

# NZ GRASSLAND ASSOCIATION

Fuelled by Science, Tempered by Experience

**GRASSLAND NEWS**

[www.grassland.org.nz](http://www.grassland.org.nz)

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Presidents view

Warwick Lissaman

Membership, so many benefits, but, as with much in this world you have to belong/engage to acquire.

So often we think we have it sorted in our own space - be it the farm, the consultancy practice or the research station - but have we really?

How often does the free sample (picked up or dropped in mailbox) actually ever add value to the business? Perhaps it opens the door to a discussion, but then integration into the farm business needs support (the people factor). The more interaction they have the better they are able to communicate the message. It's a fine line to tread, enabling the research needed and then the communication enabling the on farm innovation through adoption. NZGA continues to have a critical role to play in enabling both.

Travelling and sharing are all very much part of the extension message. Travel allows us to see it, feel it, taste it, smell it; and on that note, I look forward to reading columns supplied by Dr Shirley Nichols, and Vice-President Dr David Stevens.

New success needs some innovation at the farm level - in field testing of technique or research adoption. Hence time is required to see changes to bottom line. How can we as a whole speed this up? Demonstration farms and regional centres of excellence having frequent open days would be a start. I suggest less of the big grandiose marketing department annual showcases, but regular invited group or rep driven and repeated visits.

It is great to read the recent press coverage of the need to prove it before you claim it (see recent changes to The Fair Trading Act on [Substantiation](#) - it is an offence for traders to make a claim they can't back up). For so long so many of our membership have pleaded for this to be the case. The

marketing people will see it as a challenge and be assured the pressure from marketers will go on the farmers to direct research dollars into finding options other than the tried and true. It is up to us to ensure that the case application stacks up.

Yes, there are resources that are wasted daily throughout the world, some can be recovered for the betterment of society, others are futile until technology advances; and in fact instead of trying to recover, reduce the wastage should be the cry. Interesting this goes for all sectors, whether it be seed rates, sowing depth, marketing glossy paper, lost opportunity through poor land use opportunities, on my farm through nutrient wastage, through to how the NZGA functions.

What if anything we do needs to change? NZGA function and future direction will be on the Executive agenda for our meeting prior to conference; let me or any other executive member know of any concerns or thoughts you have. Your annual subscription is due, and chasing up arrears is another very good example of waste of resource use; as are these southerly winds that attack at lambing/calving time. As I started with, engage with research and win; look forward to seeing as many as possible in Alexandra Nov 5-7.

## **Life members**

This issues celebrates two of our Associations Life members. Both of these gentleman have had a huge impact on what is often considered the most difficult part of the job for anyone working with farmers - the extension of science from the research to the farmer.

Mike and Tom both shared the ability to distil the complexity of the science message both into the appropriate language and on into the farm system. These skills, in addition

## **Student travel award 2014**

Its that time of year again and the NZGA Executive are pleased to announce that there will once again be student travel awards to conference.

The submission form is available on the website (<http://grassland.org.nz/information.php>)

I have already had 2 applications from sharp eyed students (or supervisors). Applications should be submitted to Marie at [eo@grassland.org.nz](mailto:eo@grassland.org.nz) as soon as possible.

Final date for submission is September 15th.



**NZGA for over 80 years**

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to their research work, have met the NZGAs own strapline of 'fuelled by science, tempered by experience.'

## Mike O'Connor, Life member (1939-2014)

Jeff Morton

It is with the deepest regret that the New Zealand Grassland Association record the passing away of Life Member Mike O'Connor on the 12<sup>th</sup> July in Hamilton.

Mike was a member of the Association for all of his career, was President in 1996 at the Whangarei Conference, the recipient of the Ray Brougham Memorial Award and a Technology Transfer Award in 2004, and the author of many NZGA Conference papers.

Mike was born in Southland in 1939 and educated at St Kevins College in Oamaru. He completed a Bachelor of Agricultural Science degree at the then Lincoln College and upon graduation worked for Dominion Breweries in Auckland as a microbiologist before being posted to Nelson as a Field Research Officer by the Research Division of the Department of Agriculture.

He mainly carried out on-farm soil fertility trials in the Nelson region and on the West Coast. Mike soon returned to Lincoln to complete a Masters of Agricultural Science degree on West Coast pakihi soils at Bald Hill near Westport. On completion of this, Mike and his family, transferred to Ruakura where he was appointed as a Soil Fertility Specialist in the Soil and Field Research Organisation and also carried out the role of Field Research Officer for the Waikato Region.

