



Over The Fence Newsletter

The home of Best-Practice in grazing—May 2010

www.grazingbestprac.com.au

Office: (07) 4938 3919

Mick: 0438 395 255

BEST- PRACTICE GROUPS

GBP has just launched an exciting new initiative for graziers in Queensland and New South Wales. The BPG program will support our innovators of the future.

We believe the difference between the average producer and the top 20% in the next 5 years will be the knowledge and skills in soil management and managing healthy crops and pastures. Therefore, we have developed a program which will assist producers to learn and grow with support from a group of peers and soil/ nutrition specialists. The Best practice Groups program will launch in early May with the first groups to begin early in the new financial year. Groups will be coordinated by the program coordinator, Chantelle James of Yeppoon and be made up of 10 –12 business from the same region.

Some exciting development include:

- ⇒ Each group will have a bio - agronomist working within the group and with each business.
- ⇒ Members will have reduced prices for soil testing and many other products.
- ⇒ Groups will work through a guided program over a 12 month period with 3 specific meetings/ workshops.
- ⇒ Group members will be supported to establish trials and demonstrations and work with like minded people.

For more information, please contact Chantelle James 07 49383919

The following photographs are from the CHRRUP and Farm Ready funded two day workshop which was held in Rockhampton in March. Left Rob Fry, Rob Bauman and David Oconnor.

Right—The pasture inspection on day 2.



Editors Desk....

Well, welcome to the new year, the season was extremely wet for some areas, a big part of Qld and some of NSW), while other areas are still low on the annual average. It is normal that as soon as we receive rain, the pressure comes off and we relax a little, when this really should have been our busiest period of the year, when we are making plans and implementing the real money making part of our year.

It is when the grass is growing and the season is wet, that we need to be practicing the rotational grazing programs, allowing the pasture to rest and re-grow, giving us the free feeds. In many cases, it was so wet, and overcast, little growth occurred for weeks as we had such small amounts of sunlight. By early May, our pastures are generally beginning to hay off and will probably have lower protein levels.

However, we have noticed several paddocks around the region which are still actively growing as they have been grazed down to say 40-50% growth and rested. Now they are regrowing again, while paddocks next door have gone to seed and haying off. It is not possible to have all of any property in this condition throughout the season, but we should aim to maximize that growth period.

Now is a good time to be considering doing a FEED BUDGET to ensure you have the feed to carry you through to the next green season. Especially once the growth stops, we may have no more growth till December.

What you have for now will need to be budgeted for the next seven months. Often we call this matching stocking rate to carrying capacity (SR:CC). We need to match the mouths to the available feed. At GBP, we have number of processes we use to help carry out a feed budget. Each program is carried out on farm and can be conducted as a group and may be funded from Farm ready Support grants.

If you wish to know more please contact Mick or go to www.grazingbestprac.com.au.

Bart Davidson – first time in Queensland

Agricultural specialist, Bart Davidson will be running the very first cutting edge soil and plant nutrition workshops for Queensland in late May and early June in Toowoomba and Emerald. The workshops are a first for southern and central Queensland and will be co-presented by grazing specialist, Mick Alexander of Grazing BestPrac, Yeppoon.

Mr Davidson, Bio-nutrient Solutions, Moree has been working with a large number of highly successful broadacre farmers in southern Queensland and northern New South Wales regions in past years. He is bringing the exciting new science to the grazing and cropping industries in Queensland. In the first pilot workshop, arranged by CHRRUP at Emerald, Mr Davidson was swamped by questions about balancing soils and managing difficult soils.

For the first time in Queensland, crops and pastures are being considered the same as the agronomic science of growing pastures and cereals is similar. Crops and pastures growing on the same soils, will have the same issues based around nutrient balance and microbial activity. Now more than ever before, farmers and graziers are looking to fertilizers, biological treatments and alternative management programs to improve crop and pasture yields. Farmers manage the crops for increased yields and protein. Pastures are similar in that they must produce protein to produce weight gains.

