 to embark on a rocky road to independence. After 18 months surviving as a Consultant on a pittance, I gained a grant from the Federal Department of Education and Training to establish a cooperative education program (CEED) at Murdoch University. This soon expanded to contracts for CEED management services with Curtin U, U Adelaide, UTS and QUT and staff appointments. The role required us to identify problems in industry that would benefit from research input and to engage an interested academic to co-supervise one or two student at Honours or Masters level. Students joined CEED in 3rd year and my staff and I taught a full semester course in Project Management and Proposal Writing at the participating Universities. Theses at the end of projects served as final reports to the client companies. My business was stretched across Australia and the recession of the early '90s demanded that I terminate my contracts.

At this point I headed off to Asia to offer the opportunity to international businesses for access Australian research institutes. Poor timing (Indian and Indonesian companies were not ready yet for this high level capability) meant returning, tail between my legs 3 years later to reestablish a business here. The work included 3-day training for academics in Grant Writing and the preparation of Business Plans for University clients seeking government funding for Centres of Excellence and Cooperative Research Centres.

Since my earliest recollections I have been interested in the fundamental questions: *where are we from, why are we here, and where are we going* – the purpose of life! I had developed my own understandings, but while at UCDavis I was introduced to the teachings of ECKANKAR. The long and the short of it is that I introduced and for 30 years was the leader of ECKANKAR in WA. During the time, our membership swelled to over 120 souls ready for their return into the heart of God. In 2001 I realised that it was time to stand aside and for another to take over the leadership. The outcome was to make space for my replacement by moving to Tasmania, returning to a climate I was familiar with as a kid.

Over the next two years I wound up my business interests in WA and concentrated on designing our home to be built on a 1½ acre block in the historic village of Westbury. My plans were passed for planning and then building approval, and we moved here in 2003 to start construction. One house, two cottages and two years later we started a B&B and in 2010 won the *People's Choice Award* for Tasmania.



Award for Tasmania.

Time it was to now engage with my Legacy Project: I am developing a new breed of utility chook that will be long-lived, robust, free rangers and highly productive for both eggs and meat. Now hatching the F3 generation of the "Quamby", I have vital birds that grow fast, lay many large eggs (>300 in 12 months), are docile and impress all who see them with their beauty!

What a truly great opportunity this has been as the first in my family to go to University, and to receive the formidable training for life that is an Ag Science degree at Melbourne University.

Anthony Tehan **Reflections**

Growing up in the 40s and the wool boom of the 50s when woolgrowers on 400 acres could send their children to private boarding schools, wool was making a pound a pound and farmers were complaining about provisional tax I could not foresee the huge and exhilarating revolution in farming practices of the past 25 years.



The revolution that forced primary producers to operate their farms as businesses was probably spawned by climate adversity and improved education resulting in informed analysis and information sharing.

This preparedness to be more open about once-private information enabled farmers to become more resilient, improve their succession planning and generally become highly efficient business operators in an increasingly competitive and challenging arena.

My Agricultural Science degree has been invaluable, enabling me to be fully involved in the farming scene and the wider community. It gave me the knowledge and confidence to become an innovator in the pasture seed, cattle and sheep industries while taking lead roles in farmers' and community organisations.

After graduation I studied two commerce subjects part time while working full time with the Department of Agriculture as an assistant agricultural research officer in the cereal section. I also spent time at Longerenong and Walpeup assisting with various cereal trials throughout the Wimmera and Mallee. After leaving the Department in 1965 I joined my father and brother on the family property near Mansfield.

In 1973 my wife and I were fortunate to be able to buy our own farm in the Mansfield district. Being undulating red gum country it was a big change from the steep hills of Wappan, the family property bordering Lake Eildon. It was ideally suited to temperate grass seed production such as ryegrass, cocksfoot, fescue and phalaris.

In Mansfield, the largest producer area of temperate grass seed in Australia, we growers formed our own marketing company in the 70s and commissioned research into many aspects of the seed industry. Because of our numbers we were able to work with the Department of Agriculture, CSIRO and private seed companies who were anxious to form liaisons, especially after the introduction of patent rights for privately-bred new cultivars. Fertiliser and herbicide trials were an ongoing part of seed growing. Certification required stringent standards for purity and germination especially in the export market. I was a director of our cooperative marketing company, Mansfield Seeds, and spent two years as chairman.

