

NZ GRASSLAND ASSOCIATION

Fuelled by Science, Tempered by Experience

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From the President

David Stevens

Greetings all,

The past two months have been both exciting and sad. News of the passing of Professor Colin Holmes, after a fight with cancer, leaves us poorer as a community. Colin was a great stalwart of low cost farming and his words of wisdom on this topic continue to resonate for the dairy industry. His final version of this message are captured on video from his Levy Oration at the Masterton conference and can be viewed at the on-line address below. Our thoughts are with Dorothy and family as we remember our colleague, teacher and friend.

The Hill Country Symposium was a great success and Graham did a good job of chairing the organising committee, and reporting back in the last newsletter. Professor Frank Scrimgeour, from Waikato University has completed a draft of the messages from the Symposium and the joint NZGA, NZGT and NZSAP steering group are meeting soon to formulate a way forward. The Red Meat industry is keen to have some positive and powerful messages delivered to help shape the future of hill country farming.

New initiatives are coming to hill country.

A National Forage Strategy is being developed by a group representing the key players in the forage industry. The objective of the strategy will be to have a cohesive plan that will guide future investment through the forage production value chain. The vision is to increase farmer profitability and national prosperity. Forages are an

important segment of the economy and a successful strategy will add value to all players. Richard Green is chairing this group and James Morrison has been contracted to begin the process for them.

The Pastoral 21 research programme is also beginning new initiatives in hill country research. One of note is the 'Legumes in challenging environments' programme. This programme aims to investigate the current challenges that farmers face in increasing legume content and set up research that answers those questions, at a scale that has meaningful impact for farmers. Workshops are being held around New Zealand at the moment to evaluate the types of problems in different environments, before a research programme is finalised. The Programme will build on the previous research, and will be integrally linked to current farmer experience through case study documentation, as well as developing research to answer specific farmer problems. Contact Sue Zydenbos at AgResearch (sue.zydenbos@agresearch.co.nz) for more details.

Colin's Levy Oration at the Masterton Conference in 2015 can be viewed here [*"NZ Dairy farmers have lost their competitive edge" How did this happen? What must be done now?*](#)

He gives us an insight into the development of NZ dairy industry as well as his perspective of the challenges ahead. It includes, of course, his passion for Once a Day milking.

EO Admin update

It's nearing the end of our financial year so keep an eye on your inbox in August for your membership invoice for the coming year. Currently we have over 35 members who are 2 years in arrears and over 60 who are in arrears for the current year. All of these members appear to have active email accounts so they have received the NZGA newsletters and conference Proceedings. In return payment of outstanding accounts would be appreciated.

On a more positive note the Hill Country Symposium proceeding's have been dispatched to all members. If yours hasn't arrived let me know as soon as possible along with postal address details (eo@grassland.org.nz).

Reminder - look out for Alec Mackays Ray Brougham presentations - to be held at Ruakura, Massey University, Lincoln University and Invermay - from August 22nd to 26th.



NZGA - working with scientists, farmers and agribusiness since 1931

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Professor Colin Holmes (1941 -2016)

Inspired by the All Blacks playing Ireland, Colin had New Zealand on his list of places to visit as a student. After a Bachelor in Agriculture with Queens University, Belfast, and a PhD at the Babraham Institute near Cambridge, he took up a five-year lectureship at Massey University in 1966. Luckily for us he stayed. Colin's passion has always been dairy farming and his 40 year teaching and research career was an important platform for advances made in New Zealand and international dairy farming.

There are so many areas of our dairy farming that have had Colin's touch. He started out investigating the role of fertiliser nitrogen on pasture and milk production, and a prototype rising plate meter was developed in collaboration with Bob McLenaghan. Working in this project, and later, provided the base to investigate somatic cell count and mastitis which laid the foundations for the testing and milking practices promoted through the National Mastitis Advisory Committee, of which Colin was a member, and carried on to this day.

Colin was dedicated to efficient grazing systems. His work investigating cow size and genotype in grazing and concentrate-based systems aided the thinking that was to be embedded in the Animal Evaluation System instigated in the dairy industry in 1996. His more recent work on once-a-day milking has provided opportunities for traditional dairy farmers and allowed dairy farms to profitably extend into more marginal country, while helping reduce workloads and improve farmer lifestyles.

