



This edition of the newsletter is produced in Memory of Gregor Yeates

FAREWELL TO GREGOR YEATES, PHD, DSC

Gregor's funeral at St Andrew's Church, Palmerston North on Friday 10 August was well attended.

Gregor was born in Palmerston North, the son of Dr John Yeates, a founding member of the then Massey College and Peggy Yeates.

He returned to Palmerston North following the closure of the Soil Bureau at Taita in 1994.

Although Gregor had retired in 2009 he remained actively involved in science through the Manawatu Branch of the Royal Society of New Zealand, the Science Centre Trust and the Science Centre Inc. (Te Manawa Museum of Art, Science and History), Palmerston North. Gregor was the visiting scientist at Bunnythorpe School helping them with science projects.

Tributes to Gregor were made by his sons Peter and Stuart, Landcare colleague Craig Ross, Vince Neall, co-editor of *Plains' Science: Inventions, Innovations and Discoveries from the Manawatu*, and Royal Society representative Dr Heather Meikle.



Gregor William Yeates
19 May 1944 - 06 August 2012
Palmerston North

PRESTIGIOUS AWARDS

- Nuffield Foundation Commonwealth Travelling Fellowship (Nov 1977 – Nov 1978)

Nematology Department, Rothamsted Experimental Station, Harpenden, England

- Fellow of New Zealand Society of Soil Science (FNZSSS) (Dec 1995).

"In recognition of distinction in the application and / or advancement of Soil Science"

- Fellow of the Royal Society of New Zealand (FRSNZ) (Nov 1998).

"In recognition of distinction in research and the advancement of science"

- Honorary Member of the Royal Society of New Zealand Manawatu Branch (Nov 2004).

"In recognition of his services to the branch over many years"

- Norman Taylor Memorial Award of the New Zealand Society of Soil Science (Nov 2006).

"In recognition of outstanding contributions to Soil Science in New Zealand"

- Fellow of the Society of Nematologists (USA) (Jul 2007).

"For outstanding contributions to nematology"

The following is from Craig's tribute to Gregor...

... "Returned to Soil Bureau at Taita in 1970 to join the soil biology section led by Dr John Stout.

The Director at the time, Morice Fieldes' instructions to Gregor were: "you are a 2nd generation Soil Bureau scientist. Go and get on with your science". Which he

certainly did – with ease in the DSIR days and perhaps more of a struggle later on in - he would say in spite of - restructured CRI science!

His soil biological research spanned a variety of interests.

He is most renowned as a nematologist: described in a message from Dr Brian Boag (who sends his sincere condolences) at the Hutton Institute in Scotland as “the greatest nematologist there has been, with interests also encompassing other aspects of soil ecology”.

But he also conducted and led research on worms, flatworms, porina, grassgrubs, and other invertebrates that live in or on the soil. He’s done a wide range of collaborative research on the role of macrobiology on soil processes.

Judy tells me that his interests in large native worm *Octochaetus multiporus* were sparked by digging them up when cultivating their home garden on, as I recall, a rather large section on Plateau Road, Te Marua, Upper Hutt. He discovered nematodes in their coelomic cavities. He even wrote papers on the behaviours of Adelie penguins from his Antarctic research. No doubt a side-line while doing his Antarctic nematological research, where he described nematode populations in this harsh environment.

Which brings me onto his international research activities. As well as the Antarctic, he conducted research from Aberystwyth in Wales, the Scottish Crop Research/now Hutton Institute in Dundee, with Dave Coleman in the United States, at Armidale and Adelaide in Australia, and in Sweden/Finland, to name a few places.

The Scandinavian research with Dr David Wardle and colleagues was a unique study of the effects of reindeer grazing on nematodes and soil processes. Through identifying over 4500 nematodes, he discovered that reindeer-grazed areas had more leaf litter decomposing nematodes than non-grazed areas. Which was the opposite to our sheep and cattle grazed pastures. I don’t recall though Gregor

The following is Heather’s tribute to Gregor...

Gregor was passionate about Science.

As the secretary, treasurer, former president, life member and keystone stalwart of the RSNZ Manawatu Branch he sought new and innovative ways to promote science in the region.

ever telling me that got a direct line to Santa Clause from this work.

The impacts of his international research are best summed up by Dr Mike Hodda, President of the Australasian Assoc of Nematologists: “He studied the ecology of nematode community structure, being especially interested in community structure. These analyses influenced the science globally.” Mike went on to add the Gregor’s energy and expertise are tremendous losses to the discipline of nematology and the ANN. The sympathies of all Gregor’s professional colleagues in AAN are with his family.”

“....His record of published papers in refereed journals is legendary:

292 papers published, 1 in press and he had another 8 in preparation!

One of his papers: *Feeding habits of soil nematode families and genera: an outline for soil ecologists* has been cited 190 times!”

“....A former Director of Soil Bureau, the late Mike Leamy, told Gregor that “If you halved your scientific output, you would still be better than average.”

Trevor Crosby, who came down from Auckland to be with us today, told me that of the 197 holotypes in the NZ National Nematode Collection, Gregor described 77 of them – and helped with quite a few others as well. [see list below]

I have a personal connection to these species as he named one after me – *Tylencholaimus rossi* – that he found in samples I brought back for him from the Chatham Island.

