



# Sustainable Nutrient Management Shortcourses

James Hanly  
Massey University



## Outline

- Sustainable Nutrient Management Shortcourses - *Fertilizer and Lime Research Centre (FLRC), Massey University.*
- Nutrient Management Advisers Certification Programme.
- Nutrient budgeting workshops for growers.



## Overview of courses

- Massey University (FLRC) offers two courses on Sustainable Nutrient Management:
  - Intermediate
  - Advanced
- The courses were developed in conjunction with the NZ Fertiliser Association.
- Both courses involve the use Overseer Nutrient Budgets model.

Forever discovering

Te Kūhanga  
ki Pūrehuroa



MASSEY UNIVERSITY



## Intermediate course

- Covers topics relating to the management of nutrients on farms, including:
  - *Nutrients and nutrient cycling*
  - *Soil and plant testing*
  - *Water movement through agricultural soils and landscapes*
  - *Issues with fertiliser contaminants*
  - *Fertiliser recommendations*
  - *Background to Overseer Nutrient Budgets*
  - *Using Overseer to assess nutrient management of a case study*
- Two versions of the course; Pastoral Agriculture or Orchard and Arable production. This year; 6 Pastoral courses and 1 Orchard and Arable course (5-7 November).

Forever discovering

Te Kūhanga  
ki Pūrehuroa



MASSEY UNIVERSITY



## Intermediate course

- Prerequisites include a tertiary level course in Soil Science or Land Resource Management, or have significant practical or professional experience in production agriculture/horticulture or environmental science.
- A study guide is sent out five weeks prior to the contact course (*expectation of about 40 hours pre-course study*).
- Completion of the pre-course assignment, attendance at all sessions of the 3-day contact course and passing the two-hour examination is required to gain the '*Certificate of Completion in Sustainable Nutrient Management in New Zealand Agriculture*'.

Forever discovering

Te Kūhanga  
ki Pūrehuroa



MASSEY UNIVERSITY



## Advanced course

- Enrolment in the Advanced course requires successful completion of the Intermediate course (*an exemption may be granted based on applicant's experience*).
- The intake for these courses is usually in February with contact courses scheduled for mid-year (3 courses this year).
- A study guide is provided and a commitment of about 150 hours of 'homework' study and preparing assignments is expected over a five month period.
- The assignments are case study farms using Overseer, which include both pastoral and arable examples.

Forever discovering

Te Kūhanga  
ki Pūrehuroa



MASSEY UNIVERSITY



## Advanced course

- Completion of the four assignments, attendance of a three-day contact course and passing the two-hour examination is required to gain the '*Certificate of Completion in Advanced Sustainable Nutrient Management in New Zealand Agriculture*'.
- Both the Intermediate and Advanced courses are part of the recently introduced Nutrient Management Adviser Certification Programme (NMACP).

Forever discovering

Te Kūnenga  
ki Pūrehuroa



MASSEY UNIVERSITY



**Nutrient Management  
Adviser Certification  
Programme Ltd**

- In 2012, DairyNZ commissioned the Fertiliser Association to establish the programme as part of the Ministry of Primary Industries' Primary Growth Partnership (PGP).
- The aim of the programme is to establish a set of industry standards for nutrient management advisers to meet and provide certification.
- To become certified, applicants need to demonstrate they have appropriate qualifications, or equivalent field experience, with a suitable training record.

Forever discovering

Te Kūnenga  
ki Pūrehuroa



MASSEY UNIVERSITY



- Advisers are required to have successfully completed the Intermediate and Advanced courses in Sustainable Nutrient Management (*exemptions may apply to applications before 31 October 2013 under certain circumstances*).
- Also required to demonstrate that their skills and knowledge meet required standards through a competency assessment.
- To maintain certification a nutrient management adviser needs to complete a minimum of 15 hours of continuing professional development each year.
- More information is at [www.nmacertification.org.nz](http://www.nmacertification.org.nz)

Forever discovering

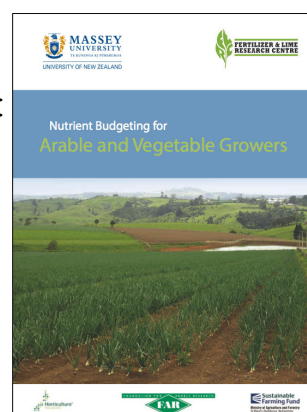
Te Kūnenga  
ki Pūrehuroa

MASSEY UNIVERSITY



## Nutrient budgeting workshops

- Project involving FAR, HortNZ and Massey University, funded by the Sustainable Farming Fund (MPI).
- Produced two booklets on nutrient budgeting:
  - Nutrient budgeting for Arable and Vegetable growers
  - Nutrient budgeting for Orchardists
- Provide workshops for growers on nutrient budgeting with Overseer.



Forever discovering

Te Kūnenga  
ki Pūrehuroa

MASSEY UNIVERSITY



## Nutrient budgeting workshops

- Original intention was a training day using Overseer.
- Developed into an information workshop on Overseer with regional council policy context.
- First pilot workshop was with FAR in Christchurch (5<sup>th</sup> July)
  - 18 participants (about half growers).

- Two main sessions:

Session 1: Background to nutrient management and Overseer; *(including update of Ecan plans, FAR review of Overseer)*

Session 2: Using Overseer *(case study, input information, interface and reports. Key factor's influencing N leaching in the model.)*

Feedback.



## Nutrient budgeting workshops

- Feedback:
  - *Most attendees thought the pilot workshop was a good length and covered useful material.*
  - *Some growers wanted a hands-on session with their own farms.*
  - *Others would rely on a consultant to run Overseer, but would like a method to assist with recording data (e.g. data recording template).*
- A second pilot workshop scheduled with HortNZ in Wellington on 19<sup>th</sup> August.

