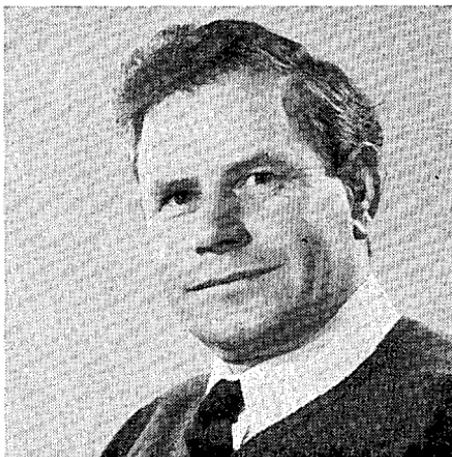


THE McMEEKAN MEMORIAL AWARD

GRAEME KENNETH HIGHT
M.AGR.SC (N.Z.)



Graeme Kenneth Hight, 1937-1979

From time to time the C. P. McMeekan Memorial Award is conferred by the New Zealand Society of Animal Production on a person who has made an outstanding contribution to animal production in New Zealand, or to the Society. The Award was established in 1974 and since then five most worthy persons have been recipients of it, namely, P. Shannon, B.Sc. (Agric.) (Reading) (1975, bovine reproduction and dairy cattle breeding), J. B. Hutton, M.Agr. Sc. (N.Z.), Ph.D. (Reading), F.N.Z.I.A.S. (1976, nutrition of the grazing bovine and extension), A. L. Rae, M.Agr.Sc. (N.Z.), Ph.D. (Iowa), F.N.Z.I.A.S., F.R.S.N.Z. (1977, animal breeding, genetics, and university teaching and administration), P. H. Elworthy (1978, sheep and beef cattle breeding, deer farming, and farming industry and science administration), and A. E. Gibson, Dip. V.F.M. (C.A.C.), F.N.Z.I.V. (1979, encouragement of research, implementation of large-scale sheep and beef cattle breeding schemes, and administration of land development). In each case the person chosen for the Award has related his professional work to the farming industry or has been an active member of that industry.

Dr C. P. McMeekan, whose memory and life's work are permanently commemorated in this Award, achieved his national and international renown for his unique ability to integrate research findings into farming systems, and his capacity to convince his audience — whether it be in public or in private — that many agricultural research results have immediate relevance to the improvement of the productivity of land, pasture, crops and animals. He would no doubt express his approval of those selected to receive the McMeekan Memorial Award.

On this present occasion, the Society seeks to honour one of its distinguished members, the late Graeme Kenneth Hight, who would have been here in person to receive this honour had it not been for his untimely and sudden death on 26 July 1979. Regrettably, this presentation is made in very sad circumstances. The deep sympathy of all members is extended to his wife, Dorothy, and their three children, Helen, Craig and David, and other members of his family, especially at this time as we pause to remember and honour Graeme.

Graeme was born on today's date [11 February] in 1937, so he was only 42 at the time of his demise. He was brought up on a back-country hill farm close to the little township of Kohuratahi in north-east Taranaki. He attended the Marco school, a one-room, sole charge school in the backblocks on the road between Kohuratahi and Whangamomona. A fellow pupil was A. H. Kirton. In that locality in the late 1930s, E. Bruce Levy (now Sir Bruce) carried out his pioneering work into the control of fern and woody regrowth and the improvement of hill pastures using the firestick, oversowing with improved grass and clover seeds, applying superphosphate and using judiciously the grazing animal. McMeekan's parents at one time operated the bakehouse at Whangamomona, so from these coincidences and background we can appreciate the environment in which Graeme was raised. He was born into farming in the hill country and knew, from an early age, its solitude, and something of its problems. This, then, was the genesis of his life's work and the challenge which he later accepted with great vigour and purpose.

