



March 2010

This newsletter is going out to all people who subscribed to the Soil Health days or have asked to be included to receive information on soil health.

The purpose of this newsletter is to provide the latest information on Soil Health, recent events, demonstration farms and upcoming events.

What's happening.....

With Autumn in the air, its time to put on your boots and come to one of the Soil Health Group days. Our first event will be a farm walk at Gary Geberts farm on Wednesday 24th March. See the flyer on page 5 of this newsletter.

Our second event is a field day at Warwick Browns on Thursday 22nd April. This one is especially for the machinery buffs! See our flyer on page 6.

For those of you who regularly check our website you will see it has changed. We now have a more dedicated area for soil health. This means we will be able to put more content on the web in the future. I am always on the lookout for good information so if you stumble across a good website or other good sources of soils information, let me know and I will put it up on the website and try and include information in the newsletter for those who do not have internet.

In this newsletter I have included some information on organic matter. See page 3.

Dont forget to check out the soils page on the website www.networksw.com.au

A Word from the Soil Health Group Committee

At our last meeting it was decided that our monthly committee meetings be open to all members. We want all members to have the opportunity to put forward suggestions as to what they want to see, what they want to learn and how to progress the group.

We hold monthly meetings - the first Tuesday night of the month at 7.30pm at the Coleraine Hotel. So you are most welcome to come along and have your input. We will put aside a time in General Business each month to discuss ideas.

Ideas for information, speakers or courses put forward so far by group members include;

- Grazing management
- Dung beetles
- Using compost
- Understanding why microbiology is important
- Soil carbon sequestration
- Soil Health Course

If you have any other ideas but cannot make the meeting, please email me at;

gill.fry@networksw.com.au and I will put forward your ideas on your behalf.

As we are a new group, it is important to make sure we are heading the direction that members want to go and that we are meeting members needs in their thirst for knowledge and understanding on all things soily. So be an active part. Come and join us.



Soil Health Group

Funding

As a not for profit group, we are always looking for funding to assist our purpose. If you know of any funding available, please let us know.

We have been very fortunate to date that we have had excellent sponsors for our demonstration farms and events such as; NAB, BEST, Munash, Vitec, Network SW Consulting and Glenelg Hopkins CMA through Caring for our Country funding.

We do not endorse products to ensure we always remain unbiased but we appreciate our sponsors as we would not be able to run these events. We hope in turn you will consider supporting them.

Classifieds

In this newsletter we are also starting a new Classifieds section. You can advertise anything agriculturally based or something to do with natural resource management. Our newsletter goes out to over 200 farmers so you can be assured you are meeting your demographic mark.

The cost of advertising is;

10cm x 10cm - \$10

Half page (14 cm x 20cm wide) - \$20

Full page (29 cm x 20 cm wide) - \$40

Newsletters come out quarterly and the deadline for items is as follows;

- 24th May
- 23rd August
- 29th November

All classified items are to be emailed to Gill Fry at gill.fry@networksw.com.au and a cheque sent to our Treasurer,

Gary Gebert,
6544 Dartmoor-Hamilton Rd,
Yulecart,
VIC 3301

Items to be included in the newsletter classifieds are at the discretion of the Executive Officer.



Membership is only \$40 per family for the year and entitles you to;

- 4 newsletters a year,
- Advanced notice of upcoming events,
- Discount to events,
- Vote at the Annual General meeting
- Participation in informal members farm walks and BBQ's

A membership form is attached to this newsletter.

This group is a not for profit group and relies on funding to continue the good work on raising the awareness and understanding of soil health. We hope you will join us.



If you do not wish to receive this newsletter in the future, please contact Gill Fry, P: (03) 5573 4539 E: gill.fry@networksw.com.au

For further information on soils, check out the networksw website. It is updated frequently and there will be even more information coming soon

Techniques to build organic matter

compiled by Gill Fry



Soil Health Group

Soil organic matter is everything in the soil of biological origin, whether living or non-living.

Organic matter is the fraction of the soil made up of anything that once lived, including plant and animal remains, cells and tissue, plant roots and soil microbes.

Soil organic matter is one of the most important components of a soil, influencing a wide range of physical (e.g. soil structure and water holding capacity), chemical (e.g. cation exchange capacity and nutrient supply) and biological (e.g. nutrient turnover and microbial activity) properties.

Listed below are some of the known techniques to help build organic matter.

Grow healthy crops and pastures

Growing more plant biomass will increase the input of organic material to help balance the continual loss of organic matter through decomposition.

As organic matter levels decline, the storage and supply of major plant nutrients such as nitrogen, phosphorus and sulfur diminish. This reduces the potential for plant production.

