



Grassland News

"Fuelled by science and tempered by experience"

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View from the Coast

Anders Crofoot

It was very pleasant to get an autumn for the first time in five years. We had pretty much forgotten what long grass looked like. Winter has taken away the surplus feed and as I write this, we are in the midst of the storm that has brought snow as far north as Auckland. We had snow on the beach at Castlepoint for the first time anyone has seen other than an old photograph. However, with the calendar well into August, spring can't be too far away on the Wairarapa coast.

The lack of production research continues to be of great concern to me. The changes in Government funding policy are beginning to take root with some more production research in the pipeline; however, it has to be focussed in areas that will provide real returns.

In the past months I have had some good conversations with our sponsors who are major funders and providers of research, DairyNZ, Beef & Lamb and AgResearch. One issue that came up was how to make sure research was focussed so that both levy payers and the government are getting the best value for the dollar invested. If farmers are going to pick up new research results then they have to see a benefit to their bottom line. Otherwise why would they do it? Modelling projects, literature reviews and social research may fit funding criteria and timelines, but how will they produce an economic return for farmers? They have a place, but in recent years I feel they have been overemphasised.

The NZ Grassland Assoc. is one of the only forums where researchers, farmers and agribusiness mix; as such we are



August snowfall at Castlepoint Station

well placed to help influence the direction and focus of research. The question is how to do this effectively without becoming yet another special interest group trying to do our own thing?

With farming profitability on the rise, farmers are shifting from just trying to stay alive, to looking for ways to improve their operations. We should be at an ideal time to get up-take of new research, especially when it can be shown to improve the bottom line, or better yet, the triple bottom line.

Things are shaping up well for the Gisborne conference. We will be privileged to see some farms that aren't usually on display. I look forward to seeing you all there.

NZ GRASSLANDS CONFERENCE 2011

Farming profitably in a challenging hill country environment.



Emerald Hotel and Conference Centre, Gisborne

November 8th—10th

It has been 28 years since the NZGA conference was in Gisborne. Whether or not you have visited the North Island's East coast before - this would be a great opportunity to mix business and pleasure.

The Agronomy Society is joining us again this year, plus we have a presentation on the first day from Rod Oram, a well known international business commentator.

The programme can be viewed online at

www.grassland.org.nz

PLUS

NZGA IS 80 YEARS OLD...

On the Monday evening we invite everybody to celebrate the anniversary over drinks and nibbles.

No single solution to pasture persistence but some management practices will help

Rob Brazendale (DairyNZ) and Gary Walton (Beef + Lamb NZ)

Messages from the farmer workshop at the recent Pasture Persistence symposium

Lack of persistence has many overlapping causes, and there is no stand out solution.

Causes of poor pasture persistence include:

- insect damage, e.g., Clover root weevil, Black beetle, drought
- use of an inappropriate endophyte (e.g. AR1 in upper North Island)
- drilling annual ryegrasses into perennial pastures
- increased feed demand on pastures
- reduced natural re-seeding, resulting from plant breeding and management for pasture quality
- poor soil structure and low fertility.

Grazing management

Grazing management can make a difference. Pastures replace themselves naturally through tillering of grasses and stolon growth of clovers.

November is a critical period. Seed-heads appearing in October/November die when grazed or cut. New tillers must replace them. A high tiller replacement rate before summer improves persistence.

Some grazing management practices assist this process and some slow it down. Grazing management practices that enhance tiller replacement rate include:

- November/December nitrogen applications of 20 - 25kgN/ha
- avoid grazing pastures below 4 cm residual other than in winter.

Grazing management practices that reduce tiller replacement rate are:

- High pre-grazing covers (more than 3,000kg DM/ha),

or allowing hay/silage paddocks to get too long before harvesting. New tillers don't get enough light and die.

- Hard and frequent grazing events during drought conditions.

Further reading: DairyNZ Farm fact 1-20 *How do pastures grow?*

Insect management

Manage insect pests to minimise their impact – they cannot be eliminated.

- Select appropriate endophytes
- Use treated seed at sowing
- Use crops to break insect cycles
- Some crop sequences reduce insect populations (e.g., Turnips, Maize, Chicory), while others attract insects, (e.g. annual ryegrasses).

Further reading: *Pasture Renewal Best Practice Guide*

Plant nutrition

Soil fertility status of individual paddocks must be known before pasture renewal.

Plan to do a soil test before starting the renewal process.

Pasture species other than ryegrass and white clover

Where ryegrass persistence is a problem due to summer dry and/or insect challenges options such as tall fescue and lucerne can be considered.

Alternatives to ryegrass have different seasonal production patterns that need to be understood if milksolids production is to be matched or improved.

Discuss options with your seed company representative or farm consultant.



Clover root weevil

Farmers need more capital, not tax

Jacqueline Rowarth, Massey University

The economic rationale for having a Capital Gains Tax (CGT) is clear but the skewing of behaviours that will result could be extremely damaging.

