



Pictured are participants at a well attended field day conducted on Ann and Bob Davie's Ventnor farm

Farmers ready to adapt

FARMERS are ready and willing to adapt their businesses to manage the impacts of climate change.

That was the clear signal given by participants at a field day held at Phillip Island last week to discuss ways that farmers can reduce their greenhouse gas emissions, improve water efficiency and build soil carbon.

More than one hundred people attended the field day, which was organised by Enviromeat and the Bass Coast Landcare Network as part of the Western Port Greenhouse Action and Resource Efficiency Project (Western Port Project), and was funded by the Victorian Sustainability Fund.

Feedback at the end of the day indicated that a large number of farmers were ready to take immediate action to reduce their own emissions, and improve water efficiency.

The feedback also revealed that there is a huge interest amongst farmers about learning how to improve soil fertility, and the role of carbon in healthy soils.

Hosted by progressive beef farmers Anne and Bob Davie, of Ventnor, the field day looked at not only the science behind emissions, but also the practicalities of implementing abatement strategies on-farm.

Bob and Anne have been active participants in the Western Port Project, achieving significant reductions in their emissions (their goal is to become carbon neutral) and waste to landfill, and improving their water efficiency to the point that they are no longer reliant on mains water for stock.

Through the Western Port Project, Bob and Anne have recently begun trialling different feed supplements that have been shown to reduce enteric methane and nitrous oxide emissions in dairy cows, to measure their effect on weight gain in beef cattle. A demonstration of feeding vegetable oils to a test mob of steers revealed that scientists and farmers have much to learn from each other, both about the practicalities of various strategies, and the long term impacts of the use of dietary supplements.

Methane gas causes

One of the scientists present, Associate Professor Richard Eckard from the University of Melbourne and Department of Primary Industries Victoria, opened the field day with an explanation of the causes of enteric methane and nitrous oxide emissions.

He also gave a valuable overview of the proposed Carbon Pollution Reduction Scheme and the potential impacts for Australian agriculture.

While agriculture's entry and role within the Scheme is yet to be decided, it will certainly be included in measures to reduce Australia's emissions (agriculture accounts for 16% of Australia's total greenhouse gas emissions). The difficulty with agriculture however, is the fixed relationship between nitrogen and food production: as global demand for food rises, more nitrogen is required, and therefore more emissions are created. "We will never manage a net reduction in greenhouse gas emissions, and feed the world," explained Dr Eckard. "What we must aim for is a reduction in emissions per unit of food production."

Dr Eckard favours an incentive-based approach like that proposed by industry in New Zealand. Farmers who adopt best management practices are rewarded with permits, which can be sold to those farmers who are yet to achieve the same standard. With greenhouse gas emissions representing losses of energy and nutrients, the

overall result should be a more efficient and competitive agricultural sector.

Moragh Mackay of the Bass Coast Landcare Network which is a partner in the Western Port Project agrees. She adds, however, that farmers need to be confident that any proposed strategies will deliver quantifiable productivity gains without any negative side effects. For that reason she is grateful for farmers like Anne and Bob, and others in the Western Port Project, who have been willing to trial different strategies to develop best management practices for the broader farming community.

Glen Mcmillan of Genesis Now, who is helping to develop action plans for farmers in the Project, also spoke at the field day, along with Sonia Lees from Vital Soil Consulting who discussed soil health and building soil carbon. There were demonstrations of Aquatrain®, an easily applied product that has been shown to reduce evaporation in dams by up to 50%, and the Davies' smudging technique. Carried out after grazing, smudging helps to incorporate nitrogen from the cattle's dung into the soil, which helps

to build soil fertility and reduce fertiliser use.

There were also displays of fence posts made from recycled silage wrap, a car run on recycled vegetable oil, an Australian-made wind turbine and a soil conditioning mulch made from paper waste.

Participants were treated to a BBQ lunch of rump steak and sausages provided by Enviromeat. The Davies, who have an accredited environmental management system in place, are Enviromeat suppliers and receive a premium for their meat in recognition of their good environmental management.

Bass Coast Landcare Network is running workshops on regenerative soil management, and has also produced fact sheets relating to topics discussed at the field day. The Western Port Project also has vacancies for interested Bass Coast farmers. For more information, contact Moragh Mackay on 5678 2335 or moragh@vic.chariot.net.au. For information about Enviromeat, or to register for the next training for producers to supply Enviromeat contact Jenny O'Sullivan on 5663 2386 or osulliva@dcsl.net.au