In teaching, Colin was known as a great presenter of information and passionate communicator. In 1984 he organised the first Massey Dairy Farmers Conference. His role as editor and co-author of 'Milk Production from Pasture' remains the bible for practical dairy farming on grass. Massey University offer an annual scholarship in his honour. His services to dairy farming were acknowledged in 2010 when he received the New Zealand Order of Merit.

Google Colin Holmes Massey University and a 0.53 second search brings up 47,300 results, testament to the depth of influence that Colin had as a teacher, mentor, researcher and industry advocate. His mana in the industry has led to him receiving the Sir Arthur Ward Award for



communication (1997), the McMeekan Memorial Award (2004) and life membership (2009) from the New Zealand Society for Animal Production; the Ray Brougham Trophy (2008) and The Levy Medal (2015) from the New Zealand Grassland Association, and a lifetime achievement award at the National Dairy Excellence Awards (2009).

Colin was a great person for talking about simplicity in dairy farming systems. That was the enduring message I always got from him. Many farmers, and salesman in particular, try to make things more complex than they need to be. Farms are such complicated biological systems that you need simple principles and policies to stand a chance of reacting to the many variables that unfold each season.

It was all about cows, pasture and low cost, which has once again proved right in the current pay-out environment.

Colin was also a strong advocate for the value of researchers and specialists learning from successful farmers. In the opening invited address he gave to the Australasian Dairy Science Symposium in 2007, in Melbourne, his first statement in the abstract sums his philosophy up well: "Successful dairy farmers are the real experts in whole farm systems, in which they successfully apply the principles and integrate the components. Researchers and dairy specialists should learn from them, and work closely with them." Dairy was the context but it applies equally well to other agricultural systems and accords well with the spirit of NZGA – "*fuelled by science, tempered by experience*".

Conference 2016 - Timaru - "Land of diversity and opportunity"

The annual conference, Timaru 2016, is coming up. There will be a great line up of new research and excellent field days. Again the programme will cover a wide range of topics from aluminium in soils to genetic gain in ryegrass, grazing management for dairy cows, weeds, pests and earthworms.

The Local Organising committee have planning well underway and the editor is busy getting papers through the review process for the Journal. The field day programme promises a look into the future with robotic milking and integration of sheep, beef and dairy enterprises, as well as

potential greenhouse gas mitigations.

Keep the dates – **Wed 2- Fri 4 Nov** – free, and book your accommodation now as it is fast filling up.

The venue will be down at Caroline Bay.



The history of the NZ Grassland Association - 85 years young

The Association is reaching an important milestone in 2016 - celebrating 85 years.

With a sense of our history I thought it was timely to reproduce this paper from our archives, written by an early secretary of the Association. It is fascinating to read how many of the challenges and considerations are the same as the ones faced today.

The New Zealand Grassland Association

By S. H. SAXBY, Secretary, New Zealand Grassland, Nelson 1954.

With the increased interest that is being taken in the New Zealand Grassland Association, there is associated an increased need for a consideration of the origin and development of the association and its activities.

In 1930 the farmers' of New Zealand were beginning to feel the effects of what has, two years later, to develop into a period of extremely low prices for primary products. Farmers were producing as-much as they could, not because the produce was wanted much of it was not wanted-but in order to secure sufficient revenue to keep them solvent. Coinciding with this recession in prices was an increasing interest in the need for an expansion of research and advice regarding the country's grassland.

The gumlands of Northland, the pumice land of the Central Plateau, the arable land of Canterbury, and the rolling, cold clay country of Otago and Southland were all regarded as problem country. The solution to the satisfactory grassing of these was just round the corner, but some materials and knowledge were lacking. Before 1930, Certified ryegrass was unknown; a good strain of white clover was not available; subterranean clover, except to a very few farmers, was regarded as being no better than a weed. Topdressing with lime, phosphate, and potash had been carried out for many years, but, largely because of the absence of a good legume in the swards, much of the topdressing was not producing the results that it should have done.