“....As well as being on the editorial boards of numerous scientific journals (recently 8), he took leadership roles on the Council of the RSNZ alongside me during the early 1990s at the time of sweeping changes to NZ science...”

“....Gregor retired from Landcare Research in May 2009 (well actually he left about 3 months earlier because his dedication to research had meant he had accumulated this amount of leave) but never retired from his science.”

If RSNZ offered us the Rutherford Lecture or a special visiting scientist, Gregor said yes and how soon? Last year, he initiated the visit of a scientist from Canada to add a different dimension to our thinking about freshwater ecology. In addition, he believed that people promoting and encouraging science deserved

recognition for their non-employment related contributions – the RSNZ MB Certificates of Merit. He also nominated people from this region for a range of Science Honours including fellows of the RSNZ.

38 years ago, Gregor, through RSNZ MB co-founded the Manawatu Science and Technology Fair. Annually, with interest and enthusiasm, he judged projects, advised the committee, found sponsorship and presented prizes.

Gregor's role in helping young people to develop as scientists was immense and widespread.

When Plains Science Vol1 was published, he obtained a grant, so that each MSTF participating school could receive a copy. He wanted students to know of the rich scientific and technological heritage in their region.

Gregor was a mentor.

He mentored me, many of you, numerous postgrads and school students. As a mentor of this last group he was unparalleled. He guided them through their CREST (Creativity in Science and Technology) research and science

fair projects. He was always willing to share his vast knowledge and practical experience with them and to put them in touch with others who might help when he did not have the answer. A rare event. The many worm girls from Girls High can attest to his support in helping them to think critically and achieve Gold CREST.

A long term CREST supporter, when told last year, that some CRESTies might be struggling for research funds, Gregor established the RSNZ MB CREST fund for secondary students. Always keen that students learn, each applicant had to submit a formal application with a budget and promise a final report – just as “real” scientists do. The first of these grants have now been awarded.

Recently he was the visiting scientist at Bunnythorpe Primary school.

He sought activities that would excite and engage the students even getting onto the floor to clearly demonstrate an idea.

Nematodes Described by Gregor in the New Zealand National Nematode Collection

Acrobeles kotingotingus Yeates, 1967e
Acrobeles maeneeneus Yeates, 1967e
Acrobeles taraus Yeates, 1967e
Acrobeloides ellesmerensis Yeates, 1967e
Acrobeloides syrtisus Yeates, 1967e
Alaimus himatangiensis Yeates, 1967c
Aporcelaimellus maitai Yeates, 1967f
Aporcelaimellus taylori Yeates, 1967f
Arenasoma terricola Yeates, 1967f
Axonchium coxi Yeates, 1979
Axonchium watti Yeates, 1979
Crassolabium australe Yeates, 1967f
Discolaimium sabuli Yeates, 1967f
Discolaimus arenicolus Yeates, 1967f
Dorylaimellus egmonti Yeates & Ferris, 1984
Dorylaimellus pastura Yeates, 1979
Dorylaimellus tahatikus Yeates, 1967f
Dorylaimoides chathamii Yeates, 1979
Ereptonema inflatum Yeates, 1967h
Eurystomina whangae Yeates, 1967c
Haliplectus onepui Yeates, 1967b
Helicotylenchus depressus Yeates, 1967a
Hemicycliophora chathamii chathamii Yeates, 1978
Hemicycliophora chathamii major Yeates, 1978
Hemicycliophora halophila Yeates, 1967h
Iotonchus stockdillii Yeates, 1988
Labronema rikia Yeates, 1967f
Leptonchus dicephalus Yeates, 1967f
Longibulbophora ammophilae Yeates, 1967d

Longidorus orongorongensis Yeates, Etteger & Hooper, 1992
Mesorhabditis littoralis Yeates, 1969
Miconchus kirikiri Yeates, 1967c
Miconchus reflexus Yeates, 1967c
Mononchoides potohikus Yeates, 1969
Mylonchulus psammophilus Yeates, 1967c
Oxydirus visseri Yeates, 1979
Pakira orae Yeates, 1967b
Panagrolaimus australis Yeates, 1969
Pandurinema mowhitia Yeates, 1967b
Ruamowhitia orae Yeates, 1967g
Scutellonema magna Yeates, 1967a
Stegelleta iketaia Yeates, 1967e
Stegelleta tuarua Yeates, 1967e
Synonchium pacificum Yeates, 1967g
Takakia waipukea Yeates, 1967g
Takamangai waenga Yeates, 1967f
Torumanawa wahapuensis Yeates, 1967f
Trichodorus clarki Yeates, 1967d
Trischistoma stramenti Yeates, 1972
Trissonchulus littoralis Yeates, 1967c
Trissonchulus quinquepapillatus Yeates, 1967c
Tylencholaimus australis Yeates, 1979
Tylencholaimus chathamii Yeates, 1979
Tylencholaimus micronanus Yeates, 1979
Tylencholaimus rossi Yeates, 1979
Zeldia punua Yeates, 1967e