The problem is achieving a sensible transition, and people are already thinking their way around what is proposed. For property owners, the answer is to put up the rents. Clearly if the future realisation of their investment is going to be reduced by taxation on the gains, they will need to improve their interim returns. As accommodation (whether commercial or domestic) is in short supply in some places, rents will increase under the influence of domestic market forces.

For the agricultural community, the issues are somewhat different. Farmers and growers in New Zealand are price-takers. They are in competition with suppliers in other countries, and what is termed 'the agricultural treadmill'

works against them. Cheap transport of agricultural products mean that farmers with the lowest production costs compete with farmers with higher production costs in other countries. And although most other developed countries do have CGT, it is not the developed countries with which New Zealand usually competes for food markets.

The Australians are already debating the problems of passing on costs as they face a carbon tax which will put up costs of production. Alex Livingstone, the CEO of the peak horticulture body for Queensland, Growcom, says that "Horticulture is a price-taking industry, based on supply and demand. Growers have received minimal increases in the prices they receive for produce in recent years, while at the same time government red tape and compliance costs have seen their costs increase significantly".

(cont'd from page 2) New Zealand farmers and growers are in the same situation of having an unsecure income which has been eroded over past years. Like the Australians, international market forces mean that they can't pass on the costs, risks and uncertainties.

Although there is certainty that the world wants food, there is no certainty that people will be prepared to pay sufficient money for that food to allow farmers and growers to achieve the secure income that is needed. And without the prospect of a capital gain on their asset, the rewards in being in agriculture evaporate.

The result will be that investment entrepreneurs depart. Headlines to the effect of 'High earners will leave New Zealand' have already appeared in major newspapers.

The arguments suggesting that having a CGT will make it easier for young farmers to buy land doesn't consider the point that by devaluing land, the farmers that have worked extremely hard to build assets will have worked for nothing.

The economic downturn and consequent devaluing of land has already had a bad effect, seen in the number of mortgage sales.

And a CGT certainly won't encourage investment in capital infrastructure and new technologies. Given the current debate on how to encourage greater uptake of new technologies 'to enable the bottom 10% of farmers to improve performance', the timing of the announcement of the proposed CGT is poor.

A CGT means that any improvements in property will result in increased tax at the point of sale. It is recognised by economists and policy makers that having well-defined and strongly protected property rights is important in enabling property users to take full account of all the benefits and costs of employing their resources in a particular manner.

The process of weighing costs and benefits produces what economists call efficient outcomes. That translates into higher standards of living for all. Although the 'prosperity and property rights' linkage is usually rolled out in connection with developing countries, the psychological issues are likely to be similar when implementing a CGT.

The problem is that adoption of new technologies costs money, time and energy and increases potential risk. All four factors are barriers to adoption.

In Europe, part of the cost and risk in adoption and implementation of new technologies is offset with the farm subsidy. The subsidy-free New Zealand farmer believes that a new technology should pay for itself in making a difference to the bottom line. But as price takers, this difference is difficult to ensure.

Writing in McKinsey Quarterly this month, Ross DeVol, executive director of economic research at the Milken Institute (an independent American-based economic think tank) suggested that the best way to stimulate the American economy would be to cut corporate taxes by a third to improve the competitiveness of firms.

Applying this economic philosophy to New Zealand enterprises would result in considerable support. It would also result in having to make some hard decisions about where savings could be made in government expenditure.

Perhaps what is needed is not another economic think tank, but a 'skewed behaviour tank'. We need wayward thinkers from the sector(s) being targeted by the new policies so that their analytical skills and in depth knowledge can be put to work for the good of the country.

Their role would be to analyse proposed policies and show the unintended consequences. It is these people that will develop the innovations that lead to adaptation and 'survival'. What works in evolutionary biology could work for New Zealand.

Published in National Business Review, 29.7.2011

OBITUARY - Emeritus Professor Bramwell Roger (Watty) Watkin

On 23 May 2011, in Albany, Auckland, surrounded by his family, Professor B R Watkin passed away peacefully.

He is survived by his wife, Natalie, daughters Debbie, Julie and Nikki and son, Tim; and nine grandchildren. His eldest daughter, Terrill, died in a motor car accident as a young woman.

Watty was born in Gore in 1925, the youngest of three boys. His parents were Salvation Army officers, and moved frequently until a settled period of about five years in Taranaki, where Watty was Head Prefect at Stratford District High School in 1943. He went on to complete B Agr Sci and M Agr Sci (Hons) degrees in the then Field Husbandry Department in the Uni-

versity of New Zealand, now Massey University. The title of his research was "The Influence of Animal Manure and Clover on the Structural and Chemical Characteristics and the Earthworm Activity in a Manawatu Soil". Thus Watty commenced a career of six decades of dedicated research and teaching in the complex area of the interaction between pasture and the grazing animal.