In the past decade, we have seen dramatic changes in the way we manage cropping

lands, converting to minimum and zero-till, reduced fertilizers and organic inputs. And in the grazing scene, a small number of producers

are now utilizing forms of rotational grazing and receiving production benefits. However, with the assistance and guidance of local graziers and specialists, we will begin to develop “Best Practice” models for the grazing industry. Mr Davidson explained, this best practice must begin with the soil in terms of nutrient balance and microbial balance.

Mr Davidson explained the need to balance the soils by not just looking at which nutrient is lacking, but more to know which nutrients are causing an imbalance. He explained that the three key nutrients (calcium, sulphur and phosphorous) if deficient will reduce protein production in pasture and therefore weight gain. These nutrients are required for optimal plant production. A plant can look lush and green and



“The three key nutrients (calcium, sulphur and phosphorous) if deficient will reduce protein production in pasture and therefore weight gain.”

have no ability to increase animal weight.

The Soil and Plant Nutrition workshop will cover:

- ⇒ **Read and interpret soil tests**
- ⇒ **Understand the interactions between soil and plants, biology and nutrients**
- ⇒ **Implement a best practice monitoring program for soil, crop & pastures**
- ⇒ **Increase the efficiency of your fertiliser program and practices**
- ⇒ **Identify the three phases of plant growth in grains that make the money and how to maximise them**
- ⇒ **Improve the biological health of your soils**

Workshop organizer, Mick Alexander, said, he believed the knowledge of soils which will be presented during the program was not widely known across the industry, as many agronomists simply did not understand the depth of science. He explained the need to better understand the implications of major nutrients being out of balance and the impact we have on simply topping up one nutrient in isolation. The issues in our industry are real as there is a general trend of reduced pasture yields, reduced weight gains and growth rates and reduced profits.

For more information, call Mick, Chantelle or Noela 49 383919/ 0438 395255. **The next**

workshops will be held at

Toowoomba 31st May and 1st June

Emerald, 3rd and 4th June.

MycoApply®

Mycorrhizal Applications International Aust. Pty Ltd manufactures and supplies **MycoApply®**, environmentally friendly mycorrhizal inoculant that gives superior plant performance.

Mycorrhiza translates from the Greek word meaning 'fungus root' – but it's not a nasty pathogen infecting your plants, but a symbiotic relationship between the root system of most plant species and the introduced fungi. Inoculating your crop with **MycoApply**, which is a blend of Vesicular Arbuscular Mycorrhiza (VAM) spores in a powder form, at the time of seeding, will ensure healthy growth with less fertilizer input.

The mycorrhizal relationship with plants dates back 400 million years, and is one of the longest and most successful relationships in nature. The mycorrhizal fungi excrete chemical exudates that dissolve mineral nutrients (mainly phosphorus), absorb water, guard against soil diseases, and glue soil particles together into a friable structure. In return, the mycorrhizal fungi receive sugar and other compounds from the plants to fuel mycorrhizal activities. Research has documented improved plant nutrient and water uptake, plus resistance to a wide range of soil diseases and better tolerance of environmental extremes. Plants establish reliably, fruit and flower more abundantly, thrive with less irrigation, less chemical fertilizer, and less pesticide.

VAM is a natural part of undisturbed soil; however modern agricultural practices have a tendency to reduce the biological activity in soil, with pesticides, chemical fertilizers, loss of organic matter and erosion, adversely affecting the presence of mycorrhizal fungi. **MycoApply** replaces the lost or depleted mycorrhizal populations, it's easy to use, affordable and safe and can significantly increase nutrient uptake and yield. It can save you money and contribute to a healthier environment at the same time. The topsoil that supports food production is a valuable commodity that needs preserving in a healthy state to provide continued productivity. **MycoApply** helps both plant growth and soil condition.

Suggested rate of application for seed coating broad acre crop is 1kg of **MycoApply** with the seed used to sow 1 hectare. Regular phosphorus based fertilizer application can be drastically reduced (one third to one half) as mycorrhiza can unlock residual nutrition from past fertilizer applications. Trial results have shown equivalent high yields with only **MycoApply** and NO additional fertilizer.

