

CHAPTER FIVE

THE ACADEMICS

You never stop learning. The teachers pass on valuable information to the students, who can also give valuable feedback to the teachers.

In New Zealand there are two main hubs of agricultural education - Massey and Lincoln Universities; and young farm cadets learned by taking courses at Telford in Otago, Taratahi in Wairarapa, and Flock House in coastal Manawatū. Eventually restructuring put paid to the latter as farm training institutes, and the plant science people at Massey have recently been restructured. Lincoln underwent troubled times in recent years as well.

Ironically, there is no agricultural education in Waikato, another farming hub. In 2012, Jacqueline Rowarth was appointed as the inaugural Professor of Agribusiness at the University of Waikato. But when she moved to another position in 2016 to become the first Chief Scientist of the Environmental Protection Authority (until 2018), the university failed to replace her. So Hamilton remains an agricultural research presence at DairyNZ and with a reduced AgResearch core. There is now no teaching of agriculture in Hamilton.

The Massey and Lincoln lecturers had some excellent human material to work with and to mould into future farming leaders and researchers, intent on making improvements down on the farm. Others tended to prefer the sports fields to the classrooms, while others did both.

While researching and writing this history of NZGA, I have repeatedly written that the subject attended or graduated from Lincoln and Massey, so some achievers were attracted to the Association and had a positive influence on the members. I have therefore included some examples that have been prominent in NZGA.

Lincoln was linked to Canterbury College initially and began educating students in 1880. When agriculture had become the backbone of New Zealand's exports, it became Canterbury Agricultural College in 1896 with its own governing body, and able to award degrees through the University of New Zealand. Eventually in 1961, the institution was officially renamed Lincoln College and became part of the University of Canterbury. Finally, in 1990, Lincoln became a self-governing national university.

Massey University on the other hand, was the brainchild of two professors - Peren and Riddet. On the 1 February 1927, the Council for the Massey Agricultural College appointed Geoffrey Peren as the Principal of Agriculture. William Riddet was appointed the Chair in Agriculture and director of the Dairy Research Institute.

They both considered that Wellington and Auckland were unsuitable as a base for agricultural education, so they met and agreed that Palmerston North would be a natural compromise. When it began as Massey Agricultural College there were only 20 staff members and the first intake in March 1928 totaled 85 students.

Both colleges were present at the inaugural meeting of NZGA in January 1931, with AH Flay and MJ Scott representing Canterbury Agricultural College, and WA Jaques with FLC Scrivener representing Massey Agricultural College.

Among the NZGA Foundation Members were Abe Hudson from Canterbury College and Geoffrey Peren of Massey. While the First Conference was held in Palmerston North in August 1931, the second was at Canterbury College in January 1933. So the educators were well represented in NZGA from the beginning. The lecturers led from the front, presenting papers at NZGA and the graduates emerged later to be prominent contributors at the conferences and on the Executive.

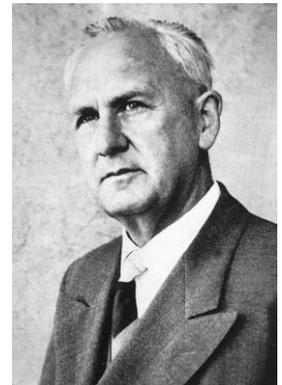
Lincoln Academics

Richard Bevin was at Lincoln College from 1921 to 1923, where he gained a Diploma in agriculture and in 1924 completed the degree of BAg at Otago University. After several years in Tasmania, he returned to Lincoln College in 1938 as senior lecturer in agriculture, a post he held for 12 years.

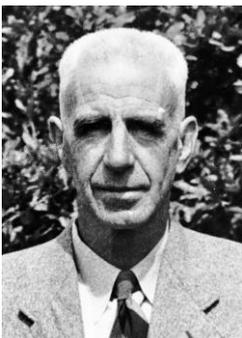
In association with Associate Professor A. H. Flay, he organised the course for the diploma in valuation and farm management and as tutor for the course in 1939 he instituted the plan for rural field cadet training.

Bevin was one of the initiators of the Agricultural Development Conference and was closely associated with the material on which the recommendations of the conference were based.

He travelled on behalf of the boards to South Africa, Rhodesia, the United Kingdom, Europe and North America. Bevin was NZGA President in 1952 and also a past-president of the Lincoln College Old Students' Association.



Dick Bevan



Abe Hudson

After World War One, **Abe Hudson** attended Canterbury College and during 1921-22 he gained a College Diploma at Lincoln. In 1923 he then completed a BAg at Canterbury College and a year later a BSc. At Lincoln he was President of the Students' Association (1922), Captain of the 1st rugby XV. In 1923 he was a member of the Canterbury College 1st XV, and a member of and manager of the Haslam Shield shooting team.

In February 1935, he was appointed Lecturer in Soil Chemistry at

Massey College. The Bledisloe Medal for 1936 was awarded to Hudson, on the decision of the College Board, after consultation with an NZGA sub-committee. He served as NZGA President in 1953.

