



The Biological Husbandry Unit Future Farming Centre

Permanent Agriculture and Horticulture: Science & Extension

Launch of the BHU Future Farming Centre

The Biological Husbandry Unit (BHU) was established in 1976 at Lincoln University. In 2001 it was re-launched as a charitable trust the '*Biological Husbandry Unit Organics Trust*' as a joint venture between Lincoln University and the NZ Organic Movement.

The role of the Trust is to undertake research and promotion of organic and holistic management through: education and training, research and development and extension activities. In January 2011, the Trust appointed Dr Charles Merfield, as the new head of Research and Extension. He recommended that the Trust create an agricultural/horticultural science and extension centre dedicated to permanent agri/horticultures such as organics, agro-ecology, biological farming, etc. The Trust agreed and the result is '*The BHU Future Farming Centre*' (FFC).

The rationale behind the FFC is that globally, including in New Zealand, agriculture is changing from the yield maximisation paradigm of the last half century, to one of a multiplicity of goals, such as quality, as well as the quantity of food and fibre plus the need to work within environmental limits and the expectations of wider society.

Many of the tools and techniques of the past are losing their effectiveness, e.g., pesticides, or have significant side-effects, e.g., soluble nitrogen fertilisers. Therefore simply trying to re-double the efforts of the last fifty years will make the problem worse, not create a solution. This is why the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) said that 'business as usual is not an option'. A different agricultural paradigm is needed. The FFC has its roots in organic, ecological and sustainable agricultures, all of which offer many time-proven ideas and practical tools to help mainstream agriculture transition to a new model to meet both current and future needs of humanity and the planet.

The launch of the FFC is at 1.00pm to 2.00pm on Monday 31st October at Lincoln University with the official opening by Tom Lambie, Chancellor of Lincoln University, organic farmer, former National President of Federated Farmers and Commissioner at Environment Canterbury.

The main part of the launch will consist of a public lecture by Dr Charles Merfield, which will consider:

- What permanent agriculture means
- Why soil husbandry is the most important task for farmers and growers and the most important activity for any civilisation
- Why we have passed 'peak pesticides' and what the post-pesticide era will entail
- Why nitrogen fertilisers are a problem, not a solution
- The importance of ethics in agriculture
- Why agricultural science is a political act
- Why the arguments whether organic or mainstream agriculture are scientific or unscientific are misplaced.
- An agricultural science and extension system for the future of farming.

Light refreshments will be provided from 2.00pm to 2.30pm. To register your interest in attending (for seating and catering purposes) and for full information on the location of the launch please visit www.bhu.org.nz.



Who we are



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Charles Merfield completed a higher national diploma in commercial horticulture in the United Kingdom before spending five years managing intensive organic horticultural farms in England and New Zealand. He has completed a range of postgraduate studies at Lincoln University culminating with his PhD, covering a wide range of topics including computing, management, agroecology, biocontrol, organic vegetable seed production, weed management, and feminism. Merf's intellectual interests and activities include physics, such as cosmology and quantum theories; philosophy, particularly the philosophy and history of science and organic agriculture; evolution; the foundations of computer and information theories including human cognition; and he has given over six-years service on the University's Human Ethics Committee. Within the organic movement he was a key founding member, chair and editor of the Canterbury Commercial Organics Group, and has been actively engaged in global organic politics. Professionally he is a general ecological agronomist, with non-chemical weed management as a speciality. Merf has published a diverse range of scientific papers, a book chapter, and many farmer focused publications.



Jon Manhire
Chair
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BHU Organics Trust

Jon Manhire has been an agribusiness consultant and researcher for over 20-years with a focus on organic and sustainable farming systems. He works with a wide range of primary industry sector, government, company and producer clients in New Zealand and overseas. Since 2003 he has led the Agricultural Research Group on Sustainability (ARGOS) - Pathways to Sustainability Project - a broad-based Ministry of Science and Innovation and industry funded project that is investigating the environmental, economic and social impacts of different farming systems. This trans-disciplinary project as well as associated research has provided Jon with a good understanding of different regulatory, market and policy approaches to resource management and sustainable land management, their relevance and potential impacts. This has helped inform an understanding of the need for and the scope of possible research for the BHU Future Farming Centre.



Dr Sam Scarratt and Prof Steve Wratten

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Steve Wratten is Professor of Ecology at Lincoln University, visiting Professor at Charles Sturt University, Australia and has been the University's representative on the BHU Trust since 2003. He is also the Deputy-Director at Bio-Protection Research Centre, a Centre of Research Excellence based at Lincoln University. He has worked at the universities of London, Southampton, Cambridge, holds three doctorates and is a Fellow of the Royal Society of New Zealand. He has around 400 refereed publications, including six books. His main research concerns evaluating and enhancing 'nature's services' (ecosystem services). Using resource economics techniques, the existing value of these services (such things as biological control of pests, pollination, and soil formation) is estimated and then habitat manipulation ('ecological engineering') is used to enhance these services on farmland to provide profit and real evidence of sustainability. This work is done across several agricultural sectors but the most prominent work is in vineyards <http://bioprotection.org.nz/greening-waipara>.