



SUSTAINABLE
FARMS

Agenda – Tuesday 10 May

ANU, Acton Campus – China in the World Lecture Theatre

9:00am Tea and coffee

9:15 – 9:30am **Introduction and overview of Sustainable Farms and seminar program – goals for the day.**

*Michelle Young, ANU Sustainable Farms
David Simons, Landholder*

9:30 – 9:45am **Environmental Accounts for the Box Gum Grassy Woodlands**

Michael Vardon, ANU Sustainable Farms

The Sustainable Farms team recently completed the SEEA accounts (UN's System of Environmental Economic Accounting) for the ecological community of national significance, the Box Gum Grassy Woodlands. This is the first study of its kind that has attempted to link environmental accounting to the laws designed to preserve biodiversity. These accounts provide a knowledge base of value to farmers, regional land care bodies, agricultural industry bodies, government and the finance sector.

9:45 – 10:15am **Natural Asset Farming – monitoring effective management interventions**

David Lindenmayer, ANU Sustainable Farms

Sustainable Farms has been involved in monitoring biodiversity and ecosystem condition through large-scale, long-term work in temperate woodlands on farms since 1997. The work has demonstrated the critical biodiversity values of a range of natural assets on farms, ranging from replantings and patches of remnant vegetation to rocky outcrops and farm dams. Many of the key discoveries from the research and monitoring could only have been through long term, on ground, custom designed research programs. Yet these discoveries are fundamental to best practice conservation on private land, effective management interventions, and efforts to integrate biodiversity conservation and agricultural production (e.g. through environmental stewardship programs). Some woodland ecosystems are at high risk of ecological collapse under business-as-usual management. However, key solutions to conservation problems are clearly apparent from the long-term science and monitoring conducted by Sustainable Farms.

10:15 – 10:45am **Demonstration of BirdCast; an online tool for predicting bird occupancy**

Angelina Siegrist & David Lindenmayer, ANU Sustainable Farms

BirdCast is an online tool that estimates the native bird biodiversity in Box Gum Grassy Woodlands within the NSW South Western Slopes bioregion. The tool has the potential to demonstrate farm-scale bird biodiversity dividends generated from past and future investments in vegetation management and restoration programs.

**Response from NSW Local Land Services, Business Partner Customer Experience,
Tracey Potts**

10:45 – 11:00am Morning Tea

11:00 – 12:15pm **Farm dam research**

*Ben Scheele, Helena Clayton & David Smith, ANU Sustainable Farms
Martino Malerba, Deakin University*

Farm dams are ubiquitous in grazing and mixed farming landscapes in Australia and provide water for livestock and habitat for a range of wildlife. Despite their common presence, we know surprisingly little about how management practices and catchment conditions affect water quality and the wildlife value of dams. Sustainable Farms' research is helping to fill this gap, with a variety of work programs over several years focusing on quantifying changes in water quality and wildlife across a large number of dams with different management practices. Our research is evaluating water quality, birds, frogs and reptiles, farm dam economics and working with collaborators on greenhouse gas fluxes. Early results indicate that it is possible to manage dams to ensure high water quality, create important wildlife habitat, reduce evaporation and minimize greenhouse gas fluxes.

**Response from NSW Local Land Services, Business Manager Agriculture,
Andrew Lieschke**

12:15 – 12:25pm **Final Questions and Feedback Poll**

Workshop close





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Speaker Information

Helena Clayton



Agricultural Economist, ANU Sustainable Farms

Helena has a research background in Agricultural and Resource Economics. Helena will be evaluating the links between land management practices that protect and enhance natural assets on farms, and farm financial performance. This will help to identify opportunities for both conservation and farming benefits and enable investment prioritization.

David Lindenmayer



Ecology Research Director and Lead Scientist, ANU Sustainable Farms

David is Professor of Ecology and Conservation Biology at The Australian National University's Fenner School of Environment and Society. He is an expert in landscape ecology, conservation and biology. He has maintained some of the largest long-term ecological monitoring programs in Australia, with some running for more than 37 years.

Martino Malerba



Environmental Scientist, Deakin University

Martino is an environmental scientist at Deakin University investigating ways to improve the sustainability of agricultural practices. His research focuses on using satellites to monitor the environmental effects and the carbon footprint of small constructed water bodies, such as farm dams.

Ben Scheele



Research Fellow, ANU Sustainable Farms

Ben is based at The Australian National University and joined the Sustainable Farms team last year. He has spent the last 13 years in various roles investigating how to enhance biodiversity in farmland in south-eastern Australia. His primary focus is on frogs but he is interested in all wildlife and grazing systems management. Ben is a driving force in the farm dams project.

Angelina Siegrist



Biodiversity Field Officer (Wodonga), ANU Sustainable Farms

Angelina has a wide range of ecology experience across Australia, previously working in north-west Australia, central NSW and having grown up and studied in Victoria. She considers herself a generalist but is particularly excited by reptiles.

Dave Smith



Research and Extension Officer (Wodonga), ANU Sustainable Farms

David was previously based in Cowra and now looks after our Victorian and Western Murray projects. Dave is passionate about birds, having completed his Graduate Diploma of Ornithology on birds in the arid zone.

Michael Vardon



Environmental Accountant, ANU Sustainable Farms

Michael researches and teaches environmental accounting at The Australian National University at the Fenner School of Environment and Society. His knowledge of environmental accounting spans the collection of basic data, account compilation, analysis and indicators as well as applications to public policy.

Michelle Young



Director, ANU Sustainable Farms

Michelle has a background as a social researcher and has experience working in public health in NSW and in the Australian Public Service. Michelle is excited about working with landholders and regional partners to achieve meaningful outcomes.