The seed growers were part of the grains group of the Victorian Farmers' Federation and, as president of the VFF seed section, I spent two years on the Grains Council. It was an interesting experience with several members using the organisation as a stepping stone into state and federal politics. While seed production was our main enterprise we maintained diversity with an Angus beef herd of 400 cows as well as a prime lamb enterprise with 1500

first cross ewes. In the 1990s we gradually moved out of seed production and concentrated on beef. Herbicide resistance in seed crops and the necessity for multiple spraying did not appeal as a sustainable farming practice.

A significant precursor to the revolution of running business farms was the formation of groups in the 1980s with the introduction of benchmarking and sharing of what was once seen as private information. The openness of farmers about their cost of production and revenue was a great stimulus. We were, I believe, well behind the dairy farmers who had been pioneers in this area. We aimed to be in the top percentile of farmers. It was no good being average. One New Zealand consultant pointed out that “average” was where the cream of the crap met the worst of the best.

Over the past decade we have downscaled to 400 acres, fattening heifers and breeding Wiltipoll sheep (Wiltshire Horn Poll Dorset cross with an infusion of Aussie White and Dorper) which, mercifully, don't need shearing or crutching. We were among the first to introduce the breed to the district. This raised a few eyebrows and prompted a few disparaging remarks which have faded as growers see the advantages of a very low cost sheep operation.

Our rural enterprise became even more diverse with an early move into the newspaper publishing and printing arena. In 1971 my wife, Joan, a former journalist with *The Sun* newspaper, and I and two other families bought the ailing *Mansfield Courier* newspaper and printing works which had been in the Amor family for the previous 85 years. The *Benalla Ensign* had wanted to buy the paper but the Amors did not want to sell to ‘foreigners from the north’. Being owners of the local paper was a major link with the community. We led the fight for important institutions such as the retention of our locally managed Hospital and the courthouse as well as causes such as the preservation of productive agricultural land and sustainable planning. In concert with local councillors it took us five years to regain our own shire, the only municipality to do so in the amalgamation era. One of the most rewarding spin-offs from owning the newspaper was being able to join the Commonwealth Press Union (CPU) which comprised 54 commonwealth countries.



At home 2016

Although our paper was very small in comparison with most other members we travelled extensively and met people from all over the world from amazingly different backgrounds. In the halcyon days of the CPU conferences included many heads of state from a wide variety of countries as well as press barons of the world. During our 30-year involvement with the Courier I was board chairman and my wife Joan was publisher. Obviously this necessitated us taking on many different roles depending on staffing and production issues.

My interest in local government included two terms as a shire councillor. I also served on the board of the Mansfield Hospital for 10 years, helped to establish a retirement home and more recently a philanthropic independent living village. The CFA, Landcare, charitable fund-raising and membership of various sporting organisations have ensured a good balance in a life that somehow seems to be busier than ever.

Reflections on our Contribution to Australian Agriculture

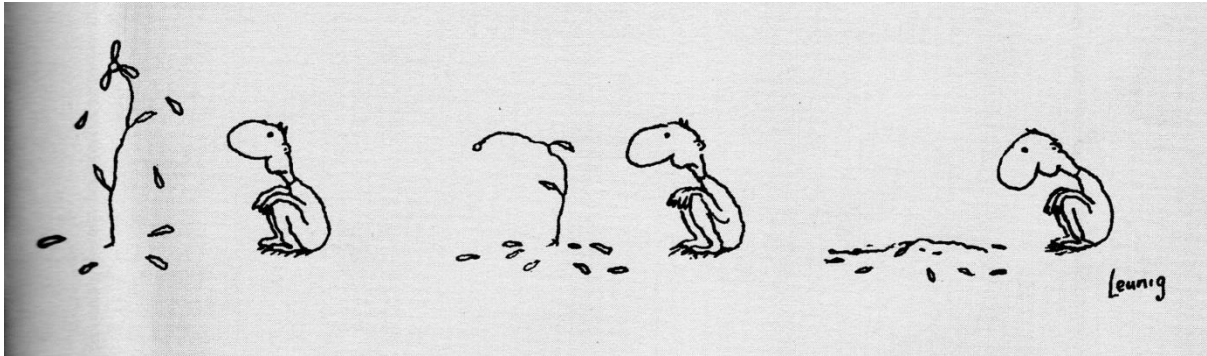
While the stories told above are unique to our group, many aspects of our achievements are shared by other graduates of Agricultural Science from that time. The binding glue is the broad training that we all received at the School of Agriculture at the University of Melbourne. When we graduated, agricultural extension was in its infancy, statistics was more the province of mathematicians than biologists, futures marketing was the buzz word in agricultural economics, little was known about plant, soil, animal and environment interactions and the future of molecular biology was still a distant dream of those who discovered the relationship between DNA structure and the genetic code. We were offered glimpses of an exciting future where science could lead to a better understanding of the biology of microorganisms, plants and animals, and how this knowledge would have direct application to the productivity and profitability of Australian agriculture. We had already been exposed to the revolution that subterranean clover and superphosphate brought to temperate Australian agriculture, and to the promises that new knowledge could bring similar changes to tropical agriculture in Australia's north.

