

From Rhonda's Desk



Once again I am writing this article while we are in the grips of the worst drought in 1000 years. I congratulate each and every one of you for your efforts of partaking in biological (regenerative) farming as a way of promoting healthier soils, plants & animals. Andre Leu, Chairman of the

Organic Federation of Australia points out that Australia has a history of long periods of dry times and illustrates that only by increasing soil organic carbon with a stable humus product such as compost will we be able to survive in these trying times.

I have attended many educational Seminars and Workshops this year as a way to further increase my knowledge, not only on soils but also the impact humans are having on the environment and how our thinking creates our future.

With drought conditions persisting it is important that we manage our thoughts and ensure we interact with positive people and visualise a happy prosperous future. It will rain again!!!!

Over leaf is an article summarising the 'Managing the Carbon Cycle' Conference giving you some idea of the enormity of the global problem we are facing. The more I hear the stark warning that we have used up two-thirds of the world's natural resources the more passionate I become about conserving what is left and growing 'new' soil. Soil is the only natural resource that is renewable, we as farmers can play a major role in reducing green house gas emissions by sequestering carbon in the soils.

YLAD Living Soils continued to grow in 2006 with some encouraging results been recorded, even in the drought. I will continue to organise stimulating educational experiences to allow you to build on your present knowledge and attain a level of confidence in biological agriculture. Edwin Blosser from MBS will be back in Australia in March and September for further seminars.

I would like to also personally thank you, on behalf of our team, for your support and encouragement during this very difficult season and wish you a healthy and happy Christmas and a much more prosperous New Year.

Merry Christmas to you all

Carbon Trading Now Happening in Australia

Rhonda Daly from YLAD Living Soils was privileged to participate at the Managing the Carbon Cycle Conference in Canberra. Organised by Dr Christine Jones, a long time advocate of the role soil organic carbon has in reducing carbon dioxide in the atmosphere and environmental issues.



Pennie Scott, Canberra, Andre Leu, Chairman Organic Federation of Australia & Rhonda Daly enjoy the dinner at the Managing the Carbon Cycle in Canberra in November

It is now becoming known that the organic carbon levels in Australian soils has dropped from 8% to around 2% in the last 200 years with current farming practices. Still today we loose 12.5 kg of soil through wind and erosion to grow 1 kg of wheat, equating to 250 grams of soil lost per slice of bread.

With only 4% of our national population farming the land we need to look at ways such as carbon credits to provide an avenue for income to help our children remain on the land.

Tony Windsor, MP spoke of his experiences as a farmer in the Armidale area and since the conference has been instrumental in increasing the awareness of the significant role farmers can play in the 'carbon' debate.

Mr Windsor believes that the potential to use **carbon credits to reward agricultural practices** could not only improve Australia's soils but also store carbon in the soil rather than the atmosphere and could be one of the solutions that the Federal Government is looking for.

'Increasing soil carbon can significantly reduce the impact of dryland salinity, reduce sedimentation rates in rivers and streams, improve water quality,

improve air quality and decrease the impact of the Greenhouse Effect, global warming and climate change,' Mr Windsor said. This national debate is the responsibility of everyone in the community because as we have seen as the level of carbon and nutrients decline in our soils so does the quality of life it supports.

Australia is in the grip of a major epidemic of man made diseases caused by reduced nutrition and quality in the food produced on depleted soils. We need to become protectors of our natural resource base and commit to making our environment, society and community something we will be proud to hand down to future generations.



The Management and Staff of YLAD Living Soils wish you a very Merry Christmas and a Happy Sustainable New Year.

We would like to welcome Alecia Brown and Kris Behler to our office staff at YLS, please make them feel welcome when you call.

Consultancy Update - Guy Webb GAIA Consultancy

After 10 years in Queensland **Guy Webb** now has, a great wife and a couple of young children to his name and is moving back to Central West NSW (Forbes) in December 2006 to be closer to family (& babysitters). Guy worked for many years as head agronomist with Nutri-Tech Solutions in Yandina and has a broad, practical knowledge of soils and plant health. Guy has been offering consultancy to **YLAD Living Soils** for a few years now, and being closer hopes to continue and expand this service to their valued customers.

The **KIT Days** prove to be very valuable and will be continued in 2007.

