



TAFCO
RURAL SUPPLIES



SMARTchoice

ISSUE 9 December 2009

Introduction

This is an update on the Commonwealth funded Caring For Our Country SMARTchoice project. The project has the general aim of supporting land owners in the Upper River Valleys of North East Victoria deal with land use change. There is part time staff involvement and the project is coordinated through TAFCO in Myrtleford. The SMARTchoice project has a funded role to assist landowners deal with soil moisture monitoring, product quality assurance, soil 'health' and general land management issues.

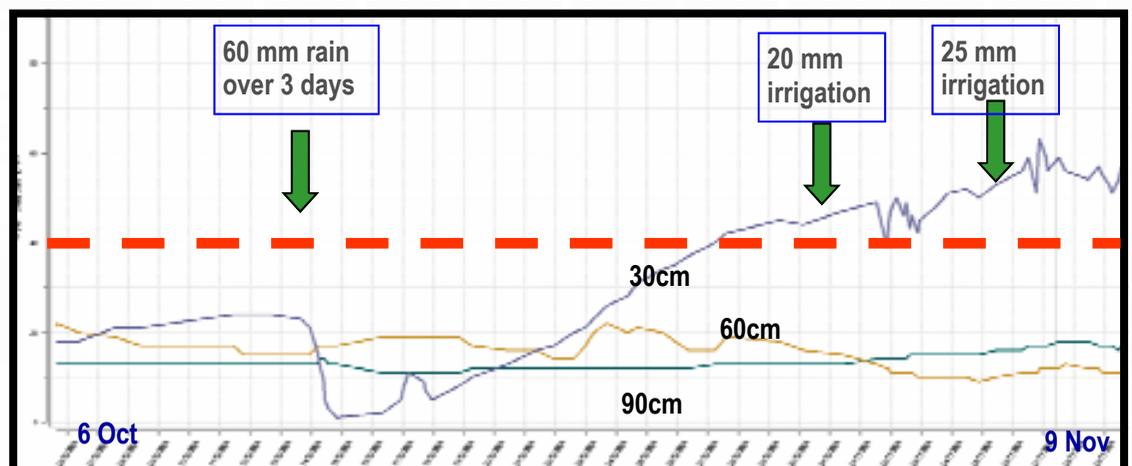
Soil Moisture Monitoring

When tobacco was being grown in the area there was little or no soil moisture monitoring used. Locally, only some grape producers, dairy farmers and an assortment of other horticulturalists had been using the technology. However, nowadays in most irrigated cropping situations the technology is widespread. Soil moisture monitoring can be a useful tool to indicate when a plant is under moisture stress or alternatively if irrigation water is 'passing' the effective root zone. The SMARTchoice project is conducting soil moisture monitoring in lucerne, walnuts, blueberries, raspberries, vegetables, currants and commercial blackberries.

We have started to develop some good knowledge and trends over the past couple of months. The complicated looking graph below, which was completed before the most recent rain events is an example of the type of information we are generating. In the instance below on a clay-loam soil there are separate probes 'buried' at 30, 60 and 90 centimetre depths in a two year old district lucerne crop.

The probes constantly record soil suction. This suction is the 'pressure' that plant roots have to exert to extract moisture from the soil. It is difficult to give a thorough explanation in this newsletter but in general terms once the 'suction' moves above the red hatched line, the crop is theoretically developing moisture stress. You will note that when it rained or the crop was irrigated the readings on the 30 cm probe dropped away; in other words the soil 'wetted' up. **Remember again the probe is 30 cm deep so the irrigation water takes time to get there and may barely penetrate to that depth when the topsoil is dry.** Once again as the crop extracts the soil moisture the 'suction' moves up.

We are more than happy to meet with individuals or small groups to discuss the findings and trends. Just give Gary Baxter a call on 57521800 to do this.



Primary Producer Proud



There is an opportunity to visit Yanco Research Station (NSW) to look at "Aspects of Lucerne Production" on Wednesday 9 December 2009. A recognised NSW DPI lucerne expert will lead the day.

Contact Gary Baxter on 57521800 (as soon as possible if interested)

Visitors and Visits

Through the SMART^{choice} project we encourage various people and organisations to visit us and have a look at what the area has to offer. Lucerne has become a key land use in the area. The SMART^{choice} project has joined the Australian Fodder Industry Association (AFIA) as a corporate member. This membership enables us to receive newsletters and articles put out by the industry on issues such as quality assurance, field day opportunities, new technology, transport regulations, etc. The AFIA would certainly encourage individual membership but in the short term it is a contribution the project is making in order to stimulate some wider interest.