Jack Calder was born in Temuka, attended its District High School until his headmaster applied successfully for an agricultural bursary at Canterbury College. There Jack duly completed a diploma in agriculture and then a BAg - a "back-to-front" degree course with agriculture completed first, science at the end.



Jack Calder

In 1923 he started at Canterbury College as a housemaster and worked as an associate for Dr FW Hilgendorf, New Zealand's outstanding teacher of agricultural biology, and he gained an MSc in 1927. Jack remained at Canterbury/Lincoln for 35 years, serving as Chair of Agricultural Botany in 1955.

He joined NZGA in its second year (1933) and was a frequent committee member. He contributed papers at four early conferences during 1933-36. Jack was President in 1956, when many delegates to the International Grassland Congress in Palmerston North later reassembled at Lincoln for the NZGA meeting.

Jack was Assistant Director to ER Hudson from 1936 and on three occasions had responsibility as Acting Director of Lincoln. In 1949 he was the first staff member to travel overseas and in 1955 received the Bledisloe Medal, Lincoln's premier award for outstanding merit. Jack retired unexpectedly in 1958. For six years he worked in Britain as consultant to Twyford Seeds before finally returning to live in Lincoln.

Sharky (CE) Iversen took an intermediate course at Otago University in 1924 and then did a degree course at Canterbury College, graduating in 1928. He became one of the first students to complete a MAgSc in agricultural economics.



Sharky Iversen

He also qualified for the College Diploma of Agriculture. Sharky was an enthusiastic and successful member of the rugby First Fifteen and continued as a football enthusiast later in life.

He keenly supported NZGA and was President in 1956, the year the XVII International Grassland Congress was held in Palmerston North at Massey. He retired from what was now Lincoln College, because of ill health and died in 1967, aged 60.

Tom Walker was yet another Lincoln stalwart. He received the inaugural Ray Brougham Trophy from the NZ Grassland Trust in 1994 and was made an NZGA Life



The Prof - Tom Walker

Member in 1996. He also received the Bledisloe Medal at Lincoln University in 1996.

Tom was born in 1916 in Leicestershire, England. In 1935 he was awarded the Royal Scholarship in Chemistry at the Royal College of Science at London University. Tom moved to Canterbury College in 1952 to be Professor of Soil Science. But he was lured back to Britain by New Zealander Professor Mac Cooper to the Chair of Crop Husbandry at Kings College, the wing of Durham University in Newcastle on Tyne.

However, the weather in northeast England was depressing and dreary, he reckoned, and he yearned for the Canterbury fishing, so returned to Lincoln in 1960 and resumed the Chair in Soil Science, and remained there until “retiring” in 1979. But Tom never did retire, and continued to build a nationwide reputation on television for his gardening expertise.

Lincoln College was once taken to court by a “fertiliser company” when Tom described their liquid fertiliser as “an expensive way to buy a 44-gallon drum!” He was also no fan of organic farming, describing it as a marketing gimmick, never hesitating to explain his reasons.

Reinhart Langer was a Lincoln staff member from 1959-1985. He was the father of modern plant science teaching and research at Lincoln University. In addition to being Professor and departmental head of Plant Science, he was Vice-Principal for eight years and Acting Principal for over a year.



Reinhart Langer

In late 1958, Langer was appointed to the faculty of Canterbury College. His research in the plant science department centred on increasing yields in crop and pasture plants. Dr Langer was the foundation professor in plant science at Lincoln, and served on the University Grants Committee. He was appointed Lincoln's public orator in 1978.

In 2005, Langer was conferred an honorary DSc by Lincoln University. He was also a fellow of the NZ Institute of Agricultural and Horticultural Science, and the ANZ Association for Advancement of Science. He was NZGA President in 1969. He died in Christchurch on 3 August 2018, aged 97.

Jim White was born in Nelson province and studied soil and plant science at Lincoln. He graduated in 1955 and became Professor Tom Walker's first masterate student. Jim undertook a doctorate in Adelaide, South Australia then returned to Lincoln to lecture.



Jim White

Several years later Jim became Head of the Plant Science Department and developed the custom of bringing his staff to the annual NZGA conferences. Jim always asked the 'curly' questions after many presentations, never to embarrass the speaker but to gain more knowledge for all those attending.

During his career he co-authored a textbook on pasture and crop science but he and wife Barbara were also keen gardeners. He retired in 1994 and enjoyed gardening, but after a decade Jim's health deteriorated in 2004-5. Jim received the Ray Brougham Trophy at the 2006 NZGA conference, but died the next year.

Terry Ludecke studied at Lincoln College during 1954-57 where he graduated MAgSc. His research in Central Otago gave farmers and farm advisers the key to the phosphate and sulphate contents of schist and greywacke-derived soils, which were essential for worthwhile clover responses when improving tussock hill country.

Terry also tackled finest of grinding of Sulphur, sulphur forms, clover nodulation, and suitable sheep breeds for improved hill country - all problems needing urgent answers to enable farmers to progress.



Terry Ludecke

Terry joined the staff at Lincoln College in 1960 and became a reader in soil science. There he tackled the conditions necessary for nitrogen responses in wheat, a doctorate study at the time of his sudden death on 5 May 1980.