MycoApply® has been scientifically proven; quality tested and is supported with expert customer advice. For more information please contact MAI (Australia) - 08 97273801 – or visit the website www.maiaustralia.com.au

Left side of Oat crop treated with **MycoApply**, untreated controls on right side show haying off ahead of schedule harvest period



“it's not a nasty pathogen infecting your plants, but a symbiotic relationship between the root system of most plant species and the introduced fungi”

CHRRUP promote sustainable grazing management.

The CQ Best Practice Group and CHRRUP ran the first of five workshops to be held over a two year period in March at Rockhampton. CHRRUP have been sponsored by the Farm Ready Industry program to run a series of workshops and field days in the CQ region to promote the innovations in managing for climate.

Bart Davidson (Bio-Nutrient Solutions) and Mick Alexander delivered the two day workshop with a focus on balancing soils, improving microbial balance and nutrient cycling. The first workshop was a pilot to develop an even more dynamic workshop to assist graziers and farmers to adapt to drier conditions.

Some of the future programs will include:

- ⇒ **Pasture cropping (Colin Seis)**
- ⇒ **Carbon management**
- ⇒ **Fungi amendments**
- ⇒ **Bio-char**
- ⇒ **Grazing management**
- ⇒ **Soil balancing.**

For more information about the training program, contact 49 383919 or CHRRUP on 49822996

Grass trial to assess grazing best-practice

31742484BH

Well known grazing educators, Mick Alexander and Shane Krafft of Grazing BestPrac has established the first two on-farm research sites to assess the ideal timing of grazing (best practice) in central Queensland. The trials are being run by Grazing BestPrac as a tool to help local graziers to better understand the impact of various grazing practices. Mr Alexander said, the most important aspect of our industry is the management of our soils and our pasture to minimise the impact of climate change. However it is rare to find hands on research being done in the region to assess grazing management.

Grazing BestPrac have had many requests to set up trials in the past year to assess the value of free feed and the pasture recovery

not know where to begin. In fact, most forward thinking graziers realise the old ways are not working and want support to make changes, but also want some data to demonstrate the best way to go. The trials (grass plots) have been established on two properties at Ridgeland and Thangool, to compare a number of different grazing models and to give local groups their own research sites.

The first of the new trials has been established at "Bindaree", Garnant (near Ridgeland, 40 kilometers west of Rockhampton). Local grazer, Trevor Jones, was excited to finally establish the trial in December, to compare some of the new ideas on grazing management. Mr Jones said, he had been working closely with

grass and bagging, drying and weighing it according to the program. One of the

number of animals a property can run, without understanding the real science and

create the optimal conditions to grow grass. In this grazing trial, we are comparing:

1. Light graze
2. Moderate graze
3. Heavy graze
4. No Graze

The main pasture base is a native pasture mix, including Queensland Bluegrass, Kangaroo Grass, Black Spear Grass and Indian Couch, with several annual species. The trial will be completed in late May with the final cut and weighing sessions and the collation of the results for each



Trevor Jones Bindaree Garnant

phase. Recent research has shown, most primary producers would like to grow more grass and have healthier pastures, but do

Mick Alexander to design the trial and to make sure it was well managed. Then every few weeks, we've been cutting the



Trevor Jones collecting grass samples in the trial

important outcomes so far is that the plots which were not cut at all, have already hayed off, while the ones being cut are still actively growing. This research is important to have as a guide for our own paddock decisions. He continued, I've had a mob of breeders in a four paddock rotation for four years and we are now splitting another paddock up so we can rotate our steers as well.