Colin Peace, the Executive Officer of the AFIA visited the area recently, met a few 'new' lucerne growers and had a look at a couple of district farms. He was travelling with Brian Bailey, a grains analyst and writer for the Stock and Land newspaper.



Brian Bailey (on the left) and Colin Peace visiting an established lucerne paddock in the Myrtleford area

Our visitors were certainly impressed with the quality of the lucerne stands in the area. They acknowledged the issues of scale and farm size which we are well aware of. Colin went on to say that quality is the key to being successful in the fodder business, regardless of whether the market is domestic or export.

Colin advised us that as with many other industries, quality assurance has become a priority issue. He discussed a specific quality assurance program relating to the industry. It is called Fodder Care. It is a mechanism of recognising and acknowledging professionalism in the fodder business. Costs for the program have been minimised through training via teleconference and on line auditing of fodder producers. Fodder Care provides a system for traceability and creates efficiencies in auditing for hay consumers, giving them a reason to purchase hay which has the Fodder Care stamp.

If you are interested in more detail on the AFIA or Fodder Care give Gary Baxter a call on 57521800 or the AFIA on 03 9530 2199. The project may be able to extend some assistance to any farmer interested in Fodder Care.

Another activity recently conducted was a visit to Patties Foods in Bairnsdale. The local farmers who made the trip were 'new' berry growers from the Myrtleford area. They want to explore any opportunities for marketing their produce.



Obviously it is a long way from small 'new' berry blocks in the Myrtleford area to supplying frozen berries for a major company. So, the visit was clearly along the lines of preliminary discussions.

Patties Foods has a diverse group of brands. One of their lines, Creative Gourmet, has a frozen berry packing facility that is being relocated from Silverwater in Sydney, to Bairnsdale. Patties management indicated a preference to 'buy local' berries where possible. Richard Rijs, a director of Patties and Grant Leyden, the General Manager of Manufacturing hosted the visit. At the local end the visit had support from The Agribusiness Forum, Wangaratta Unlimited and Regional Development Victoria.

Are You a Weather Watcher?

SMART**choice** project staff are in the process of installing four Automatic Weather Stations across district locations. At the time of writing one had been installed in the Myrtleford area, one in the Porepunkah area and one in the Kiewa Valley. In the near future there will also be an Automatic Weather Station set up in the King Valley. When the four stations are established and any 'bugs' ironed out, the data will be available to everyone. This will mean that anyone who has internet capacity will be able to access very localised and detailed weather data.

Readers may say, that's nice but what's in it for me? Many of us are interested in the weather basics such as rainfall, maximum and minimum temperatures, etc. However the equipment we are installing also measures more specific data such as sunlight hours, wind speed, wind direction, leaf wetness, humidity, evaporation, chilling hours and more. This type of data can be useful for some farmers to assist predictions on the likelihood of disease outbreaks, to identify preferred spraying conditions or to check the likely suitability of certain varieties requiring minimum chill hours, and so on.



A recently installed Automatic Weather Station

We will keep you posted regarding when the four sites go on-line. At the moment the data from the Myrtleford, Kiewa Valley and Porepunkah sites is coming through to us at TAFCO. For anyone interested in a more detailed explanation of some of the weather data before it goes on line, give Gary Baxter or Kerry Murphy a call on 57521800.