As soon as Terry started on the Lincoln staff he joined NZGA and began contributing papers at the annual conferences. In the decades he was active he presented eight papers. He enjoyed helping to organise events and inevitably became involved on the NZGA Executive Committee. He helped to organise the 1970 NZGA Conference at Lincoln and was elected to the Executive in 1975, while he was already President of the NZ Society of Soil Science during 1974-76.

In 1979, Terry chaired the organising committee for NZGA's first and very successful Research & Practice Conference on *Herbage Seed Production*. This effort never stopped his outside activities - he was also chairman of a school board of governors, President of the Lincoln College Rugby Club, Secretary of the Old Students Association, chairman of the Lincoln College Branch of the University Teachers Association, and he gave service to his church.

But above all, Terry considered people as individuals to be the most important. He found temporary accommodation for students in Alexandra; he did something about a

few students who were being disadvantaged by a change of course structure at Lincoln College. He gave good counsel to so many students - enthusiasm was his hallmark and he communicated this to those who sat and listened. Terry also had a great sense of humour and never lost an opportunity to pull someone's leg.

Terry Ludecke was midway through his year as NZGA President when he died suddenly while refereeing a rugby game, I was told. Vice-President John Lancashire stepped in to carry on with the 50th Conference in Greymouth. The *Herbage Seed Conference Proceedings* was dedicated in Terry's honour. Terry left behind his wife Barbara, their two daughters and two sons.

Michael Smetham was a typical Englishman who was born in 1930 and lived through the Second World War in London with his family. He opted for an agricultural career, studied at Wye College (the agricultural department of London University) in Kent, graduated with a BScAg and sailed to New Zealand in 1955. He worked on farms, gaining valuable farming experience and then joined the Department of Agriculture in 1957 as a farm advisory officer in Gore. He had a huge district to cover, from Lake Wakatipu to Raes Junction.



Michael Smetham

He left Gore in March 1960 to marry an Invercargill girl, Sheila (nicknamed Buffy), and they sailed back to Britain, staying for two years. The Smethams then returned to Southland and while Michael was re-employed in advisory work, based in Alexandra and covering Otago, he also became fascinated by research, and carried out subclover evaluations around Central Otago but was then offered a position at Lincoln College by Reinhardt Langer, as a pasture science lecturer and researcher.

At Lincoln Michael obtained a MAgSc, expanded his subclover research, and remained there for the rest of his career as a senior lecturer. His lectures must have been interesting, as he had a sturdy voice with excellent pronunciation.

Michael was listed as an NZGA member in the 1959 *Proceedings* so he probably joined soon after arriving in New Zealand. At NZGA conferences he gave several presentations featuring his subclover findings in dryland, and often asked questions after other presentations that were very typical of him. He attended the conferences almost every year and became involved with NZGA administration when he chaired the LOC for the 1974 Oamaru Conference and was elected to the Executive Committee in 1983.

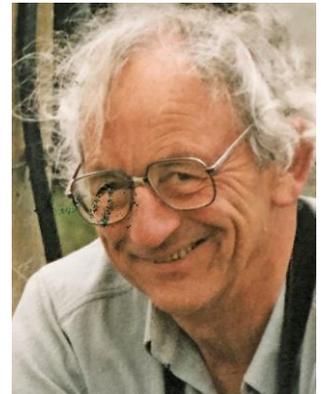
Michael went through as President in 1988. He was elected to the NZGT the following year and stayed on the Trust until the mid-2000s. He arranged to have the publications on sale at the Lincoln University Library.

In later years, another important part of his life was his involvement in compiling the Lincoln Art Collection. Michael was on the Art Committee with Dick Lucas and others, and between them they amassed a important and representative body of New Zealand Art. After retiring, he also spent time cataloguing the collection, which is now a valuable asset to Lincoln University. However, he turned 90 in 2020 and he has sadly succumbed to old age, and now struggles to remember many of those times.

Dick Lucas was elected an NZGA life member in 2008 at Blenheim. He first became acquainted with an NZGA Conference in Greymouth back in 1964. His generous boss, Principal Bill Bryant of Westland High School in Hokitika, gave him three days off to attend the sessions.

Dick spent four years secondary-school teaching and his Lincoln BAgrSc proved to be an excellent qualification for it, but he decided he wanted to be closer to real agriculture, so he next spent five years on one of Dick Seddon's tropical provinces - Niue Island!

In 1974 Dick was appointed to co-ordinate the new Diploma in Field Technology at Lincoln College, and he resumed attendance at most NZGA annual conferences - his wife Margaret irreverently referred to them as the "Plant Science Picnics"! While conference field days were valuable for his teaching, he hated those field trips where those attending didn't get to kick the turf and palpate the herbage.



Dick Lucas

When programmes were rationalised in the late 1980s, student numbers declined, leading to the Dip Field Tech being discontinued. So Dick reinvented himself as a pasture husbandry lecturer for the rest of his career, and he found it was particularly rewarding to supervise post-graduate and BAgrSc Honours students.