When plant production declines, there is less organic matter available for soil organisms, so their activity declines, leading to a downward spiral of production.

Rotate crops

The level of soil carbon is affected by the quantity and quality of the plants grown. The quantity of plant residue can be changed by;

- growing crops of different biomass
- improving the nutrition of and disease status of following crops through a beneficial rotation
- growing crops with different rooting patterns that alter soil structure.

The quality of crop residues can be improved by growing plants that are easy for microbes to decompose.

Plants with high nitrogen levels are easier to break down than woody plants with high lignin levels.

Legumes have the potential to bring nitrogen into the system from the atmosphere and can be grown as either a cash crop or green manure.



It is important to look at your soil to see how much organic matter is present.

Grow green manure crops

Green manure crops are rotation crops that are ploughed in (or sprayed out) rather than harvested, to provide organic matter for the following crop. For instance, a crop will need less nitrogen if it follows a legume crop.

The costs of green manure crops need to be assessed carefully, especially in terms of water use, since there is no direct financial return.

Organic matter gains tend to be short-term, especially as the input of immature crops or legumes provides an easily decomposed biomass.

Use pastures in rotations

Pastures increase organic matter in the soil. A mix of grasses and legumes provides more organic matter than legume pastures such as lucerne or medic.

The grasses have greater root biomass, and legumes are easily decomposable so their beneficial effect is soon lost.

Apply animal manures, recycled waste

Organic amendments such as animal manures or recycled organics (eg foodwastes and composts) are usually added to supply plant nutrients. Addition of organic matter is generally a secondary concern.

Applying manures in excess of plant requirements increases potential for serious environmental damage from runoff or leaching.

While large additions of recycled organics or animal manures should increase soil organic matter rapidly, improvements in cropping and pasture systems may take five years or more to register an increase in a soil test.

Retain crop residues

Carbon management in soils must focus strongly on inputs. Retention of crop residues is a key management option currently available for farmers.

Retaining crop residues produced onsite by crops is more cost effective than bringing in materials.

Reduce tillage and erosion

Reducing or stopping cultivation altogether has several direct and indirect effects on organic matter.



The residence time of carbon added to soil can be nearly twice as long under zero tillage than under intensive tillage.

When crop residues remain on the soil surface, and the soil surface is not disturbed, rainwater infiltrates rather than runs off, so the soil is protected from erosion. All processes aimed at increasing organic matter are futile if the soil itself is lost.

After erosion, the main process for carbon loss from soil is microbial decomposition.

The physical disturbance of ploughing brings crop residues into the soil where conditions for microbial decomposition are more favourable than for residues left on the surface.

As well, cultivation breaks up soil aggregates held together by organic matter and exposes the organic matter in the aggregates to decomposition by microbes.

A less well-known direct effect of tillage is the degassing of CO₂ that naturally builds up within the soil air from microbes and plant roots.

Reduce periods of bare fallow

During a fallow period no new organic material is being produced, but carbon continues to be lost from the soil as organic matter decomposes.

Summer fallows are worst as the soil stays moist and warm favourable conditions for decomposition.

It is important to seek expert advice for your particular farm scenario.

Disclaimer

The information provided in this publication is intended for general use, to assist public knowledge and discussion to improve soil health. It includes statements based on scientific research. Readers are advised that this information may be incomplete or unsuitable for use in specific situations. Before taking any action or decision based on the information in this publication, readers should seek professional, scientific and technical advice.

To the extent permitted by law, the author and its project partners do not assume liability of any kind resulting from any persons use or reliance upon the content of this publication.

Farm Walk



Soil Health
Group

March event.....



When	Wednesday 24th March
Where	Gary and Robyn Geberts, Hamilton- Digby Rd, Yulecart (about 8kms from Hamilton)
What	Farm Walk and BBQ See one of our demonstration farms. Informal discussion on what has been tried and what seems to be working. Guest speaker - Neville Simcock from Southern Soils will talk on 'soil biology & biological fertiliser principles'.
Time	10.00 am to 1.00pm
Cost	Members - \$10 Non members - \$20 (includes BBQ lunch)
RSVP	Please RSVP by Monday 21st March for catering purposes Gill Fry Executive Officer, Soil Health Group P: 5573 4539 E: gill.fry@networksw.com.au

Field Day



Soil Health
Group

Toys for the boys! (and the girls)



