Capability statement
TIA Dairy Centre

The Dairy Centre is one of five sector-based research, development and extension (RD&E) centres within the Tasmanian Institute of Agriculture (TIA).

TIA
TIA is a joint venture between the University of Tasmania and the Tasmanian Government. TIA has approximately 150 staff and over 80 higher degree research students. Its headquarters are in Hobart but it has offices and laboratories in four locations across Tasmania and has access to four research farms.

TIA Dairy Centre – What We Do
The TIA Dairy Centre is a centre of excellence within a regional, national and global network, specialising in research, development, extension and education that contributes to prosperous, innovative and sustainable agriculture and natural resource-based activities. The key RD&E priority areas of the TIA Dairy Centre are:

- Animal health and welfare
- Animal nutrition
- Benchmarking and business analysis
- Biophysical and farm-system modelling
- Feedbase
- Natural resource management
- People, education and training
- Precision agriculture and new technologies

The TIA Dairy Centre mission is to undertake quality innovative and responsive research, development and extension to assist the dairy industry in achieving growth and development in a profitable and sustainable manner. The Centre’s areas of work include:

- Feed production – the production and consumption of forage (pastures and crops), grazing and harvesting management, water use efficiency and nutrient requirements.
- The factors affecting milk production – supplementary feeding, feed conversion, body tissue mobilisation, milking frequency, genetic merit and developmental epigenetic effects.
- Management of the dairy environment – synchronisation of fertiliser use with weather conditions, plant demands and soil properties, nutrient budgeting and management, and improvement of catchment water quality.
- Precision agriculture and new technologies – including working with Automatic Milking System technologies, technologies for nutrient and fertiliser application and management, mitigation and management of emissions from dairy farms, irrigation technologies, remote monitoring of cows, and biophysical and whole farm system modelling.

Advisory Committee: Centre alignment with industry and government priorities and strategic direction are informed by the Dairy Centre Advisory Committee.

The Dairy Centre activity is highly collaborative and interactive with the industry, scientific and government communities.

Industry Collaboration
The TIA Dairy Centre maintains a close working relationship with Dairy Australia and DairyTas. The Centre receives support from Dairy Australia and DairyTas to distribute the Tassie Dairy News to dairy farmers throughout Tasmania. They also fund specific research, industry development and extension work carried out by the Dairy Centre. The Centre is represented on the DairyTas Board, and represented on the Dairy Moving Forward Groups 1, 3 and 4 centred around the key RD&E areas of Feedbase and Animal Nutrition, Natural Resource Management and Climate Change, and Farm Business Systems. The TIA Dairy Centre also receives recurring funding and has established a Deed of Agreement with Dairy Australia to support ongoing RD&E.

Scientific service and contributions
Staff from the TIA Dairy Centre contribute regularly to a range of conferences and publications, including a representative on the organising committee of the 2013 Australian Dairy Conference; major sponsor and representation at the 2012 Australasian Dairy Science Symposium; contributing to the 2013 22nd International Grassland Congress and 2014 Australian Science of Agronomy Conference.
National and international collaborations

The TIA Dairy Centre undertakes significant collaboration with the following organisations – Melbourne University, working on climate change adaptation and mitigation in modelling; University of Sydney, in RD&E of Automatic Milking Systems; CSIRO in the use of precision technology and sensors for monitoring and evaluation of grazing behaviour; and Western Dairy in the use of precision technology for applying nitrogen fertiliser.

External funding

Centre staff work closely with Dairy Australia and DairyTas in order to develop, execute and extend RD&E projects for the benefits of stakeholders.

Extension and education

Staff contribute to the teaching within the School of Agriculture Science to ensure maximum benefit from the teaching-research nexus. Staff also provide expert supervision for both Honours and PhD projects covering a range of topic areas including (but not limited to) extension and development, pasture production, soils and nutrients, development of new technologies and analysis, business analysis and management, and animal health, performance and production.

Staff work with the Tasmanian Skills Institute and The National Centre for Dairy Education, and are responsible for input into and delivery of pasture courses, animal health and welfare, and people management.

DairyTas and Dairy Australia provide support to our leading extension project – DairySmart. DairyTas, through their small grant projects, also provides support to a number of localised projects such as the Tasmanian Dairy Mentoring Program. Dairy Australia provides funding to our major feedbase activity – More Milk From Forage R&D project – in addition to support for the benchmarking program.

Staff

Staff list on the TIA website – Click on a name to get more information, including credentials and research interests.

Current projects

Current projects list.

Facilities

The TIA Dairy Centre includes the Tasmanian Dairy Research Facility at Elliott, which is a fully operational 320-head dairy farm and is home to structured experiments based on a wide range of key industry issues. A weekly report is generated which includes information on pasture and cow production, climate data, and decisions that are being made.

Recent publications