Dick retired from a full-time position as a senior lecturer at Lincoln in 2004. However, he has lingered there as a part-time member of Derrick Moot's "Dryland Pastures Group", contributing to field days that promoted subclover, perennial lupins and Caucasian clover to dryland farmers. He has found this to be satisfying and feels pleased to be making a contribution to *NZ Incorporated*.

Dick and fellow grasslander Michael Smetham also contributed to the cultural image of Lincoln as co-convenors of the Art Committee for 40 years. They had a mandate from Lincoln Vice Chancellor, Bruce Ross, to develop a collection of contemporary New Zealand art to balance the gumboot, rugby and beer image. Ecologist Gavin Daly was another art committee member. They found it was amusing when showing the

Friends of Christchurch Art Gallery, the University of the Third Age (U3A) and Probus groups around the Lincoln campus to tell them that they were “muddy boot” pasture specialists!

While he contributed to some NZGA LOC committees, Dick didn't serve on the Executive; so he reckons the Life Membership he received in 2004 at the Blenheim Conference was an outlier.

Work and *Play* are four-letter words - and **Professor Derrick Moot** believes in applying both to his life. Born in Christchurch, he didn't go on farms until he was an 18-year-old student at Lincoln. Derrick chose agriculture as being a ticket to travel, but he's done more for this country's farmers than most people have. That's why Derrick was awarded the Ray Brougham Trophy in 2016.

Derrick's father was a Dutch immigrant who was production manager at the Crown Crystal glass factory in Hornby. Derrick baffled his father when he chose to study at university, but I daresay he was a proud father afterwards. In his third university year Derrick went on an exchange year to Oregon University, but had to work full-time at the Crown Crystal factory in his second year at Lincoln to pay for this. He would sometimes work overnight at the factory and then attend his Lincoln lectures during the next day.



Derrick Moot

In the late 1980s Derrick completed his honours degree, focusing on evaluating lucerne-grass mixtures. NZGA Life member and Lincoln senior lecturer, Dick Lucas, supervised Derrick's honours project and influenced his subsequent career. Derrick learned how to share ideas among his colleagues and not to worry. He has also been an avid sportsman in his time, coaching junior football; a coach, organiser and a national referee in volleyball; the Canterbury organiser for beach volleyball that involved over 3,000 participants; and a champion in lawn bowls. He set up the Sumner beach volleyball league before following his wife (a GP) to Britain, and began post-doctorate research on climate change.

In those years he was a sceptic about this phenomenon, but he examined the evidence, realised it was real, and that climate change was a growing problem. He then met Professor John Porter, a lead author for the Intergovernmental Panel on Climate Change (IPCC) third report, who introduced Derrick to many influential people in a short time.

At this time he also realised that he enjoyed teaching as well as research. So when a teaching position at Lincoln was offered to him, Derrick and his wife returned to New Zealand; and he began working with his former lecturers in the Plant Science department. He mentioned climate change in some lectures, but the students considered he was deluded. However, he was aware that when climate change intensified, the East

Coast dryland farmers would be vulnerable, and he wanted to develop sustainable farming methods to ensure these farmers survived.

At this time lucerne, the plant he had studied for his honours degree, was forgotten, largely because the varieties then being grown needed pesticide protection and costly fertiliser. So Derrick carried out evaluations of lucerne, chicory and red clover, even though he lacked research funding. Instead he had his PhD students carry out the research. The results could greatly benefit dryland farmers, so he has been telling them the findings from eight years of this research.

Derrick has shown that lucerne can perform better than other forages in dryland situations, given the right management; but he doesn't want farmers to see his advice on growing lucerne as a silver bullet. If they mismanage it their farming system will collapse. So by speaking to farmers, at field days, on the phone or directly, he has been instrumental in the economic, environmental and social transformation dryland farming on the East Coast. He is recognised, nationally and internationally, as a legume specialist, particularly on lucerne management.

He is an outstanding communicator and I echo his need for simplifying the science to enable farmers adopt his research results on the farm. Derrick also developed a dryland pastures website and created the Beef+Lamb NZ text service that offers advice and answers for over 700 farmers every week. In recent years he has also given over 200 speaking engagements.

Derrick is a passionate pasture person, intent on making a positive contribution to the industry. He is another great asset to Lincoln.

Lincoln graduates included:

Frank Callaghan - born at Lincoln and became DSIR Secretary and a science leader. NZGA President in 1949 and was elected as President of the Royal Society of NZ in 1950.

Percy Smallfield - educated at Canterbury Agricultural College and completed the BAgrSc degree course. In his career at the Department of Agriculture he developed thousands of hectares of pumice land in the North Island's central plateau; saw the development of Crown and Māori land. He was awarded the Bledisloe Medal 1930-1939 and received an NZGA Special Award in 1961.

George Holmes - MAgrSc degree at Canterbury College and primarily responsible for establishing Invermay. Served as NZGA President while at Invermay.

Ivor Elliott was another NZGA President who went to Canterbury College in 1932 and after graduating BAgrSc, he went into the fertiliser industry and later served on the NZ Fertiliser Manufacturers' Research Association (NZFMRA). He was also active in establishing the NZ Institute of Agricultural Science and was a Fellow and Past-

President.