His secondary education was at New Plymouth Boys' High School where he was a boarder. As the only son, Graeme's parents wanted him to return to the farm after two years of school. Towards the end of Graeme's second year at school, J. J. Stewart (now Principal of Flock House), who was his house-master and teacher of agriculture, visited with Graeme his parents, Mr and Mrs K. D. Hight, at Kohuratahi. Stewart persuaded them to allow Graeme to continue at school till he had completed his seventh-form year so that he could then proceed to university.

Graeme took a full and active part in school life at New Plymouth, where he was a proven leader and a tenacious player in the 1st XV rugby team. At school he was a cheerful, friendly boy who was popular with his peers and well respected by the staff.

In 1955 Graeme commenced his tertiary education at Victoria University College, Wellington, where he sat three subjects in the Intermediate year. The following year he went to Massey Agricultural College, Palmerston North, to commence his studies for the degree of Bachelor of Agricultural Science which he completed in 1959.

Graeme's undergraduate record was noteworthy for the number of A passes and several failures. It was these failures that spurred him on; no man can be really great unless he has experienced some failures and risen above them. Graeme gained in determination through these experiences.

Graeme commenced studies for a Masters degree in 1960, during which he held the William Hudson Scholarship and the New Zealand Wool Board Scholarship. Characteristically, he started his thesis project on 2 January 1960 when most people were on vacation. He approached the task with exuberance, enterprise, and determination, working with his sheep from early morning till late evening, followed each night with four or five hours of avid reading of the scientific literature, writing copious notes and preparing detailed, voluminous assignments. In the abattoir, and in the dissection laboratory, he worked methodically and with a purpose. He wanted to make a definite scientific contribution now that his dream was starting to unfold.

From his thesis, entitled *A Study of the Effects of Undernutrition and Re-alimentation on the Romney Ewe*, two papers were prepared and submitted to scientific journals and their acceptance for publication greatly

stimulated him. Equally important to him was the conferment on him of the degree of Master of Agricultural Science with First Class Honours in Animal Science. These successes gave him the assurance that he was equipped for, and ready to embark on, a career in agricultural research.

During his two postgraduate years at Massey, Graeme developed his critical faculties more fully and gained a sound understanding of the science of animal breeding, growth of animals and their nutrition, and of meat quality. He became very interested in the wonders of DNA and RNA and indeed planned to go to the University of California at Davis to undertake Ph.D studies in this field. He wanted to relate these cell constituents to growth of sheep or cattle. If he had pursued this desire, it is unlikely that his contribution to the sheep and beef cattle industries of New Zealand would have been so great.

While in his last years at Massey, Graeme was taken by the writer to two farms where he was greatly influenced by what he saw and by what was discussed. The first farm was that of W. L. Clinton-Baker at Tupurupuru, Gladstone, in the Wairarapa, where performance recording of cattle was discussed, and the second farm was that of A. G. H. Parker at Wairunga, Maraetotara, Hawke's Bay, where the genetic improvement of sheep was debated during the visit of G. K. Hight, R. A. Barton and A. J. F. Russel (now of HFRO, Scotland) on 16 September 1961. Later that year, on 16 December, Hight, J. N. Clarke (now of the Genetics Section, Ruakura Animal Research Station) and R. A. Barton visited Parker's property where Graeme worked almost through the night calculating selection indexes of Romney rams. On their return to Massey, Hight and Clarke excitedly discussed this visit with their mentor, A. L. Rae, who encouraged them to further consideration of the problem and the ramifications its solution could have on the sheep breeding industry of New Zealand and eventually, possibly, in other countries.