The careers chosen by the graduates of 1964 were as diverse as the characters of those who shared the Dookie experience. It is not my intention to mention names, but I do wish to reflect generally on the contribution that our cohort made to the advancement of the politics, practice and science of agriculture during their careers. A small number either returned to the family farm or took up farming properties where they were able to implement some of the knowledge they had gained from the degree. A few elected to enter the teaching profession where they spread their understanding of agricultural and environmental science, and some took up other careers outside of science and agriculture. About one third chose research careers in science in Universities, CSIRO, Industry and Departments of Agriculture.

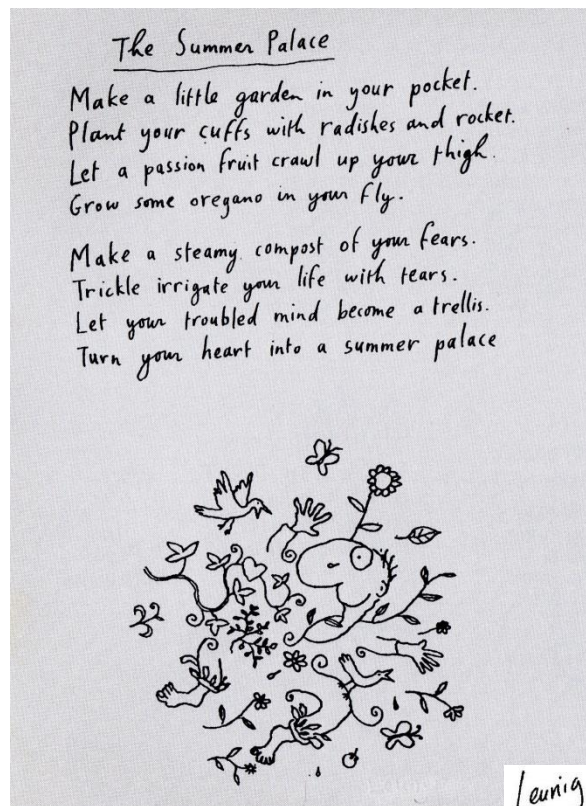
Up until the 1960's the subjects of science (Biochemistry, Physiology, Botany, Pathology, Microbiology, Genetics) were taught as separate entities, often bearing little relation to each other. It was becoming clear when we graduated that all biological processes had biochemistry as a common base, and that outcomes of these processes (growth, reproduction, disease) are best understood in relation to basic biochemical pathways. It was also understood that the interactions between these pathways creates complex systems of regulation of outcomes, and one needs to understand these control mechanisms if one is to understand how the whole system operates. It was from this desire that scientists started "modelling" systems with a view to predicting outcomes. Our cohort of graduates has made significant contributions in this field, with models of rumen fermentation, nutritional requirements of both ruminant and monogastric animals, soil-pasture-animal management models and plant genetics models. These computer based models are now used practically to assist pig producers to optimize productivity from available resources, advise farmers on feeding strategies for intensively fed cattle and help graziers manage their complex systems of soil, pastures and animals for optimum productivity.

On a broader scale, many of our colleagues have been involved in international agriculture, training scientists and farmers from developing countries, advising foreign Governments and experts on developing agriculture, managing ACIAR and AusAid projects, creating markets for Australian farm produce and generally creating and enhancing the promotion of Australian agricultural science to the world. This is indeed a legacy to be proud of, and a testament to the enthusiasm and dedication which our cohort has applied to their chosen careers in *Shaping the Science of Australian Agriculture*.

Reflections



The End



A Thought for your Future

Notes