Alan Johns - another Canterbury success, he developed an international reputation for his research into bloat. He established the DSIR's Plant Biochemistry Division in Palmerston North in the 1950s.

Nelson Cullen was born in 1927 and studied agriculture at Lincoln College, graduating BAgrSc in 1950. He joined the small Invermay staff that year, and became Invermay's director in 1966, overseeing research into animal, pasture, crop, fertiliser and soil technology.

In 1975 he moved to Ruakura as Director of Soil and Plant, managing a staff of over 180 including 50 scientists. During the years at Ruakura Nelson recruited more staff, established horticulture research, and helped to set up a comprehensive fertiliser advisory system. Nelson was elected as a Life Member of NZGA in 1984 and was made a Fellow of the Institute of Agricultural Science.

Another Lincoln College graduate, **George Banfield** was field superintendent of the Department of Agriculture at Hamilton, and received the first award made by the Grassland Memorial Trust.

Gavin Sheath obtained an Honours degree at Lincoln University and worked as the MAF district scientist for Otago, carrying out evaluation trials in dryland and irrigated situations. Gavin then moved to Palmerston North to undertake a doctorate at Massey University on the growth and agronomy of *Grasslands Maku* lotus.

After obtaining his doctorate he moved to MAF's Whatawhata hill country research station, maintaining his interest in legumes. He was elected to the NZGA Executive Committee in the early 1980s. Gavin became Group Leader at Whatawhata and in the mid-1980s, he began farming systems research and fruitful work with Māori incorporations, becoming a source of farming wisdom that helped improve some large land areas in North Island hill country.

Gavin served as NZGA President in 1985 at Whangarei and then joined the Grassland Memorial Trust. In the early 1990s Gavin was coopted onto the Organising Committee for the XVII International Grassland Congress by chief organiser Ray Brougham, held in New Zealand centres and Rockhampton, Queensland. He developed a very successful IGC programme that featured keynote addresses on a topic followed by posters around the same topic, ending with a 90 minute discussion session to form conclusions. This proved far more successful than the traditional format used at previous congresses.

Gavin was elected to represent Australasia/Oceania on the IGC Committee from 2001 onwards, and was surprised and honoured to be elected Chairman. He went on to be the first New Zealander to chair the first joint IGC-IRC gathering held in China in 2008. Gavin was elected as an NZGA Life Member in 2001 at the Hamilton Conference

and was awarded the Ray Brougham Trophy in 2019. He eventually retired in April 2011

Derek Woodfield is the son of a Methodist Minister and spent his youth at Leeston, by Lake Ellesmere. After school he went to Lincoln, excelled in his degree and was appointed to the Plant Breeding Group at DSIR Grasslands in 1982 to focus on legumes, especially the clovers.

Derek immediately became an NZGA enthusiast and helped Deric Charlton as Secretary, so the Executive Committee appointed him as Assistant Secretary in 1983. The two worked really well together and Derek took over as Secretary in 1984. He established a three-year term in the role, as regular renewal of such positions encouraged innovation in NZGA's direction.

Derek served his term and then went to the USA to study for a doctorate in Wisconsin, following an almost traditional route started by Lionel Corkill in the 1950s. By then Derek had met and married Jenny and they had two children when they duly returned to Palmerston North.

Derek continued in the NZGA and served as President in 2002 when the Conference revisited Greymouth. He was elected a Life Member in Palmerston North the following year.

Derek's career has continued to thrive and he now heads Grasslands Innovation Ltd, the plant breeding section part of PGG Wrightson based at the AgResearch Grasslands campus in Palmerston North.

Massey Academics

Stuart “Robbie” Robinson remained a keen NZGA member into his nineties. He attended his first Grassland Conference in Palmerston North in 1936 and joined NZGA, and became one of the Association’s longest standing members.

Robbie went to Massey College in 1932 and after graduating, joined the Department of Agriculture in Palmerston North as an adviser. When World War Two began he was sent to Britain with five other specialists to assist with food production. When these Kiwis arrived Britain was only growing a third of what it needed, but by the time the war ended this had risen to two-thirds – although Robbie didn’t claim to have achieved this on his own!

Robbie returned to Massey’s Agronomy Department in 1947, where he worked with Bill Jacques. The two agronomists soon merged with the Soils Department headed by Professor Abe Hudson, another NZGA enthusiast at the time. During the early 1950s these people worked hard with DSIR Grasslands Division staff to organise the 1956 International Grassland Congress in Palmerston North. The late Ray Brougham once said that they did no everyday work during the two years before this event!

After the sudden death of Peter Sears, Robbie joined Hazel Foster, Professor Tom Walker and other Executive members to establish the Grassland Memorial Trust (now NZGT) in 1964, as a means of commemorating Sears and other prominent grasslanders. He continued as reader in agronomy at Massey until he retired from there in 1972 after 40 years’ service. But then he moved over the road to DSIR Grasslands and developed the Turf Research unit there until retiring again in 1976 – and that wasn’t the end either! He had been a member of the NZ Turf Culture Institute since the 1950s and served as its President for eight years, so decided to spend most of his spare retirement time developing that organisation.