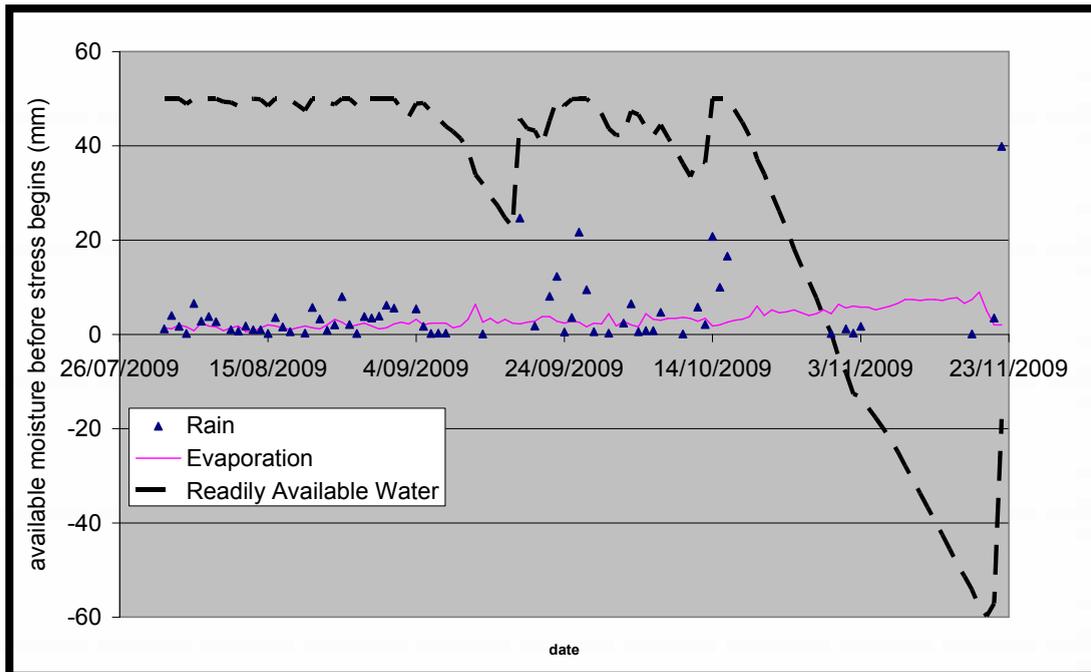
Part of the basis of attracting the funding for the weather stations was that we want to demonstrate that 'the project' has the capacity and technology to assist landowners who are either growing or thinking about growing 'new' crops in the area. An example of this is the current vegetable seed production occurring in the area. Being able to use technology to predict the likelihood of certain diseases could be valuable in managing risk if there is expanded production of this type in the area.

Onions being planted for seed production in the Myrtleford area (August 2009)

When was the Ideal Time to Start Irrigation this Season?

The article below has been prepared by Dennis Watson (Irrigation Officer) with the Department of Primary Industries Rutherglen. Dennis is assisting the SMARTchoice project with the soil moisture monitoring and has extensive irrigation experience.

The hot weather prior to the recent rain events had probably meant most irrigators in the Myrtleford region had already commenced irrigation. By examining rainfall and evaporation rates it is theoretically possible to estimate when irrigation should have occurred. For example with lucerne, in a soil type capable of holding a ½ megalitre of moisture (*before the plants begin to stress*), the theoretical time to begin irrigation would have been on the 30th October (see Figure below).



Perennial ryegrass pastures, on the other hand, should have been theoretically irrigated earlier, on about the 25th of October (see Figure above). The ryegrass has a shallower root system. In the same soil situation it will only have access to about ⅓ of a megalitre of moisture (*before stress starts to occur*). A crop such as grape vines, will use less water per day. The theoretical start up irrigation date in the grape situation would have been more like the 11th of November (see Figure above).

The consequence of starting irrigation late depends on the crop type and the irrigation system used. Irrigated ryegrass pastures can suffer a yield loss of 65 kg of dry matter per hectare each day irrigation is delayed from the ideal start up time. This may not seem like much but consider if you are late by 2 weeks and irrigating 20 hectares. This equates to a production loss of 18.2 tonne. If this was hay at \$200/tonne it is equivalent to a loss of \$3,600. (*The example assumes that once you irrigate that you refill the soil to eliminate further stress and that your irrigation system is capable of applying enough water to fill the profile*). **Take advantage of the recent good rains to ensure your irrigation scheduling is on track from now on.** There are a number of ways to check if your irrigation scheduling is on track:

- Dig a hole and feel the soil
- Monitor weather patterns (*evaporation and rainfall*)
- Install soil moisture monitoring equipment

Do not wait for signs of plant stress; if it looks stressed you are well and truly late.

The Department of Primary Industries has grants available to people interested in installing soil moisture monitoring on their farm. For more information contact Dennis Watson DPI – Rutherglen (02) 6030 4567. Alternatively, you can contact Gary Baxter or Kerry Murphy at TAFCO on 57521800 who will liaise with me.



ABOUT TAFCO

The Tobacco & Associated Farmers Co-operative Limited (TAFCO) was formed in 1987 by tobacco growers to operate as an agricultural merchandising business to service tobacco growers and other primary producers.

Being a co-operative, profits are retained in the local communities and equitably distributed amongst members. TAFCO has a broad horticultural base of 500 farmers throughout the Ovens, King, Kiewa and Beechworth areas - many operating multi-commodity farming enterprises. Over 600,000 \$1.00 shares are held by members.

See our website for details on becoming a member.

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