Non-New Zealand species

Actus neocaledonensis Yeates, 1992
Clarkus dorsalis Yeates, 1992

Clarkus ouinnensis Yeates, 1992
Cobbonchus altitudinarum Yeates, 1992 f
Cobbonchus couleensis Yeates, 1992
Cobbonchus dzumaci Yeates, 1992
Cobbonchus orstomi Yeates, 1992
Falcihasta tropica Yeates, 1973
Helicobelondira hebridensis Yeates, 1973
Hexactinolaimus aneityi Yeates, 1973
Iotonchus candelabri Yeates, 1992
Iotonchus lacuplanarum Yeates, 1992

Iotonchus montanum Yeates, 1992
Iotonchus recessus Yeates, 1992
Mitoaxonchium basalticus Yeates, 1973
Mylonchulus ananasi Yeates, 1992
Mylonchulus ciradi Yeates, 1992
Mylonchulus paitensis Yeates, 1992
Mylonchulus vasis Yeates, 1992
Neoactinolaimus proximus Yeates, 1973
Paratylenchus gabrici Yeates, 1973

DR GREGOR YEATES MEMORIAL PRIZE FOR A PROJECT INVOLVING SOIL BIOTA

This award is given for a project in the area of Soil Biota in memory of Dr Gregor Yeates. Dr Yeates, DSc, Fellow of the Royal Society of NZ, Fellow of the Soil Society of New Zealand was a world-renowned scientist who was the Secretary, Treasurer and Honorary member and former president of the RSNZ Manawatu Branch. 38 years ago, Gregor, through RSNZ MB co-founded the Manawatu Science and Technology Fair (MSTF). Annually, with interest and enthusiasm, he judged projects, advised the committee, found sponsorship and presented prizes. He was also involved in the Science Centre Trust and Science Centre Inc. to promote science across the wider community.

Gregor was a mentor. He worked with numerous students in the Manawatu and especially enjoyed working with primary school pupils. A long term CREST (Creativity in Science and Technology) supporter, he established the RSNZ MB CREST fund for secondary students.

The first recipient was Rhys Judd, Palmerston North Boy's High School. Rhys is a Y13 student and his project was entitled "**Lousey Bases**" and involved an investigation of the amount of ammonia that *Porcellio scaber*, (slaters) produce in response to environmental factors.



Professor Vince Neall, Massey University presenting Rhys Judd with his award

Heather noted that '*Gregor's absence was keenly felt at the MSTF last weekend. He always provided good advice when the committee was selecting the final prize winners and often came up with financial solutions when a decision could not be reached easily.*'

FROM THE PRESIDENT

This newsletters feature article recounts the life and times of Gregor Yeates, who passed away recently after a short illness. Gregor had an engaging, enthusiastic personality and, as reflected by his 38 year tenure with DSIR and its transition to Landcare Research, a true passion for his chosen vocation. Without doubt, his passing will leave a huge hole in the field of soil nematology.

Also in this month's issue we have a piece covering Dr Lewis Kahn, who will be our keynote speaker at the upcoming 40th Conference of NZSP.

Lewis is an Associate Professor at the University of New England and is also Technical Coordinator for Wormboss – the Australian equivalent of Wormwise.

Lewis and others in the Wormboss team have successfully rejuvenated Wormboss to become a valuable extension/learning tool for Australian livestock farmers.

I'm sure all members of the NZSP with an interest in best practice parasite management on New Zealand livestock farms, will value engaging with Lewis to find out how Wormboss was brought up to date, particularly as our own Wormwise initiative lies dormant.

Finally I look forward to seeing everyone in Blenheim in October.

Regards

Colin

2012 CONFERENCE

24 & 25 October

**The Winery Riverlands & Marlborough Convention Centre
Blenheim**

Keynote Speaker – Lewis Kahn

Lewis Khan is an Associate Professor in Animal Science at the University of New England in Armidale NSW and also a partner in the consultancy AIMS Agriculture. Lewis completed his PhD in nutritional biochemistry and then applied these skills to investigating host resistance to nematode parasites of sheep, with a special interest in changes associated with reproduction. His research includes elucidating the ecology of barber's pole worm and in particular the moisture requirements for development success. Being a person who thinks in terms of agricultural systems he has a keen interest in integrated parasite management of sheep and leads national projects, using commercial sheep farms, to refine regional worm control programs. Lewis is also project leader for WormBoss, the national resource for sheep worm control in Australia, and through his consultancy provides livestock and agronomic advice for sheep and cattle producers.

Welcome Function

There will be a Welcome Function on Tuesday night (23 October) where the Marlborough wine producers will showcase the wines and wineries of the region. The wine sampling will be free to all conference registrants and partners.

Other beverages will be available for purchase.

The venue and time are to be confirmed.

Conference organisers contact details

Robin McAnulty Robin.McAnulty@lincoln.ac.nz

Paul Mason masonp@earthlight.co.nz

VACANCY – TREASURER

We have lost our Treasurer, Dean Reynecke!

If you are interested in taking over from Dean please contact Caroline or if you are attending the conference please put your hand up at the AGM.

Many thanks to Dean for your efforts for the Society.



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