Experimental work on grassland production was producing information, but the value of the results was limited because of the lack of suitable techniques. But during 1930 important changes were taking place. Critical measurements of pasture production had been initiated. In January. Certified ryegrass had been placed on the market and was to meet a very mixed reception; some interest was being taken in the value of subterranean clover on dry land; pasture management was being studied more closely than ever before and a good strain of white clover was being selected.

A major change was taking place in New Zealand's grassland. Research and advisory staffs were being recruited to the limit of the small amount of finance available.

It is not surprising therefore that on 19 and 20 January,

1931, a conference was held in Palmerston North with the object of discussion among grassland workers "the betterment, of research, investigation, demonstration or instruction in grassland management generally." This conference was called by Mr A. H. Cockayne, then Assistant Director-General of Agriculture, and was attended by 21 persons representing the Departments of Agriculture and Scientific and Industrial Research, Lincoln College, Massey College, Cawthron Institute, and representatives of some fertiliser interests.

The meeting inspected trial work at Palmerston North and at Marton and held discussions based on "a consideration of grassland truths which could be accepted." Mr Cockayne, as convener, gave an impromptu presidential address in which he said, "Let us have a grassland caucus which will dominate grassland research and improvement..." This meeting set up a committee which was required to report on what it considered could be done to further cooperation and coordination in grassland research.

Persons attending meeting at Palmerston North, January, 1931:

Allan, Annett, Askew, Blewett, Callaghan, Davies, Deem, Doak, Fawcett, Flag, Cockayne, Hadfield, Holford, Hudson, Levy, Jacques, McCulloch, Scott, Scrivener, Woodcock, Connell

Persons who attended the inaugural meeting of the New Zealand Grassland Association in Palmerston North in August, 1931:

Aitken, Hudson, Allan, Annett, Askew, Blewett, Burnard, Callaghan, Cathie, Deem, Doak, Fawcett, Flav, Holford, Cockayne, Jacques, Levy, McCulloch, Napier, Peren, Rich-White, Scott, Scrivener, Stewart, Taylor, Wilson, Woodcock, Connell

The Committee, which reported on 25 June, 1931, recommended among other things "the formation of an association or institution of workers in all departments of grass farming advancement," and that an inaugural meeting of such an organisation should be held in the near future in Palmerston North. This meeting was held on 5 August, 1931, and the 28 persons present resolved to form 'the New Zealand Grassland Association' and adopted a constitution. Mr Cockayne was elected chairman and Mr R. P. Connell secretary. It is of interest to note that of the 28 foundation members no fewer than 11 are, 23 years later, still members of the Association. Although members were anxious to hold another conference, their efforts were defeated by the financial depression. A proposal to hold a meeting in December, 1931, was abandoned. Another meeting, proposed for January, 1932, reached the advanced planning stage, but also had to be abandoned. In a letter to a correspondent concerning the proposed 1932 conference the secretary stated, "Regarding the inviting of 'leading farmers' to the January meeting of the Grassland Association, it appeals to me as highly desirable that this should be done". Unfortunately, the Association languished until, April, 1933, when a move was again made to hold a

conference. This conference was held at Canterbury College, Christchurch, in August, 1933.

The conference was of interest for four things:

- * The president broadcast his address from his bed in Wellington and was listened 'to by the assembled members in Christchurch.
- * The very full and sometimes almost acrimonious discussion on 'Certified ryegrass' and on the organisation of the seed trade.
- * It was the first occasion on which farmers attended and on which a farmer presented a paper
- * It was the first of very few occasions when the Association acted (unsuccessfully) as a pressure group.

Such was the birth and the early days of the New Zealand Grassland Association. Since its' enthusiastic but rather faltering beginning in 1931 the Association has, with the exception of the years 1940 - 1946, held annual conferences in various parts of the country, the present one in Nelson being the sixteenth. Although half of the conferences have been held at or near Palmerston North and Christchurch, the remainder have been held in widely separated centres throughout the country.