Mike remained based at Ruakura until he retired in 2004. At Ruakura he continued his research career which expand-

ed into work on pasture responses to nitrogen, dairy cow requirements for magnesium and sodium, lime on hill country, use of trace elements, nutrient requirements of peat soils, utilisation of municipal sewage by pine trees, land application of dairy farm and factory effluent and many other areas. This work was carried out in Waikato, Central Plateau, King Country, Poverty Bay and Northland. Most of it was done in collaboration with others, often in different organisations.

Mike was a very humble, caring and considerate person. He mentored many younger scientists and other research staff and was well known for his approachability and common sense. He gave his technical staff opportunities to grow by giving them responsibility to manage different projects.

Although he could relate to people in any walk of life, it was with farmers that Mike had the greatest affinity. As a scientist, he had the rare knack of being able to convey technical information in a manner that was easily understood. Mike always delivered his message concisely and clearly at the many field days and conferences he presented to. His research was always very relevant by being directed at solving farm-related problems.

The New Zealand Grassland Association convey their condolences to Mike's family and assure them that his contribution to New Zealand agriculture was a significant one.

## Tom Fraser - the challenge of making research accessible

From The Press 12/7/2014

A huge amount of science with the potential to lift New Zealand's agricultural performance is sitting in computers or on office bookshelves not being used by farmers, says retiring AgResearch farm systems scientist Tom Fraser.

Presenting research in a way that can be adopted by farmers remains a dilemma for scientists, said Fraser, who retired from AgResearch, Lincoln, after 40 years' involvement in forage research and pastoral grazing systems for sheep and beef farmers.

"A farmer has to farm a whole system, not just a plant, animal or soil. That is what a component scientist can't get their head around. They can come up with great science such as a forage plant, but don't understand why it is not taken up by farmers.

"For example, hogget lambing can be a great thing, but it doesn't work for everyone as it has an impact on other stock classes at other times of the year.

"My biggest concern for the pastoral industry is the growing imbalance between farming systems. In Canterbury we used to have a balance of dairy, sheep and beef, cropping and horticulture. So if one sector was in downturn, others were achieving good prices. Now we have a heavy reliance on the dairy industry.

"I hope the funders of research realise we need a balance of agriculture and don't put all of the research dollars in one basket.

"Most of the low-hanging fruit is already picked and most future advances will be small, particularly in forages, without going to genetic engineering.

"In sheep and beef and dairy the best-performing farmers are still producing twice as much as their poorer-performing counterparts.

"Of the science done, only 20 per cent is taken up by farmers within five years, so it takes a lot of time to get it out there.

"For example, Coopworth sheep were bred in the 1960s and 1970s for higher production traits, particularly lambing percentage, and it has taken a long time for other sheep breeds to match this.

"A lot of science is not being utilised. Much of that is sci-



Tom with the Ray Brougham trophy

ence's fault as it is not put out in a form that is usable or can be readily adopted. A lot of science is good science, but it ends up as a scientific paper. It needs to be interpreted into a form where it can be applied into a farming system.

"Technical transfer is easy - put a fact sheet on a desk. But does any of that get adopted? The best way is for some farmers to adopt new technology and get other farmers to follow, but that takes time.

"Or legislate, so farmers will have to change.

"It can be confusing with so many forage varieties now available. Farmers are getting much more educated and the good farmers are able to sift through that information. New Zealand pastures are ryegrass-white clover dominant and will continue to be as that is where the money is. Plant breeders concentrate on this area as they know they will make a return.

"The shift in land-use to dairy is obvious. But one of the biggest changes in pastoral agriculture in the last 40 years is the improved performance of the sheep industry. Previously it was one ewe and one lamb at 13kg carcass weight; now it is one ewe and two lambs at 18 to 20kg carcass weight and on more marginal land.

"The sheep industry beats itself up, but should take a lot of credit for what it has achieved in animal performance through improved genetics and better feeding and manage-

ment. Some of that is science driven, but a lot is farmer driven.

Fraser estimated he had conducted at least 1000 workshops for sheep, beef, dairy and deer farmers on topics including pasture quality, forage establishment and species selection, sheep efficiency, brassica management, feed planning and more recently climate change and greenhouse gas topics.

"I've never been to a field day where I haven't learnt something as farmers have the biggest research laboratory and are always trying something. And I will hear about the successes, if not always the failures."

Fraser first worked for DSIR Grasslands before this became part of the Crown Research Institute AgResearch 20 years ago.

"Through a lot of restructures I've managed to stay in there."

Originally from a Southland hill country farm, he managed a farm for four years before joining DSIR and a lifetime of research. In 2012, he was awarded the New Zealand Grassland Trust Ray Brougham Trophy.

Fraser said he would continue to work with farmer groups.

"I'm not going to go out and set myself up as a consultant. I always enjoyed the farmer contact and working with farmers. That is the satisfying bit."