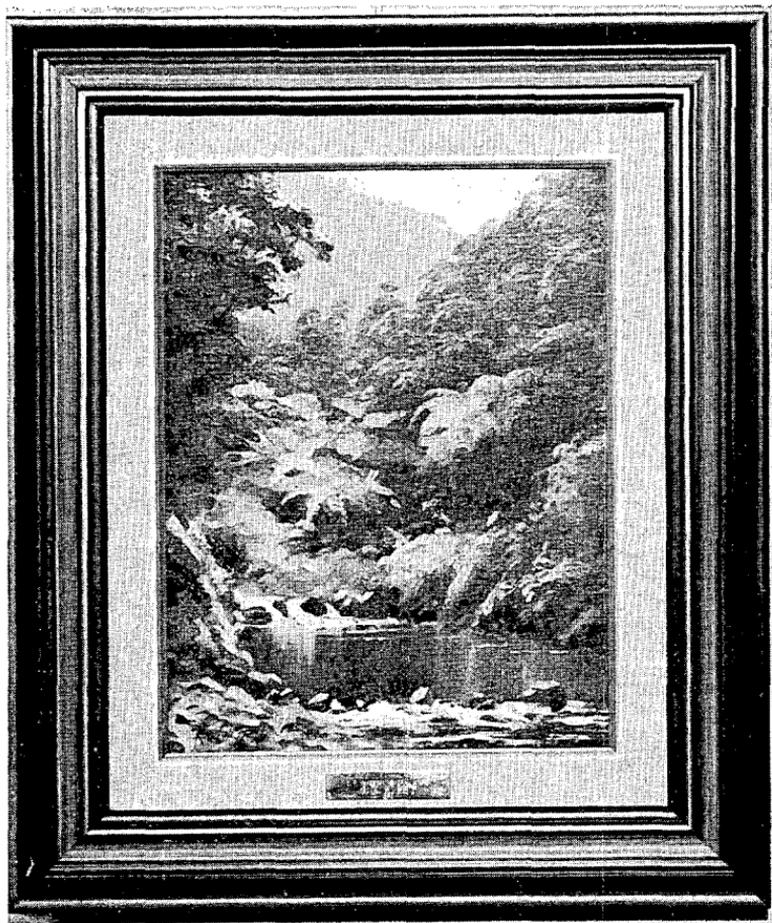
Subsequent to these visits, A. G. H. Parker, R. O. and G. D. Bendall, W. G. Cullen, B. G. and B. R. Hayden and G. K. Hight in partnership with his father, K. D. Hight, at a meeting on 26 November 1966 formed the New Zealand Romney Development Group. W. L. Clinton-Baker joined J. G. Falloon, G. D. Bendall and D. P. Fouhy to establish, on 25 June 1967, the Wairarapa Angus Improvement Group. These two pioneer groups were the forerunners of other large-scale sheep and beef cattle group-breeding enterprises, including those of the Lands and Survey Department.

One of Graeme's activities which demanded much of his energy was his readiness to discuss with many audiences the benefits that would accrue to those who adopted the genetic principles involved in open-nucleus breeding and who used rams and bulls of high merit for economically important traits. He worked to this end directly with a number of groups and indirectly with others.

In his later years at Massey, Graeme met Dorothy Isobel Wallis who was a trainee nurse at the Palmerston North Public Hospital. The courtship flourished and Graeme and Dorothy were married in Masterton on 20 October 1962. Dorothy was very supportive of her husband, encouraged him when he needed encouragement, and tempered his overenthusiasm on those many occasions when he undertook, or contemplated taking on, an additional and heavy workload. Together they worked on the extensive breeding records from the Waihora scheme of the Lands and Survey

Department, Rotorua District, and later Dorothy assumed sole responsibility for their tabulation and analysis. She was his loving helpmate to the very end.

Following the completion of his Masterate studies, Graeme was employed for a few months in the Sheep Husbandry Department at Massey as a Research Assistant. This gave him the opportunity to collect and analyse data relating to carcass composition of open- and woolly-faced



The plaque affixed to the painting bears these words:

N.Z. SOCIETY OF ANIMAL PRODUCTION
C. P. McMEEKAN MEMORIAL AWARD

G. K. HIGHT
1980

The original painting is of a Coromandel landscape by Randall Froude.