At the first meeting of the Association members decided that the conferences should be peripatetic. That this has been justified has been shown by the ever-increasing attendances at conferences and by the steadily increasing membership. If all conferences had been held at only one place, it is most unlikely that membership would have increased as it has done. The reason for this: is the large, more or less temporary, increase in the number of members at each conference, and is shown in the table below:-

Table 1

| | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 |
|------------|------|------|------|------|------|------|
| Full | | 268 | 425 | 600 | 716 | 784 |
| Conference | 187 | 103 | 67 | 66 | 248 | 127 |
| Total | 187 | 376 | 492 | 666 | 964 | 911 |

When the conference was held in Southland membership in that district was at a high level but has since dropped off considerably. Similarly the membership in Taranaki was very small until a conference was held there, when it rose rapidly. Since then membership in that district has dropped off. As a contrast the membership in Hawke's Bay shows a consistently low level, largely because no conference has been held there. One does not have to look far for the cause of these changes. It is essentially the short-lived interest of a large number of the farmers in whose district the conference is held. Nevertheless, the interest of farmers is, on the whole, very considerable, as is shown in, the following table, which sets out the numbers of members in each of several occupational groups.

Table 2

| | 1950 | 1951 | 1952 | 1953 | 1954 |
|--------------|------|------|------|------|------|
| Farmers | 91 | 196 | 310 | 419 | 488 |
| Ext/Research | 122 | 148 | 196 | 179 | 175 |
| Commercial | 32 | 46 | 63 | 77 | 90 |
| Other | 27 | 36 | 31 | 41 | 47 |
| Total | 272 | 426 | 600 | 716 | 800 |

This shows the general increase in the number of members in each group, particularly that of farmers. It is obvious that farmer membership could be increased very greatly. Moreover, the extent to which the other interests can be increased is problematical; and they would reach saturation point long before farmer interest would.

In this is clearly shown the proportional increase in farmers from about one-third of the total members to almost two-thirds. It also shows that extension and research workers have decreased from half of the total number of members to a little over a fifth.

It may be asked: Is it necessary or desirable to secure such a large membership with such varied interests? There are two answers to this question. First, a large membership is desirable if for no other reason than to enable the Association to remain solvent. The important reason, however, is that for the Association to be of the greatest value it must have a large membership of workers in all departments of grass farming advancement".

Second; a wide variety of interests is desirable if the main function of the Association is to be achieved. This answer is associated with another question that might be asked, namely: 'What do farmers gain from attending a Grassland Conference that they cannot gain by attending Farm Schools which are conducted in most districts?' Such a question implies a similarity between Farm Schools and Grassland Conferences.

As I see it, these have very different functions, with only a small overlap. Farm Schools are primarily an advisory service to farmers and are concerned with the application of improved farm practices. Grassland Conferences, on the other hand, are not concerned with advising farmers or any other group on the application of any farm practices. They are concerned more with the discussion of factors which may or may not later lead to improved farm practices. For example, at the, Timaru Grassland Conference blind-seed disease of ryegrass was discussed with considerable profit to all concerned, even though, no recommendations could be made, regarding the application of existing knowledge regarding its control. Surely all groups of members were interested to know that so much work was, being carried out and how difficult it was to find a practical solution to the problem. Similarly; in the early days of the Association, papers on the isolation of strains of ryegrass and white clover were of real interest to members of the Association. A similar paper given now would be quite out of place, but

might be quite a satisfactory subject for discussion at a Farm School as a background for a talk on the seed certification scheme.

I feel sure that there are many subjects to which all groups within the Association can make valuable contributions, both as prepared papers and in discussions. Take this conference for an example. The symposium on "Pasture Species" could be dealt with in two ways, one suitable for a Farm School and the other suitable for this conference. For a Farm School one would discuss the place of, say, subterranean clover, amount of seed to sow, seasonal production, and so on. For a Grassland Conference subterranean clover would be regarded critically with emphasis on an examination of its shortcomings rather than on its advantages. In this manner grassland knowledge would be increased by the contribution of the research worker, the advisory officer, the farmer, and the commercial man. For these reasons I feel that no group of members should be too concerned with changes in the numerical strength of any other group, provided always that the reasons underlying practices rather than the application of the practices form the basis of papers and discussions.