Robbie and wife Chris eventually discovered southeastern Queensland and bought a duplex in Hervey Bay, north of Brisbane. They intended to enjoy it for five years but over-wintered there for well over a decade. They eventually returned to Palmerston North permanently and lived in a retirement village until he died in the early 2000s.

Professor Bram (Watty) Watkin had a long and active interest in NZGA, serving as President in 1972 and being made a Life Member in 1983. He was also made a Fellow of the NZ Institute of Agricultural and Horticultural Science in 1984.

Watty was born in Gore in 1925, and completed BAgSc and MAgSc (Hons) at Massey, then the Field Husbandry Department in the University of New Zealand. His

career spanned 60 years, covering research and teaching pasture-livestock interaction.

Watty studied for a doctorate at Wye College, University of London during 1949-1954, supervised by the legendary Kiwi, Professor Mac Cooper. He followed this in 1954/55 with postdoctoral studies at the Grassland Research Institute, Hurley and ICI's Jealotts Hill Research Station, both in England.



Bram Watkin

He returned to New Zealand in 1955 and was appointed Officer-in-Charge at the DSIR Lincoln Regional Station. In 1959 he was promoted to Chief Pasture Ecologist and moved to DSIR Grasslands in Palmerston North. A year later Watty was appointed as Senior Lecturer in Agronomy at the University of New England in Armidale, New South Wales, Australia. He enjoyed teaching agronomy but in late 1964 returned to Palmerston North as the Foundation Professor and Head of Agronomy at Massey University. He held this post until he retired in 1986. In 1983 he also served as Dean of the Faculty of Agricultural and Horticultural Sciences.

Watty was one of the leading pasture agronomists of his generation. He was primarily interested in the interaction between grazing animals and pastures, emphasising both pasture and animal production. His work covered the effects of grazing on individual grass and legume species, to livestock production from grazing systems.

That didn't prevent him undertaking pioneering research on pasture establishment, pasture measurement, diet selection and animal production. His research on how animal droppings affect pasture composition and herbage yield was recognised internationally. In 1970, he was awarded an NZ-US travel grant to study at the University of Kentucky. In 1976, he presented a key address on *The effects of grazing animals on pastures* at an international conference in Brisbane, Australia. This review is still being cited after more than 30 years.

Watty was key player in establishing the NZ Seed Technology Centre at Massey in 1976. Over 30 years, more than 1200 students, many from developing countries, passed through the Centre. He personally supervised more than 40 postgraduates, including many PhD students. Five young grassland scientists from five different countries went on to make influential contributions to the International Grassland Congress (IGC). Later, all five were representatives on the IGC Continuing Committee.

After his retirement, Watty served as an International Adviser to the Dairy Farming Organisation (DFPO) in Thailand, living there for two years. He contributed significantly to Thailand's developing dairy industry and later visited Thailand at least yearly for over 20 years. While in Thailand he studied practical use of tropical pastures.

Watty died peacefully in May 2011 in Auckland. We remember him for his outstanding contribution to NZ grassland science and to Thailand's dairy industry.



Alex Chu

Alex Chu was born in Chongqing, China, and raised in Sabah, East Malaysia. He graduated at Massey with a BAgSc in 1968, a MAgSc (First-class honours) in 1971 and a PhD in Pasture Agronomy in 1979.

Alex lectured in pasture agronomy from 1973 and was promoted to associate professor in 1986. He published around 70 papers and supervised 55 postgraduate and honours students.

In 1988 Alex Chu was appointed as an assistant to the Massey Vice-Chancellor (International Liaison and Special Projects) and was made responsible for developing relationships between Massey University and Asia, particularly in China, and more recently in South America. His work resulted in collaborative agreements with Peking and Tokyo universities. From 2001 until 2008 he was also the International Liaison and Special Projects Adviser to the College of Sciences Pro Vice-Chancellor.

He has held honorary professorships at the Inner Mongolia College of Agriculture and Animal Husbandry (1985); China's Northeast Normal University (1987); Gansu Grassland Ecological Research Institute (1987); Beijing Agriculture University (1993) and Hubei Agricultural College (1998).

He was an honorary adviser to the Department of Agriculture, Guangdong Province, China, for five years from 1994. He established and funded three scholarships at Massey: the ACP Chu Trade for Training Scholarship, the John Hodgson Pastoral Scholarship, and the Professor Ren Jizhou Scholarship.

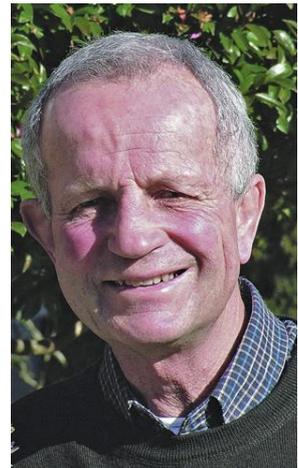
Dr Chu was a member of the NZ Agronomy Society, the NZ Society of Plant Physiologists and NZGA of which he was president in 1986. He is now retired in Palmerston North. Alex's services in promoting New Zealand's interests in China and other Asian countries were recognised in the New Year's Honours in 2003, when he was made an Officer of the NZ Order of Merit. He was also recognised by the Chinese Government with the Dong Huang Award in 1996 for his contribution to agriculture and agricultural education in Gansu province. In 2001 he received the State Friendship Award, the highest civil award given to foreign citizens, for his significant contribution to agricultural development and education.