Mr Alexander continued, the reason we decided to undertake this research was because we could not see any other group being bothered to carry out what would be deemed to be basic research, which should have been done in the past. And it would have taken another couple of years to organise and find the funds to pay staff. We need to conduct this research before government decide to place a limit on the

it is probably better to be producer driven and that way the results are locally owned. For many years, producers have argued the benefits of rotational grazing versus a continuous grazing model and it has divided the industry. Every producer and extension officer in the land has an opinion and believes they are right. Obviously, there is an ideal grazing methodology and we want to find out which is the most appropriate to improve the health of our pasture, soil and livestock. Mr Alexander commented that the science of grazing management has come a long way in the past 5 - 10 years and we need to begin utilising that knowledge. He said, sound grazing management is fairly simple, you just need to know how to



Comparison between light and heavy graze in the trial

methodology. Mr Jones said the trial is simulating patch grazing, with some areas being overgrazed and some areas being lightly or not grazed at all and some areas being grazed correctly.



Pasture assessment plots on Bindaree Garnant.

Why does grass grow so well in cattle yards?

By Mick Alexander

The cattle yards are the best example of rotational grazing principals working on most



dung and urine to the soil to kick start the mineral cycle and add nutrients to the soil. The trampling action incorporates the grass and weeds which are growing in the yards and mulch them into the soil, so the microbes are being fed for the next season. If we also feed weaners in the yards, we are adding a larger organic base to the soil as stock will often trample much of the hay back into the soil as well. All in all, this one method should be used as a standalone concept to rehabilitate scalded areas and bare gullies.

The photographs are inside and outside the stockyards at Marlborough.

properties. This is the best time of year to inspect your paddocks to compare the effect of resting pasture, herd effect and grazing density. And the best place to compare it to is the cattle yards. Most people would expect that the stock yards would be the most devastated part of the farm because hundreds if not thousands of head of cattle trample the ground and destroy the soil structure each year. This practice is simply mimicking the natural cycle of large herds grazing an area and moving on to another area once feed runs out.

True, they do cause a large impact on the soil if mismanaged, but they also do something which is totally natural in a strange kind of way, if well managed. Our stockyards are trampled heavily for a few weeks and then rested for a long period. The biggest impact will be at branding and then at weaning for a few weeks. That means the cattle yards are an extreme method of rotational grazing (high density/ short duration), which if managed for rest will turn country around in a very short period of time.

Cattle in stock yards also deliver concentrated



- In a set stocked paddock, the pasture base is mostly Indian couch and a large number of broad leaf weeds (filling the bare space) and
- Inside the yards, is a dense sward of Buffel grass, Green Panic and Rhodes Grass, with very few weeds. The few Parthenium weeds are mostly shaded out by the pasture.



The yards have been locked up for four months, since the rain and allowed to recover. This example is hard to accept unless someone points it out to you. It is even less of an issue if you are in a good season and have got plenty of grass. This and many other exciting grazing management tools will be discussed at the upcoming "Technology of Growing Grass" workshops, being held at Tambo 6th and 7th May, Barcaldine 10th and 11th May, Emerald 17th and 18th May and Wandoan 27th and 28th May. For more information, on the "Technology of Growing Grass" workshops or for more grazing management information, contact Noela on 0749 383919 or Shane on 4995 8330.

Heathly Grass, Cattle & Soils Program

'Make the most of your rain & grass in 2010'

SOIL AND PLANT NUTRITION WORKSHOP

Cutting edge 2 day soil & plant management workshop for the 21st Century

WHO - Bart Davidson (Bio-Nutrient Solutions, Moree)

WHERE TOOWOOMBA - 31ST MAY/ 1ST JUNE

WHERE EMERALD - 3RD AND 4TH JUNE

- Read and interpret soil tests
- Understand the interactions between soil and plants, biology and nutrients
- Implement a best practice monitoring program for soil, crop & pastures
- Increase the efficiency of your fertiliser program and practices
- Identify the three phases of plant growth in grains that make the money and how to maximise them
- Improve the biological health of your soils

For more information Contact: - Grazing BestPrac

Office/Noela 07 4938 3919 - Mick 0438 395 255

Heathly Grass, Cattle & Soils Program

'Make the most of your rain & grass in 2010'

TECHNOLOGY OF GROWING GRASS

Come and learn about:

- Regenerative grazing management
- Managing soil microbes
- Compost Teas & Biological Brews
- Carbon & carbon sequestration
- The value of grass
- Property planning for profit

Fully subsidized cost by Farm Ready (FRTC 0115)