It is sometimes argued by "technical" members that there are not enough technical papers and by "non-technical members", that there are not enough "popular papers". Both of these arguments are unsound. It would be quite impossible to prepare a "technical conference" in which all papers would interest all "technical" members present, if, of course, a "technical paper" can be defined. For example, a soil chemist might not be interested in a paper on plant breeding, but a farmer might. Similarly, a paper by a sheep farmer on the economics of hill country improvement might not interest a dairy farmer any more than it would interest an entomologist. It is felt, therefore, that members attending a Grassland Conference must be prepared to hear some papers and listen to some discussions which are not in their normal line of work. Nevertheless, it would certainly be unfortunate if anyone was so narrow-minded that he was interested in only what he himself was working with. The argument is therefore not one of technical versus non-technical papers, but of the conflicting interests of a wide range in the life work of individuals.

It may be of interest to review briefly some of the topics which have been discussed at Grassland Conferences in the past. The subjects discussed have, on the whole, been a reflection of current thought and research on grassland problems, usually with a bias toward the problems of the district in which the conference is held.

In the early years strains in grasses and clovers were the subject of a number of papers. Because of the financial depression at that time papers on economics and marketing were very acceptable. Bush sickness, the cause of which was still a mystery, was also discussed. Sometimes papers well away from the subject of grassland were given. Pigs, lucerne breeding, animal health, and the production

of brassica seeds were all discussed. The plant-animal relationships has recurred frequently, sometimes as the subject of specific papers such as feed flavour, the relation of pasture species to the quantity and quality of milk, the animal as a means of measuring the nutritive value of pastures, and sometimes as incidentals in a paper.

In recent years, possibly because of the formation of the Animal Production Society, papers on the plant animal relationship have almost ceased.

For many years a most important aspect of grassland improvement has been entirely neglected. That aspect is that dealing with economics. It is fortunate that it has been revived this year.

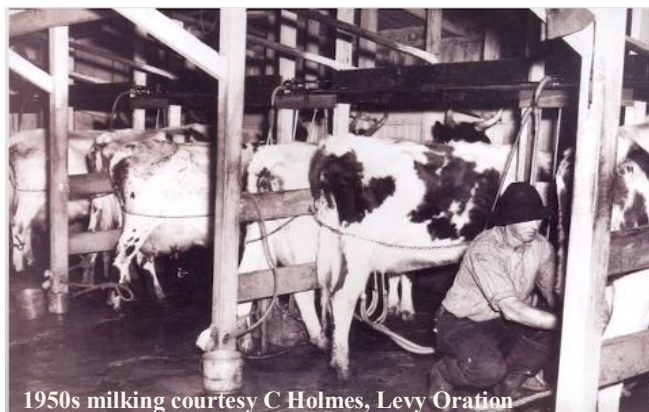
What has the New Zealand Grassland Association achieved? In itself it can achieve little, because it is not a controlling body and because it does not function as a pressure group. Its achievements can be measured only in the stimulation which its members are able to gain from its conferences. If attendances at conferences and the discussions which are held are any indication, then the Association must have stimulated all groups of members.

The Association has widened its activities to some extent during the last few years, by interesting itself in the production of a film and by acting as host body of the 7th International Grassland Congress, which is to be held in New Zealand in 1956. For the Association to increase its value, it must also increase its services.

To what extent and in what direction these can be extended is uncertain. Any extension entails additional cost and effort, whether it is in the direction of arranging additional conferences or in arranging for more published material. Nevertheless, with the Association in a strong financial position, a consideration by the Executive Committee of making an additional effort may be warranted in order to maintain interest in the Association.

As an interesting side-line on the conference it could be mentioned that as the result of what was seen on the screen at the last conference, an effort (and I believe a successful one) has been made to devise a scheme (1) whereby the bane of all audiences, the illegible slide, can be banished for ever.

REFERENCE (1) Saxby, S. H.; Scott, R. H., and Averis, M. K.: Legibility of Lantern Slides, J. Sci. Tech., Vol. 36, Sec. B., No. 3, 1954, p. 191.



1950s milking courtesy C Holmes, Levy Oration