## David Stevens - Reflections on Europe

July 2014

A trip to Europe focusses the mind on what we take for granted in our farm systems here. Visiting the recent Joint meeting between several groups of forage and animal researchers contributing to 'Forage resources and ecosystem services provided by Mountain and Mediterranean grasslands and rangelands' I got a clear message that many pasture management skills have been lost as total mixed rations have taken hold to support productivity.

A trend apparent in this meeting was a current focus on 'ecosystem services'. That is the role of grazing the animal on pasture to provide services to the farming community and the wider community. For example, grazing pasture may provide employment, a sense of cultural identity, maintain a habitat for wildlife, create or maintain biodiversity, reduce fire risk, provide an aesthetic landscape and add value to the product.

While these 'services' may appear self-evident to us as a nation that relies on grazing for profit, they are much less evident in Europe where grazing has become a by-product of owning land. Regulators are now afraid that if grazing



Rangeland at La Fage research station

isn't supported then land that provided the landscape they are used to will disappear in reversion to scrubland. The researchers are investigating pasture management but they too have lost the basic understanding of how pastures grow.

The Irish are endeavouring to create a middle ground with significant research in matching improved grazing practices with in-paddock supplementation to meet marketing needs. While mainland Europe anguishes about how to change subsidies to support grazing, the Irish are investigating how to meld the

systems together to provide a profitable solution. I'm putting my money of the Irish to come up with a more robust and sustainable solution.

The concept of losing skills is something that should worry even us.

While our farmers have the relative advantage of knowing how to get the best out of pasture, we are already beginning to lose our skill base. Dairy farmers opt for palm kernel expeller and feeding barns, simplifying their systems, but at the same time reducing the need for skill at forage management in the face of having to manage an increasing labour



Sheep systems trial at Athenry, Ireland

force lacking grazing management skills. It is not only on-farm that skills are being lost. The latest proposal for future science funding, released by the Ministry for Business, Innovation and Employment, clearly shows an erosion of funding in the biological industries. Estimates that can be identified in the report show core CRI funding moving into the National Challenges that have little focus on productivity, and a contestable base that remains constant in today's dollar terms, with a pool of approximately \$95-100 million

dollars being eroded to \$65-70 million in 10 years, all in today's dollar value. This will add to the depletion of research in applied pasture and animal management that has been at the core of our competitive advantage. All of this in the face of a government that wants a 50% increase in export receipts from the primary sector.

The question then must be posed - Where are we to get the innovation that will drive those increases and retain our competitive advantage that is based on grazed pasture?

### Grassland Society of NSW Conference 22-24 July 2014.

Shirley Nichols

I was invited to present a paper on interspecific hybridisation to improve the adaptation of white clover to soil moisture stress, at the Grassland Society of NSW 28<sup>th</sup> annual conference, held in Inverell, northern NSW. The conference theme was "Versatile Production in a Variable Climate".

My visit coincided with the dry season, this being a summer rainfall/winter dry environment – and I was told I was not seeing it as its best! The last two winters have been particularly dry, with one farmer saying it was the worst he had seen in 40 years – a familiar refrain also heard recently on this side of the ditch. Future climate predictions are for parts of both NSW and NZ to become drier and experience more frequent drought. There was, and I'm sure there will continue to be, great interest in potential pasture solutions and innovations from NZ.

My field tour visited two cattle farming operations (Brangus and Santa Gertudis/Poll Hereford cross) with 660-675 mm annual rainfall – one with a temperature range of -8°C to 45°C. Pasture species included native grasses, tropical perennial grasses, and lucerne, with oats grown as a fodder crop to fill the winter feed gap. We also visited NSW DPI on-farm field trials on temperate and tropical legumes for tropical grass pastures.

Like NZGA, membership of the Society consists of researchers, agribusiness professionals and farmers, with farmers

and graziers comprising 75%. A high proportion of farmers attended the conference and it was great to see many presenting papers based on their experience in areas such as tropical grasses, managing invasive grasses, and integrating pastures and cropping. Despite the differences in systems and pasture species between our two environments there were common linkages throughout the conference. My thanks to the Society and the conference convenors for their invitation, and their support to attend.



Grassland conference field trips look the same no matter where you are! NSW DPI tropical legume trial site at "Glenayr", Bingara.

### NZGA Conference - Alexandra 5-7 Nov

Early bird registration for this year's conference will open on August 25th until September 30th. The advice is to be organised and be in early as space may be limited.

**Accommodation** - the motels in Alex are all booked but there are holiday homes and B&B available. There are still motel rooms available in Cromwell (20 min by car) but

there is a race meeting at Highland Park on the weekend of the 8-9th so don't delay.

It would still be useful to check in with Central Otago Visitors centre who are coordinating accommodation (phone Helen at 03 440 0637).