Tambo	6th & 7th May	Emerald	17th & 18th May
Barcaldine	10th & 11th May	Wandoan	27th & 28th May

For more information Contact: - Grazing BestPrac

Office/Noela 07 4938 3919 - Mick 0438 395 255

Bissett – better than oats at Foresthome

It could be mistaken for a paddock of oats from the distance and it will yield as good as any oats crop. Innovative graziers, Stewart and Glenda Jones and Jack Jones "Foresthome" Marlborough, invested heavily to renovate a steep forest paddock more than 17 years ago and establish a shot gun mix of pasture which would be the envy of any grazier in Queensland. Stewart Jones commented that the pasture really has stood the test of time

as it has been through the most severe drought in past years and is always the best paddock on the property. The Bissett Creeping Blue Grass really is a highlight of the property as it is consistently carrying 350 - 500 weaners through dry periods from April to December.

After assessing the future value of pasture renovation, Stewart contracted well known dozer operator Bill Chapman to survey the steep forest paddocks of Foresthome, build

level keyline type contours to manage the overland flow, renovate with a deep ripper and plant a mix of improved pastures. He began in 1990 and completed the more than 280ha (700 acres) by 1994. In total, the projects cost more than \$100,000 or more than \$350/ha (\$140/acre), an extremely high price at that time. However, the cost was justified as the paddocks were all but useless until renovated. The deep ripping was carried out using a D6 dozer and long ripper tynes with a WASCA wing (Water and Soil Conservation Attachment), which subsoils without inverting the soil.

The pasture mix included Aztec Atro, Butterfly Pea, Bissett Creeping Blue Grass, Seca and Verano Stylos, Win Casia, Buffel, Katamboora Rhodes and Cunningham Leucaena. The Bissett Creeping Bluegrass seed was only just released prior to the paddocks being renovated. Mr. Jones continued, from the air, it looks like an irrigated paddock,



and still today, it continues to pay off. Even during dry periods, the ground cover remains at 90 - 100%, due to the density of Bissett runners. It is better than a hay patch, because it holds the water on the paddock, in contour banks, and releases it slowly and just continues to get better each year. This paddock has been locked up since December and has had 24 inches or 600mm in the past 4

months, with negligible erosion. To find out more about this innovative practice and other exciting grazing management tools don't miss the next "Technology of Growing Grass" workshops, being held at Jericho 29th and 30th April, Emerald 17th and 18th May and Wandoan 27th and 28th May. For more information, contact Noela on 0749 383919 or Shane on 4995 8330.



SELECTED SEEDS *The Australian Pasture Seed People!*

LICENSED PRODUCERS & MARKETERS OF

- Bisset Creeping Bluegrass
- Medway Bluegrass
- Finecut & Topcut Rhodes
- Aztec Atro

We also stock a full range of sub-tropical & tropical pasture varieties
Ask about our MAXI-GERM Coated Seed

For more information contact Rod Mooney or Robert Fry
 277 Bolsover Street, Rockhampton Qld. 4700
 Ph: 07 4927 1500 M: 0428 100 388 or 0427 741 500

Bettaflow XTRALITE

Maxigerm Coated Seed



g.bp **Heathy Grass, Cattle & Soils Program**

'Make the most of your rain & grass in 2010'

TECHNOLOGY OF GROWING GRASS

Come and learn about:

- Regenerative grazing management
- Carbon & carbon sequestration
- Managing soil microbes
- The value of grass
- Compost Teas & Biological Brews
- Property planning for profit

Fully subsidized cost by Farm Ready (FRTC 0115)

Clermont	19th & 20th April	Barcaldine	10th & 11th May
Jericho	29th & 30th April	Emerald	17th & 18th May
Tambo	6th & 7th May	Wandoan	27th & 28th May

For more information Contact: - Grazing BestPrac
 Office/Noela 07 4938 3919 - Mick 0438 395 255



Selected Seeds celebrate 40 years in business

Selected Seeds have been serving the needs of Queensland graziers for forty years. The company was founded by Phil Smith in 1970 in Biloela. Mr Smith currently runs the company from the Head Office in Pittsworth. A branch was opened in Rockhampton in 1979 and Rod Mooney who started the branch with Nigel Richardson is still there today.