Colin Holmes was born in Sri Lanka, where his Northern Irish father was in the Colonial Civil Service. In 1951 the family returned to County Antrim where they lived on a small farm. Colin gained a BAg degree at Queens University, Belfast, and

completed a PhD in 1966 at Cambridge University, then accepted a lecturing position in the Department of Dairy Husbandry at Massey University.

At Massey, he studied the effects of urea fertiliser on pasture milk production and learned a lot about grazing systems. One outcome was the Massey rising plate pasture meter, developed in collaboration with Bob McLenaghan. This led to studies on pasture yields before and after grazing, the quantities of pasture to be offered per cow daily and the effects of grazing management on future pasture quality.

Colin also collaborated with Ian Hook of LIC in studies of somatic cell counts (SCC) in milk, as an indirect measure of mastitis in cattle. These proved to be a useful measurement for farmers. Throughout the 1970s and 80s, he was on the National Mastitis Advisory Committee, a trustee for the Taranaki Agriculture Research Station and he organised/contributed to the Massey Dairy Farmers Conference.



Colin Holmes

In the 1980s he worked on a project at Massey to prove that high breeding index cows were better than those of low merit. He also chaired a group running the Holstein Friesian Strain Trial, including DairyNZ, LIC, and Moorpark Research Centre, Ireland.

In 1990, Colin became interested in once-a-day (OAD) milking and worked with dairy farmer Lionel Harding and family near Putorino in Hawke's Bay. They had been milking OAD for about five years and some of the OAD cows produced well and were fatter, but had higher SCC, according to Colin.

So in 1991, he undertook the first OAD study in New Zealand, comparing OAD cows with those milked twice a day. He became an advocate for OAD because it was a simpler system for producing low-cost milk.

Colin retired from Massey in 2006 but continued working with dairy farmers, focusing on OAD milking and grazing systems. He felt that OAD milking fitted well with grazing systems and was less demanding on people and cows. It improved cow body condition and fertility, reduced the distance walked by cows and also minimised lameness.

Colin Holmes was made a Member of the New Zealand Order of Merit for services to agriculture in 2010. He was awarded the Sir Arthur Ward Award in 1997, the McMeekan Memorial Award in 2004 and life membership of the NZ Society of Animal Production.

The NZ Grassland Trust awarded Colin with the Ray Brougham Trophy in 2007 and he received a Lifetime Achievement Award at the National Dairy Excellence Awards in 2009. Colin Holmes died after a long illness in 2017.

Massey graduates included:

Lionel Corkill was New Zealand's first pasture geneticist and plant breeder. He was a milestone creator in the country's pastoral farming industry. He made a huge contribution to pasture plant breeding during his time as DSIR's chief breeder and director, and as director of DSIR's Crop Research Division.

In 1928 Lionel Corkill was a Foundation Student at Massey College in Palmerston North, graduating with a BAgSc, and was the first Massey student to gain a MAgSc in 1931.

Corky worked for two decades at Grasslands and built up a first-rate team. He led from the front and bred the world's first hybrid ryegrass, *Grasslands Manawa* in 1964.

Ray Brougham was born in Palmerston North and started at Grasslands at the end of World War Two, as a raw young technician and worked his way into research, obtaining advice and ideas from his colleagues. He gained an agricultural degree at Massey and eventually was awarded a DSc for a series of papers on pasture management. He became Grasslands director in 1970.

John Lancashire was born in London in 1935, and came to New Zealand after gaining a BSc in agriculture at Wye College. He joined DSIR Grasslands in 1960 and then studied for a masterate degree at Massey University. In 1985 he was appointed Grasslands director after Ray Brougham retired, and led the Division into the user-pays era. In 2015 he raised funds on behalf of the Māori Trust that owned Queen Elizabeth Park, but became unwell, underwent chemotherapy and died.

Jon Toxopeus - or just Tox as we knew him - was raised in the Dutch East Indies/Indonesia and survived horrors during World War Two. Afterwards Tox moved to New Zealand and gained a MAgSc in Soil Science at Massey University.

He started with the Department of Agriculture in Palmerston North then moved to Hamilton as a soil scientist. He worked at Ruakura in the Soils and Fertilisers Group and undertook fertiliser and lime trials in Waikato and around Auckland Northland regions. He was NZGA President in 1983.

Gavin Sheath was another NZGA President who moved to Palmerston North in the late 1970s to undertake a doctorate at Massey University on growth and agronomy of *Grasslands Maku* lotus.