Romney ewes. He prepared a paper on this work which was published in 1962. This was his first scientific publication and the two papers from his thesis were his second and third publications, respectively.

He left Massey in 1962 to take up an appointment at Whatawhata Hill Country Research Station, located near Hamilton. He thereby followed in the footsteps of E. A. Clarke, who resigned from the position of Head of the Sheep Husbandry Department at Massey in 1949 to become the foundation Superintendent of Whatawhata. Clarke was followed in that position by I. J. Inkster, who, in turn, was followed by D. R. Lang. When Lang left the post at Whatawhata, G. K. Hight was appointed Acting Superintendent in July 1971 and Superintendent in 1972, a position which he finally accepted with considerable reluctance. The position was re-designated as Director in October 1975.

Graeme's 17 years at Whatawhata were full of achievement. He wrote and published some 77 papers and articles which appeared in scientific journals, or in the farming press, including several chapters in books on sheep and beef cattle production. His output of scientific and other writings did not diminish as he assumed increasing administrative responsibilities. The reviews he presented in recent years clearly showed his deep concern for the whole spectrum of the hill country: the people who lived in the hills and their socio-economic problems; the great and untapped potential of the hill country, especially in wool and meat production; the need for specific research and specialized agricultural extension services for those who work and manage farms in the hill country; and the need to stimulate better and greater production from the hills were constantly being advocated by him, not only from public platforms and in articles, but also to the NRAC Hill Country Research Working Party, of which he had been a key member. This was also his clear message conveyed to this Society in his Presidential Address only 12 months ago.

His research endeavours covered a wide field. One of his first projects on joining the then Department of Agriculture was concerned with the growth of hoggets, especially in the autumn. He collaborated with a number of colleagues in seeking a solution to the problem of autumn illthrift of hoggets. The study extended to the flats at the Manutuke Research Station, near Gisborne, where he worked with D. P. Sinclair and published two papers jointly with him in 1965 and 1967.

Early in his career at Whatawhata, Graeme focused attention on the beef breeding cow. He published a number of papers dealing specifically with the nutrition of the beef cow pre- and post-partum and these greatly influenced teaching and extension activities. They were the first such studies based on a beef cow herd in the New Zealand hill country environment. Other papers followed which threw light on, and gave guidance to, various cow management practices, including artificial insemination of beef cows.

Simultaneously with these cattle projects, Graeme was collecting, analysing and publishing the results of research initiated by E. A. Clarke into crossbreeding of sheep (Border Leicester \times Romney) and contrasting the crossbreds with straightbred Romneys. He later compared Friesian, Friesian \times Angus and Angus cattle on the hills at Whatawhata as an extension of his earlier crossbreeding studies with sheep. Important conclusions were drawn from the cattle crossbreeding project in that they highlighted the advantages of the superior growth rate of the Friesian

and the greater milk production of this breed compared with that of the Angus, even under hill country conditions.

In later years Graeme devoted a great deal of time, effort and thought to the improvement of sheep and beef cattle through selection of animals of enhanced performance. This involved him in a close working relationship with various group breeding people, and from 1968 with A. E. Gibson and others administering the Waihora sheep and beef cattle breeding schemes of the Lands and Survey Department, already referred to. He published, either on his own or jointly, several papers dealing with group breeding and was a frequent speaker on this subject at farmers' gatherings throughout the country.

In addition to all this research, extension and writing activity, Graeme carried a heavy administrative load. He was responsible for a staff of 46, including 13 scientists working on problems of sheep and beef cattle nutrition, animal breeding, animal management, reproductive physiology, wool production, agronomy, and soil fertility. His duties extended to the physical development of the Station of 810 ha, involving pasture improvement, weed control, fencing, roading, water reticulation, and top-dressing and oversowing. He was also responsible for the routine management of animals and the provision of special facilities to satisfy research requirements.