Watty carried out his PhD studies at Wye College, University of London from 1949 to 1954 under the supervision of the legendary Professor Mac Cooper. In 1954/55 he undertook post-doctoral studies at the Grassland Research Institute, Hurley



79 YEARS OF INVOLVEMENT IN NEW ZEALAND GRASSLAND
FARMING

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(cont'd from page 3) (UK) and Jealotts Hill Research Station, ICI (UK). In 1955 he returned to New Zealand and was employed as the Officer-in-Charge, Lincoln Sub-Station, Grasslands Division, Department of Scientific and Industrial Research (DSIR). In 1959 he was promoted to Chief Pasture Ecologist, Grasslands Division, DSIR, and was transferred to Palmerston North. Dr. Watkin's academic teaching career started when in January 1961 he was appointed as Senior Lecturer in Agronomy, at the University of New England, Australia. In December 1964 he returned to New Zealand as Foundation Professor and Head of the Agronomy Department, Massey University, in Palmerston North. He held this post until his retirement in 1986, and between 1983 and 1984 he also served as the Dean of the Faculty of Agricultural and Horticultural Sciences.

Watty was one of the leading pasture agronomists of his generation. His prime field of interest was the interaction between grazing animals and pastures, emphasising both pasture and animal production and ranging from studies of the effects of grazing on individual grass and legume species to the production of livestock from grazing systems. He also undertook pioneering research on pasture establishment, pasture measurement, diet selection and animal production. His research on the effect of animal excreta on pasture composition and herbage yield was recognised internationally.

In 1970, he was awarded a New Zealand-United States Educational Foundation travel grant to study at the University of Kentucky. In 1976, he was chosen to present a key address on "The effects of grazing animals on pastures" at an international conference on plant relations in pastures in Brisbane, Australia. This review is still being cited after more than 30 years. For many years Watty maintained an active interest in the NZ Grassland Association. He was elected President of the Association in 1972 and a Life Member in 1983. He was made a Fellow of the New Zealand Institute of Agricultural and Horticultural Science in 1984.

Watty was instrumental in establishing the New Zealand Seed Technology Centre at Massey University in 1976. Over a period

of thirty years, more than 1200 students, many from developing countries, passed through the Centre. Funding for training these students from developing countries was provided by NZ Ministry of Foreign Affairs.

Watty personally supervised more than 40 postgraduates, including many Ph D students. Uniquely, among those he influenced were five young grassland scientists, from five different countries, who went on to make influential contributions to the governance of the International Grassland Congress (the pre-eminent meeting of the world's grassland scientists, held every four years). All five of them filled representative positions on the Continuing Committee of the Congress.

After his retirement, for nine years (1986-1995), Watty served as an International Adviser to the Dairy Farming Promotion Organisation (DFPO) of Thailand, including two years in which he lived in Thailand (1986/88). He made a significant contribution to the development of Thailand's dairy industry, and he was instrumental in training a generation of Thai scientists in grassland farming. He visited Thailand at least once each year for more than 20 years – his last visit was just three years ago. His personal research in Thailand was focussed on practical aspects of the use of tropical pastures. A number of high-quality research publications emerged from this work, contributing to Thailand's credibility in dairy research.

Professor Watkin will be remembered for his outstanding contributions to New Zealand agriculture, particularly in grassland science; the training of a whole generation of postgraduate students who achieved eminence in their own right; and guiding the development of Thailand's dairy industry. His students remember him particularly as a demanding supervisor who provided very strong support for them and their families. He will be sadly missed by his family, his colleagues and his former students.

(contributed by past colleagues)



Notes from my desk

Marie Casey

Annual sub: By now you should have received your invoice for your annual subscription. Thanks to all those who paid by return email! If you haven't received the Symposium Proceedings it may be because we have an incorrect address for you so help us keep in touch by emailing me - eo@grassland.org.nz.

Remember to check your email for the invoice.

Email addresses: If you have changed your email address over the last couple of years I would love to hear from you (at eo@grassland.org.nz or nzgrassland@gmail.com). We have calculated that the correct email address saves approximately \$10-12 per member just for postage. That is not counting the time it takes to stuff envelopes or print the newsletter.

NZGA Proceedings: We have a surplus of past Proceedings and would like to reduce the number we are storing. There-

fore we would like to offer members the chance to buy old copies (Vol 69 and older) for \$8 each including postage. Contact me at eo@grassland.org.nz to organise this.

New NZGA Website

The website update is nearly complete, it may even be up and running by the time you receive this newsletter so take a moment to check and see.

Website links that may be of interest

For science on TV - tvnz.co.nz/ever-wondered

SFF sheep projects - www.farmingsheep.co.nz/

Beef + Lamb NZ research - www.beeflambnz.com/

Eastwood Arboretum, Gisborne - www.eastwoodhill.org.nz/

Science media centre www.sciencemediacentre.co.nz/category/in-the-news/