As well as supplying a network of agents and graziers in northern Australia from their branches in Rockhampton and Pittsworth, Selected Seeds market their BPR varieties of Rhodes grass to export markets

in the Middle East, Japan and South America. Selected Seeds Finecut Rhodes grass is by far the most popular variety in these markets.

The company also employs an agronomist on the Atherton Tablelands to ensure that only good quality seed is produced. Selected Seeds market Finecut and Topcut Rhodes, Bisset and Medway bluegrass and Aztec Atro under Plant Breeders Rights. The company is also close to releasing some new salt tolerant Rhodes grass varieties which have been bred with Queensland Primary Industries and Fisheries.



Dung Beetles buzzing at Marlborough

Local graziers, Stewart and Glenda Jones of "Foresthome", Marlborough have seen a huge increase in dung beetle activity in the past three months, with the air a buzz in the early evenings. The Jones family have been monitoring dung beetle activity for the past



Stewart Jones "Foresthome" Marlborough inspects various species of dung beetle.

twelve years and were co-operators in the 2002 – 2003 Queensland wide Agforce Dung Beetle monitoring project. Since the project was finalised, they have continued to have a keen eye and ear for monitoring beetle activity and its effect on stock. The importance of dung beetles was highlighted in a recent survey when DPI researcher, Lex Turner estimated a moderate buffalo fly activity can cause the loss of up to 15kg live weight gain

in a 100 day period, due to irritation, not to mention hide damage and lesions.

Mr Jones commented that during the drought and during the extremely wet conditions, beetle numbers were reduced, but since the rain, the populations have recovered well to be able to reduce buffalo fly populations on most occasions. The beetles tend to follow the mobs of cattle around, but you can find dung beetles in nearly every pat when the conditions are right. The biggest problem we have is no dung burial in winter. In fact, we can usually tell when the beetles are burying fast, there is no major buffalo fly activity. Our only problem is that we have no dung beetles active during winter.

In the last week, we have identified at least four species burying dung (Onthophagus gazella, Onitos alexis, Liatongus militaris and Euoniticellus intermedius) and one species shredding or rolling the dung (Sisyphus rubrus) on Foresthome. Dung beetle specialist, Mick Alexander (Grazing BestPrac) has been monitoring dung beetle populations on Foresthome and other properties in the



Mathew Alexander Yeppoon, getting a close up of the Onitos alexis beetle.

Marlborough region. He believed the activity was excellent for April and would continue until the first major frost of the winter, as long as the warm days continued. The only thing which can affect beetle populations this late in the season would be excessive and

In the past few years, individual pats have been recorded to have over 5,900 individual introduced beetles with eight different species operating together. Last Sunday, the Foresthome pats contained only a few hundred this time around. Mr Alexander commented the tunnellers have been extremely active following this year's rain. However, we cannot let our guard down as late in the season is as critical as the first few weeks of summer. Dung beetle activity occurs mostly in the spring/summer period and is dictated by temperature and moisture, as well as stock management. Mr Alexander has been promoting the role of dung beetles at several "Technology of growing Grass" workshops in past months, it is important to do the right thing by your little environmental helpers.



Dung soup!

unwarranted chemical usage. Remember, if you have a good wet growing season, warm conditions and no dung beetles in your dung pats, something is definitely wrong. Mr Jones explained his strategy for managing fly populations late in the season would be to spray stock with an overall Supona treatment or use backrubbers.

Mr Alexander has been monitoring activity and species all around Queensland and into New South Wales in past months to ascertain the populations and activity after rain. There are eight species which will be found in the central Queensland region with two ball rolling species.

Look after your humble 24/7 dung beetles and they will look after your land. And all you have to do is manage the drenches and chemical products (parasiticides) you treat your livestock with.

For more information, see advertisement below.



Mathew Alexander collecting cow dung for sampling.