Keith Widdup began his research career at DSIR Grasslands as a technical assistant in 1973 with group leader Bill Rumball and geneticist Warren Williams. He undertook a masterate degree in plant breeding at Massey University, learning the details of genetics and plant breeding techniques. Keith went on to be a significant legume breeder at Gore and Lincoln, and was NZGA President in 1994.

Mike Manning graduated with a BAgSc from Massey University in 1981. He first became involved in NZGA as a member of the LOC for the 1983 Annual Conference in Gisborne. He was elected to the Executive Committee in 1994 and served as President in 1997. Over that time, Mike also presented papers at several NZGA conferences.

Mike has extensive experience in the fertiliser industry following 39 years of involvement. Since 1988 he has undertaken several senior management positions within Ravensdown Fertiliser Ltd. Mike is currently responsible for Innovation Investments by Ravensdown; ARL, the company-owned soil and plant diagnostic laboratory; the Ravensdown Environmental Consulting team; and the Regional Council policy team.

Graham Kerr hails from Waikato and after attending Melville High School, he graduated with a BAgSc degree from Massey University. While attending Massey his practical work experience on farms in Te Awamutu, Whakatane, Reporoa and Clinton ignited an interest in pasture and how to manage it well. He has been a stalwart technical manager at the seed company that began in the 1980s as NZ Agriseeds Ltd and is now Barenbrug NZ.

Jeff Morton was brought up at Tutira in northern Hawke's Bay. He studied agriculture at Massey University, gaining a MAgrSc in Agronomy in 1975. He started working with the Ministry of Agriculture as a district scientist on the South Island's West Coast. For 12 years he carried out research into farm issues, mainly focused on soil fertility. In 1980 Jeff served on the LOC for the 50th Annual Conference. In the South Island Jeff spent five years at the MAF Lincoln Research Centre where he led research on mitigating DDT residues in soil and animal products.

He moved south to Invermay for a further twelve years with AgResearch, leading the Soil Fertility Group. He finally joined Ballance AgriNutrients in 2005 and worked in Canterbury, Manawatū and Hawke's Bay, retiring in 2015 to work as a consultant. Jeff is now an NZGA Life Member and currently the Vice President. He presented the Levy Oration in 2014.

An Exceptional Academic

Jacqueline Rowarth is a recognised academic, a science advocate and communicator, and is widely known as an agri-environmental analyst and commentator. She was the first woman NZGA President in 2011 and is a Past President of the NZ Institute of Agricultural and Horticultural Science. Jacqueline has worked at Lincoln, Auckland (Auckland University of Technology), Melbourne, Massey and Waikato Universities in senior academic posts.

Jacqueline was born in the UK and arrived here in January 1976. With one year of farm work in the UK (on an organic farm in Shropshire) she decided she needed some New Zealand experience and worked on a sheep and beef station in Awakino. The contrast was considerable.

She graduated with an Agricultural Science degree with first class honours in Environmental Agriculture, and then a PhD in Soil Science (Nutrient Cycling) from Massey University. For this she received the New Zealand Soil Science Maurice Fieldes Award.

Jacqueline was appointed to the seed science group at DSIR Grasslands in 1988 and after 6 months in Palmerston North, moved to the Lincoln regional station. There she worked on seed production issues with nitrogen, and with the grazing herbs chicory and plantain, enabling them to become widely use in pasture seeds mixtures on livestock farms.

In 1994 she was appointed as an academic at Lincoln University, in the Plant Science Department, and from 2000 to 2004, Jacqueline was at Unitec Institute of Technology in Auckland as Dean of the Postgraduate Division and Director of Research, becoming Vice President, Research and Development, at the beginning of 2005.

She then moved to Australia, and from 2005 to early 2007 she was Director of the Office for Environmental Programmes at The University of Melbourne. However, in 2007 she returned to Massey University, where she held the Foundation Chair of Pastoral Agriculture and was Director of Massey Agriculture.

In 2012 Professor Rowarth was appointed as the inaugural Professor of Agribusiness at the University of Waikato, and from 2016-2018 she was the first Chief Scientist of the Environmental Protection Authority.

Since 2018 she has been elected as a farmer member of the Board of Directors of DairyNZ and of Ravensdown – she is a shareholder and director of farming operations in the Waikato. She is also an Adjunct Professor, Lincoln University – where she started as a lecturer.

In her time she has received numerous awards, including:

- Zonta Award for Excellence, 1994
- New Zealand Science and Technology Medal, 1997
- Companion of the Royal Society of New Zealand, recognising 'Pre-eminence in the promotion of science and technology', 2001
- Fellow of the New Zealand Institute of Agricultural Science, 2003.
- Companion of the New Zealand Order of Merit, for services to agricultural science, in the 2008 Queen's Birthday Honours
- Inaugural Federated Farmers Personality of the Year, 2009
- Landcorp Communicator of the Year Award, 2010.

These days you will see her on *CountryTV*, hear her on *The Country* radio programme aired on several stations including *NewsTalk ZB*, and read her on the *NZ Herald* website, on Stuff and in *Rural News*.

I have not listed the current staff at Lincoln and Massey, as this is a history, but names like David Chapman and Grant Edwards will no doubt be covered in updates.