

Preface: Soils & Society 2006 Conference—A short report and an introduction to special issue

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Introduction

The soil resource affects all aspects of New Zealand life, and is recognised as a living substrate that supports growth and filters waste. The resource needs to be protected and nourished so that it will continue to look after us long into the future.

The New Zealand Society of Soil Science (NZSSS) organised a conference with the conference theme “Soils & Society”. This encompassed the economic, environmental, social, and cultural aspects of soil science. Rotorua was chosen as the conference venue and is an ideal location due to the growing local emphasis on water quality stemming from soil management issues. The water quality of Rotorua Lakes has become one of the important national environmental issues in New Zealand. Local and central government agencies are looking for solutions to this problem. It was expected that conference delegates from a wide range of soil-related disciplines in New Zealand – including universities, research institutes, Government departments, analytical services, the fertiliser industry and regional councils, as well as representatives from agricultural, horticultural and forestry businesses – would look at water quality issues from different angles (soil management, waste management, farm nutrients, policy issues, etc.). In addition, the conference provided a forum for discussion of a wide range of current soil research topics.

The conference was held in Rydges Hotel, Rotorua, from 27 to 30 November 2006. This is the first time ever that the New Zealand Society of Soil Science had organised the conference in a hotel, and to some extent, it helped to raise the profile of our Society. The conference organising committee was formed in mid 2005, to plan, organise and execute a memorable conference. The conference managers, Innovatek Ltd, played a key role in the running of the conference.

Conference programme

The programme included two and a half days of technical sessions of oral and poster presentations, and a one-day field tour. There were 10 technical sessions with the following themes: soil quality, greenhouse gases, land application of wastes, nutrients and water quality, microbial community, nitrification inhibitors, pedology, sustainable land use, soil carbon, and nutrient management & modelling. The organising committee received more voluntary papers than was expected, and so decided to restrict the oral presentations to one paper per person. Nevertheless, 68 oral presentations and 32 poster presentations were made during the conference. This conference had unprecedented interest with 181 delegates registered.

For the conference opening session Dr Murray Sherwin, the Director General of the Ministry of Agriculture and Forestry, represented Hon Jim Anderton, Minister for Agriculture and Minister for Forestry, and presented the Minister’s speech. There were three interesting and thought-provoking keynote addresses during the conference. The first was delivered by Don Stafford—Rotorua’s well-known historian and author—on Rotorua’s remarkable soils (i.e. mud). The second was delivered by Greg Carlyon from Horizons Regional Council based in Palmerston North. The third was given by Rick Vallance, CEO of Ngati Whakaue Tribal Lands Inc., Rotorua.

Conference field tour

The conference field trip was enjoyed and appreciated by many participants. In brief, the trip had twin themes: “Land and soil in the making” and “Land and soil management for cleaner water”. It offered an opportunity for participants to ‘peep behind the scenes’ at the wonderful volcanic landscapes, ash layers, soils, and waters of the Lake Rotorua–Waimangu–Lake Rerewhakaaitu areas. It was an informative, interesting and enjoyable day out with something for everyone. It looked at the linkages between soils and water and showed how science and society were working together to understand and reduce the impacts of municipal, farming, and forestry activities on our environment.

Tour highlights included: an overview of linkages between soils, groundwater, and lakes, and the related environmental issues of land management relevant to every New Zealander; Whakarewarewa Forest—how well has the Rotorua Land Treatment System been working for Rotorua’s citizens and the well-being of Lake Rotorua?; Lake Okaro, a small crater lake formed ~700 years ago near Waimangu—new wetland ‘nutrient filters’; lake dosing trials of zeolites and alum aimed to improve water quality; Project Rerewhakaaitu—how key farm management practices are making a difference to water quality in and around tranquil, 14 000-year-old ash-dammed Lake Rerewhakaaitu (also the site of a large US Marines camp in World War II).

Media

The media coverage was wide and excellent. The conference was covered by local and national newspapers, local and national radio, and an information request from TVNZ. The communication team at Scion did good work in this regard.

Sponsors

The conference session topics attracted a number of sponsorships from various Government organisations, local

trusts, and industries. There was one platinum sponsor – SLURI. SLURI is a group of four Crown Research Institutes: HortResearch, AgResearch, Crop&Food, and Landcare Research. There were four gold sponsors: Rotorua Trust, Environment Bay of Plenty, Environment Waikato, and the Ministry for the Environment. There were three silver sponsors: Massey University, Ballance Agri-Nutrients, and Agrissentials Ltd. Without the support of the sponsors, this conference could have not have been run in the way that it was. All the sponsorship from Massey University was used to reduce the student registration fees. Rotorua Trust's sponsorship went towards the costs of the venue and audio-visual system. The sponsorship from Environment BOP was used for the conference tour. Other sponsorships went towards running different conference sessions.

Participants' comments

"This is a very good conference, so far the best I have attended"; "Lots of relevant and useful papers and discussions"; "Very well organised, everybody knew what they were meant to do and where to go"; "The range of issues was greater than previously and showed a new sense of direction in the disciplines"; "Excellent venue – allowed good interaction throughout the event"; "Facts have proved this was a wonderful successful conference – really enjoyed it!"; "A very well conducted conference with a good mix of people and excellent field trip". "The committee should be proud of what they have achieved".

Conference Summary

The overall response and the comments received from the conference participants indicated that the conference was well organised. It created a good opportunity to mix and discuss with new people. There were number of "firsts" in this history-

making conference. Some facts include: first time an NZSSS conference was held in a hotel; wide media coverage with a number of articles in national radio and newspapers; greatest number of registrations in the history of NZSSS conferences; greatest number of people going on a Field Tour (full to capacity); introduction of new topical sessions such as greenhouse gases and nitrification inhibitors; high levels of sponsorship support.

Special Issue

Sixteen papers out of 100 papers presented at the conference were selected for this Special Issue, and we believe the readers will find these papers interesting and useful. The papers cover wide areas of soil research such as heavy metals (phytoremediation, distribution in a biosolid-amended forest soil; remedial treatments on phytoavailability); nitrification inhibitors (decomposition, nitrous oxide emission, nitrogen losses); dairy shed effluent (phosphate removal, bacterial leaching through soil, nitrogen removal in seepage wetland); flyash products (soil amendment, nutrient uptake, element extraction); understanding atmospheric sodium deposition; carbon sequestration in urban landscapes; influence of atmospheric CO₂ concentrations on soil nitrifying bacteria; various amendments on nitrous oxide emissions; rapid *in situ* assessment of soil carbon and nitrogen; and slow-release N fertiliser and its effect on net mineralisation.

Acknowledgements

As the conference coordinator and chairperson of conference technical committee, it is my pleasure, and also my duty, to thank all those people and organisations who have helped us to run this conference successfully. Special thanks to *Australian Journal of Soil Research* for publishing this special issue.