Anyone who would like Guy to visit their farm to discuss options available for 2007 please call the office on (02) 6382 2165



*Bill Daly & Guy Webb inspecting
2006 Breakwell Triticale on
Milgadara – yield .6 t/ha*

2006 - Cereal Crop Yields Surprise in Drought Conditions

Yields ranging from .6 t/ha to 2 t/ha were recorded on Milgadara despite a desperate lack of rain. 8.5 inches are recorded for the year with 5.5 "in the growing season. When the three aspects of the soil are addressed equally the results show. Improved soil structure, a diverse microbiology and balanced chemical nutrition allow the plant to produce a larger volume of root mass extracting necessary nutrients from the soil as required and taking up water held by humus. Conserving residues is one of the ways vital to improving the three critical aspects of the soil.

Surviving the Drought - A Positive Approach

By Guy Webb

Yep, it's dry, never been drier they say...drier than the Sphinx's forehead. It's hard not to wake up in the morning, see the blue skies, dry ground, hungry stock, bank statements and the 'ground hog day' morning weather reports, and not sense a strong feeling of despair and foreboding wash over the mind. It is common for bush people to suffer from mild to acute depression in severe drought, becoming understandably isolated. Coming from Condo, I know... I have been there.

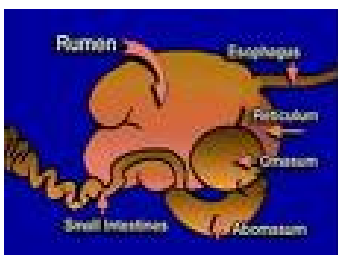
However, I talk to many farmers who carry around with them a positive philosophy that gets them through. In many cases it is people who have been down the depression track and have decided to change course. Often it is people with problems far greater than our own. In my travels I have collected what I consider to be the top five philosophies from farmers facing drought and other adversities;

- 1) There are always people worse off than ourselves that need our help & support.
- 2) Family and friends and a small patch of green lawn get you through a drought.
- 3) The Chinese have two meanings for the word crisis. One meaning is impending doom, the other is opportunity. It is up to the individual to choose which meaning to adopt.
- 4) Optimism and action, in equal measures, are the best antidotes to adversity.and my favourite...
- 5) Every single historical rainfall record proves that without fail, with unflinching accuracy, it always rains following a drought.

Drought Feeding Sheep – Increased Rumen Health Saves Feed Costs

The key to drought feeding stock is to make the best use of the feed you have at hand. Whether it is dry pasture or a grain maintenance ration, you want the biggest percentage of each mouthful of the precious feed to be converted to animal protein and energy, and as little of the nutrition to end up exiting the South end and wasted. We need the most efficient digestive capacity to achieve the best feed conversion ratio and highest profitability.

This means that the best dollars spent in a drought that will give you the biggest return on feed investment is those dollars spent on rumen health – the organ that converts the feed into the animal's body. In a fuel crisis, you want to run a car that is well serviced and maintained, efficient & cheap on fuel, not a fuel guzzler with an un-tuned carburettor and a leaky fuel tank. If the rumen is not healthy, as is often the case in drought conditions, your sheep are inefficient fuel guzzlers. It is not only costing you extra feed costs at a critical time, but wool and meat production is compromised as well.



The rumen is the true money maker on the farm, turning your investment (pasture or grain) into a saleable item (wool or meat). Rumen health is one thing you can economically control and manipulate with ease to make a large impact on you profitability.

Below is an economical paddock supplement you can mix on farm to maximize rumen health & digestion, supply rumen nutrients and cover the key deficiencies in a drought. I have used it in a number of situations and it has proven very productive (visually and economically). It is based on the work of noted ruminant nutritionalist Prof. Ron Leng, with a humate chelating agent (Stock Saver Plus) added into the mix.

DIY Paddock Supplement

Input	Cost/kg	kg/mix	Total cost/mix
Copra meal (or cotton seed meal)	\$0.53	30	\$15.90
Molasses	\$0.55	300	\$165.00
Urea Dissolved in water (1:1 ratio)	\$0.60	6	\$3.60
Rock salt	\$1.00	3	\$3.00
Guano powder	\$0.70	1	\$0.70
Sulfur	\$1.00	3	\$3.00
Stock Saver Plus	\$3.72	12	\$44.64

\$235.84



Hoggett ewes on 'Milgadara' gain weight and remain vital been fed the DIY Paddock Ratio.

This mix should be enough to treat 1500 grown sheep for 1 week in drought conditions, working out at about 15 cents per sheep per week. If you are buying in grain and/or hay, this 15 cents will make you money, not cost you money, purely on feed savings alone, without factoring in all the other production benefits. Ingredient prices are a rough guide and may change depending on availability.