Graeme was highly regarded as an administrator. The papers in his "in-tray" were always attended to with dispatch, as were the various matters concerning his staff. He circumvented the barriers mounted by the bureaucrats and despised their cant. He cut through "red tape" because he wanted to get on with the tasks he set himself and his colleagues. Everything was tackled with urgency because Graeme strongly believed in the need to serve the industry for which he had assumed so heavy a responsibility. He wanted to help the hill country farmers of New Zealand in all manner of ways. He had gained their confidence and they were listening and acting on his advice.

Graeme's reputation was of the highest. He was well respected as a scientist, and in the sheepfarming industry. He was developing an international niche through his visits to Australia and the U.S. to deliver papers and through the stream of overseas visitors to his beloved Whatawhata. He was due to travel to Spain in October 1979 to act as a consultant to an INIA/World Bank project.

He was always available to help and advise. His willingness to do this extended over a very wide range of people — from university students of agriculture, to farmers, to fellow scientists, to members of various State departments — and this was often well beyond the call of duty. He was particularly helpful and stimulating to students, whom he regarded as being important and special people. But this was also his approach to everyone — all benefited from his warm personality, his sincerity, and his earnest desire to be helpful.

When others would have relaxed at the weekend, Graeme would travel to the family farm in the Huntly district and undertake all kinds of jobs. In recent times he assumed full control of this sheep property, but only outside of his hours of work at Whatawhata which often amounted to 50 to 60 a week. There was no possible conflict between his professional position and his private interests in farming. These "off Station" activities provided him with a sense of reality and a better and deeper

understanding of practical farming. It influenced his thinking and actions at staff meetings and in the choice of research projects and their implementation.

We have lost a sincere friend and a gentleman; a leader and inspirer of men; a competent scientist; a man of tremendous energy and boundless enthusiasm; a well-organized man; a kind, considerate and sensitive man; a man of great modesty; a man with a mission and a vision for the hills of this country; a determined man not easily swayed from his viewpoint; an admirer of the beauty of the forest and the garden; and a loving and caring family man.

J. J. Stewart agonized for us all when he wrote these words to me:

"His passing is a great tragedy. I wonder now, if I did the right thing that weekend at Kohuratahi. Would he still be living if he had returned to the farm at the end of his fourth form year? Perhaps so. But New Zealand agriculture and consequently the way of life of all New Zealanders is richer because his life took the direction it did. The quality of a life is more important than its length. But while we acknowledge the great contribution he made, the sense of loss is very strong, isn't it?"

Graeme Kenneth Hight is a most worthy recipient of the C. P. McMeekan Memorial Award, but tragically it is bestowed on him posthumously. His memory and example will remain with us and especially those who were close to him in his school and university days and in his life's work at Whatawhata. His memorial is there for all to see and will continue to provide the lodestar for us to follow.

R. A. BARTON
Massey University
Palmerston North

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In accepting the Award conferred on her late husband, Mrs D. I. Hight said:

I would like to thank you all very much for this Award you have bestowed on Graeme.

Approval from the farming community is worth while, but generally they see only the end results of a person's work, and few would be aware of all that is involved. Colleagues can appreciate the months — often years — of work that is necessary before research has a practical application for the farmer.

Animal research is not always a straightforward procedure. Animals are like people — they can be unpredictable and upset plans and thinking. Scientists often have several setbacks before significant results can be achieved. Acclamation of colleagues is therefore invaluable.

I am very proud to receive this tribute to Graeme's work. As you are aware, Graeme was convinced that hill country farming and Romney sheep both have a greater potential than they are usually credited with. A large proportion of his work — both as a scientist and as a Director — was aimed at demonstrating that these beliefs were attainable.

In accepting this Award on Graeme's behalf, I feel it is evidence that he was achieving his main ambition: to contribute something worth while to agriculture in New Zealand.

There is a quotation by William James that I feel is particularly appropriate: "The great use of life is to spend it for something that will outlast it."

Thank you very much.