When	Thursday 22nd April
Where	Warwick & Lyn Brown , Balmoral Rd, Koonongwootong (about 16 kms north of Coleraine)
What	<ul style="list-style-type: none">• Guest speaker - Ian Munro from Munash, Ballarat• See Warwicks new beaut aerator• see the latest stubble incorporator• Visit the demonstration site and see what is happening
Time	7.30am - starting with breakfast - until 11.00am
Cost	Members - \$10 Non members - \$20 (includes breakfast)
RSVP	Please RSVP by Tuesday 20th April for catering purposes Gill Fry Executive Officer, Soil Health Group P: 5573 4539 E: gill.fry@networksw.com.au

Classifieds



**DOOERDOWNS SILO
TRANSPORTING**



- ➔ Silo Transporting & Sales
- ➔ 2nd Hand Silos - *Bought & Sold*

**Western District Agents
for Campbell Silos, Nhill**

Contact Warwick & Lynn
Ph/Fax 5575 0261
Mob 0429 750 261

SJ00421938

CARTAGE
for your
wool, hay, grain or fertiliser
Phone Jeff Schurmann
03 55724648
Mob: 0427205819



FOR SALE
Green TPW Wool
press and wool
press trolley
each with scales

\$6000

Call Bill on
0427 077734

Redgum slabs
Compare the prices with other kitchen benchtops
- you'll be pleasantly surprised!
Cut with a lucas mill and air dried.
Slabs from \$500 (50-65mm thick)
We can also plane them for you to give that
smooth finish
Call Ian on 0429 700 911





Basic environmental Systems and Technology Australia (Pty Ltd)

ABN: 51121414917

You are invited to attend a meeting with BEST Australia to learn how BEST TM21 can improve your farm soil as well as your farm profitability. Come and listen to the BEST team and find out how TM21 can change your farm without having to change the way you farm.

When: Tuesday 23rd March 2010

Where: "Rose Hill" Woolshed, 8242 Glenelg Highway, Warrayure

Fire Map Ref: 432 F21

Time: 8:00pm

R.S.V.P: Friday 19th March 2010

BEST TM21 is a proven product that maximizes nutrient efficiency on all types of cropping and pasture land. TM21 is a soil rejuvenator that stimulates the repopulation of native microbes in the soil using industry leading "Trigger Technology". With over 1350 farmers across Australia using TM21 on their farms you can be sure that TM21 works. Farms that use TM21 have observed on their farms increased organic carbon, disease resistance, root systems, pod counts, tillers, heads, stress tolerance (drought or water logging) moisture holding capacity and germination. TM21 is easy to apply through all boom sprays, irrigation systems or aerial applications. TM21 can be tanked mixed with all herbicides as it is a "trigger" to native biology. Application rates are normally 250ml per/ha twice per year.

TM21 is a bio-stimulant soil ameliorant that increases the population of native beneficial micro-organisms in the soil. Some of the farming practices used in the past and some things that we are presently doing, through necessary to stay profitable, are destroying the soil structure and the soil microbial life.

For more information call:

Rohan Tonissen on 0418 123 052

BEST Australia South West Victoria Distributor

Gary Gebert

Agricultural Contractor

for all your hay and silage,
pasture renovation and
cropping needs



P: 5573 4539

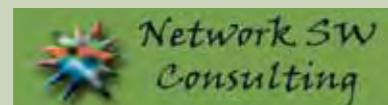
M: 0407 504 047

Network SW Consulting

specialising in natural resource
management communications,
community engagement,
facilitation & design

Phone Gill Fry

03 55734539



www.networksw.com.au

Specialists in Biological Fertiliser and Carbon Farming Agronomy

CUSTOM FERTILISER

BALANCED AGRONOMY

MAXIMUM RESULTS

- Get custom biological fertiliser Programmes - not products
- Balance and reinvigorate your soils with prescription blends
- Free Biological Agronomy with over 15 years experience
- Proven locally over the last 5 years (SA and Vic)
- Complementary belt spreader, granular NPK and foliar



Southern Soils FERTILISER

www.southernsoils.com.au

Fertiliser Price Drop

SOUTHERN SOILS FERTILISER LEADERS IN CARBON FARMING FERTILISER AND AGRONOMY

MAP	\$735 +GST
DAP	\$735 +GST
Urea	\$520 + GST
Super	\$340 +GST
SOA	\$390 +GST

(best SOA granular for seeding)

Blends Available

**Prices subject to change

*Ex Adelaide or Melbourne

Distributor (SA & SE Vic) for Direct Farm Inputs Granular NPK Fertilisers

Contact:

- Jarrad Simcock - 0438 198 100
jarrad@southernsoils.com.au
- Neville Simcock - Mobile: 0418 909 680
- Danny Partridge - Area Manager - Southern South East
Mobile: 0457 799 202
danny@southernsoils.com.au
- Graeme McCarthy - Area Manager - Western Districts North
Mobile: 0457 798 781
graeme@southernsoils.com.au