Planning the 2007 Winter Plant? - Make the Job

Budgets will be stretched for the 2007 winter plant season following a drought induced cash flow squeeze coming out of 2006. Many will be seriously contemplating sound ways to reduce input costs while still aiming for good crop results, assuming a half reasonable 2007 season. There is some good news here for those prepared to make some small changes to machinery and fertilizer programs. i.e. take a closer look at **Biological Liquid Injection**.

There are a couple of upsides that can be capitalized upon for the 2007 crop that come out of the preceding drought year;

- 1) Some of the **phosphorus (P)** put down at planting in 2006 will still be there for the 2007 crop. Although it will be tied up by now, there is an opportunity to release this P into availability utilizing specific P releasing soil microbes and reduce the requirement for a big P budget this season.
- 2) **Nitrogen (N) mineralization** has had longer to take place, coupled with reduced in crop N extraction during 2006. This means there should be a reasonable bank of N in the soils to capitalize on early season moisture.

GET WET - GO LIQUID

Biological Liquid Injection is Economical and Effective

The past 3 seasons has seen YLAD Living Soils (and some of their clients) trial and implement a variety of Biological Liquid Injection planting programs on their farm 'Milgadara' at Young. After successful trials and very convincing paddock results this season, they are now true converts and plan to do the entire 2007 winter plant using this economical, yet very productive system.

The main aim is to introduce a liquid of task specific microbial populations, microbial foods and starter nutrients into the root zone surrounding the planted seed. In moist sowing conditions these microbial populations quickly multiply and begin a season long process of;

- releasing locked up elements such as P, Ca, K, Mg, Cu and Zn
- fixing plant available nitrogen
- Producing plant growth promoting exudates such as hormones, enzymes, amino acids and antibiotics that help disease control.

Establishing these task specific microbes in via liquid injection at planting is the ideal method because the microbe population will increase around the roots as the crop grows, thus the microbe colonies grow with the crops nutrient requirements.

The system is relatively cheap to adapt to existing sowing equipment, and the fertilizer cost/ha is far more economical than a conventional DAP Urea program. Extra nitrogen requirements can be met economically with foliar applied nitrogen fixing bacteria from early to mid tillering if the season shapes up to be a good one. If you have been keen to dabble with this technology, this upcoming season offers a good opportunity to start.

Rhonda's Trip to the USA

I recently returned from five weeks in America where I spent time with our daughter and assisted as 'grannie' to our new granddaughter **Isabel Jane**. Of that time I spent 10 days with Midwest Bio-Systems touring composting sites and manufacturing facilities. The United States are accepting and implementing composting on a very large scale.

Vale – Keith Athol Freudenstein -

On my return to Australia at L A airport I received sad news that my Dad had passed away. It was a long trip back to Australia and a very sad return to Young. Many of you would have seen Dad at Seminars and little did everyone know that Mum and Dad worked tirelessly behind the scenes with preparation for YLS Seminars. Dad approved of the work that Bill and I are doing and just loved our compost and biological fertilisers for their beautiful garden in Young.



Isabel Jane Duke
Born October 2 2006

Triple Ten and Selenium - New from Nutri-Tech Solutions

Triple Ten, the gardener's choice as an all-round fertiliser, has been revised to increase the level of selenium. Why Selenium? Jerry Brunetti sees **Selenium** as one of the five vitally important elements. It has been the focus of recent medical work in Australia and overseas. It has been linked with the maintenance of a healthy immune system, mediating mineral uptake and enzyme function of the living body. Additionally, Selenium has been associated as having antiviral, antioxidant and anti-cancer effects.

A survey of selenium levels in blood donors in Adelaide has shown a 20% decline from 1977 - 1988. Researchers have thus been suggesting that by altering a diet to include higher selenium harboring foods, i.e. basil, nuts, meat or fish or perhaps the consumption of foods especially grown with higher levels of selenium, would greatly improve the health of many people.

The addition of selenium into the Triple Ten formulation is an attempt to help farmers produce "**healthier plants for healthy generations**"



Congratulations to Michael and Pauline Ricketts of Ralf Holdings Young on winning the Local Field Wheat Competition with a crop that yielded 1.8 tonnes/ha. A **prescription Nutri-Blend** was applied to this paddock in 2004 and boron humate granules were used in conjunction with soluble fertiliser down the tube at sowing.

A great effort in a drought year, well done

2007 Calendar - dates for your diary

March 5	Post Drought Soil & Plant Management Seminar
March 6, 7 & 8	Midwest Bio-Systems Advanced Composting System Workshop
May	Kit Day - at 'Milgadara'
June/July	Lou Tice - Investment in Excellence
August	Kit Day
September	Midwest Bio-Systems Advanced Soil Fertility Workshop
October	Kit Day