

Best Practice for Grazing.

with Mick Alexander



What is Strategic Cropping Land (SCL)



Strategic Cropping Land is a term which has been used for some months when discussing the protection of our prime farming land and reducing the possibility of these areas being mined. The Queensland Government has stated, it considers that the best cropping land, defined as strategic cropping land, is a finite resource that must be conserved and managed for the longer term. In the latest planning document, they have agreed as a general aim, the exercise of planning and approval powers should be used to protect such land from those developments that lead to its permanent alienation or diminished productivity.

I believe all farming land is valuable for food production (food security) in the future, as populations grow and nutritional requirements increase. We should be aiming to develop a best practice management for all farming and grazing land and ensuring that any mining is regenerative, before being approved or started. According to reports, the agriculture and agri-food industries generated \$22.7 billion in to the Queensland economy in 2006-07 and employed nearly 273,000 Queenslanders, while the resource sector also contributed \$26.3 billion to the Queensland economy including \$1.3 billion in royalties used by the state to fund essential services. That makes our two industries just about equal to the economy and so should have equal input into policy about the future.

However, it has taken a long haul for organisations such as Future Food Queensland to get policy established. The latest comments

about "Strategic Cropping Land" are focussing on the best of the best, a total of only 4% of agricultural land in Queensland. At last, the Queensland Government has drawn up maps, called Trigger Maps, which identify 4 per cent of the state as having the potential to be declared Strategic Cropping Land, from the Darling Downs, through Central Queensland and into the Far North. This would mean resource extraction activity which would permanently alienate the land would be prohibited, but operations such as coal seam gas activity may be accommodated.

This brings up two questions:

- What is the basis for choosing the prime land?
- What is the guarantee for the remaining 96% of land in the future? This is especially important with the term "Permanently alienate the land" being used. Is it simply expected that all the approved land will be low productivity after extraction. If so, who is allowing for even more reduced productivity in the future. Has the Queensland Government established a plan to have reduced productivity from farming and grazing enterprises in the future?

And yes, climate has a big bearing on production, as the soil nutritional balance dictates the difference between achieving a high or low potential production in any given season. Two paddocks side by side can have two different yields with the same crop, simply due to soil balance. Prime land in our minds is land which has an ideal Calcium to Magnesium ratio, high cation exchange ratio, high clay content, high macro nutrient availability, low sodium and many other measurable factors. However, most soil tests do not show the information required to measure an ideal soil. Many of the soils (some cropping and some grazing) which are not ideal soils certainly have the capacity to be more productive if well managed.

In the past few years, biological agronomist, Bart Davidson (Bio-Nutrient Solutions), Moree has been assisting many growers and graziers to better understand the limitations of their soils and the crops being grown on various soils. Mr Davidson has been delivering training to many dozens of producers in a series of field days and workshop programs throughout Queensland and New South Wales. He is keen to work with the innovators in the industry to help train cutting edge science which is not being used by conventional agronomists.

Bart Davidson will be running two day "Soil and Plant Nutrition" workshops at Goondiwindi on 1st and 2nd September to explore this and many other issues. For more information, contact Noela on 0749 383919 and 0438361100 or Mick on 0438 395255.

Cost Effective Regrowth Control at GBP workshop



It's possible to control regrowth without blade-ploughing. Bill and Beth Hamilton and their son Scott of "Calingunee" have been thinking outside the square and looking past conventional methods for regrowth control on their Moonie property. Their 8300 acre property is situated 35 km south of Moonie on the Leichardt Highway. The main soil types on Calingunee range from good Brigalow Belah soils to Ironbark ridges with the predominant timber and regrowth of Brigalow, Box, Hop Bush, Wattle and False Sandalwood.

The Hamilton's have been slashing 20% to 25% of their property every year so that suitable paddocks have been slashed every 4 to 5 years. Mr Hamilton said they started slashing regrowth in 1993 and have continued slashing every year. Box regrowth is the most aggressive growing tree on Calingunee and is the main indicator to the time frame between slashing.

Mr Hamilton uses a 4.5 metre Schulte slasher powered by the properties 120 HP Chamberlain 4480 tractor. This slasher can handle regrowth with stems up to 75mm in diameter. Mr Hamilton has added a railway iron pusher to the front of the tractor, fitted a belly guard and changed the tyre configuration on the tractor to avoid tyres being punctured. Heavy walled Logger tyres have been fitted on the back and truck tyres fitted to the steering. In all the years the Hamilton's have been treating regrowth this way they've only ever had one flat rear tyre from a piece of wire.

Mr Hamilton commences their slashing program late winter each year. The timing of this treatment ensures their livestock have been

able to utilise the best of the pasture before the old unpalatable Phase three feed is put back on the ground. By knocking down the regrowth and unused pasture in this manner the Hamilton's are increasing their ground cover and have less bare exposed soil. This increases soil water absorption and reduces evaporation rates. This mulch layer also provides a food source for soil microbes Bacteria, Fungi and Nematodes. Combined with grazing management all these factors lead to a continued improvement in Soil Health.

Mr Hamilton is able to slash eight acres (3.2 ha) per hour with the cost of Diesel and Labour at six dollars (\$6.00) per acre. The Schulte slasher has given the Hamilton's twelve years of reliable service. This cost compares very favourably compared to Blade Ploughing. In the last two years the Hamilton's have completed some Blade Ploughing as part of a project. This work cost Ninety Five dollars (\$95) per acre compared to Six dollars per acre for slashing. Without favourable rain after Blade Ploughing a percentage of the pasture has died and these paddocks are now too rough to drive vehicles over.

In 1994 the Hamilton's developed a Rotational Grazing system on Calingunee. This allowed them to control where stock graze and by resting their paddocks gave plants adequate time to recover before they are grazed again. Mr Hamilton said they run up to 1200LSU (Large Stock Units) adjusting stock numbers as the seasons vary. Calingunee is considered to be in a 24 inch (600mm) rainfall belt. The last fifteen years has averaged seventeen to eighteen inches (450mm). This has meant that the Hamilton's have had a strong focus on managing their stock numbers to match Carrying Capacity (available pasture) to Stocking Rate (number of animals on hand).

Combining the use of Slashing and Rotational Grazing Mr Hamilton said they have more than doubled their carrying capacity. Using a grazing benchmark in 1994 Calingunee carried 8 SDH/100mm. (Stock days per hectare per 100mm rain) by 2009 the grazing benchmark is 17SDH/100mm.

By using these management practices the Hamilton's are making better use of the rainfall they receive and are improving their plant species diversity above the ground and the microbe diversity below the ground. Diversity leads to a more resilient grazing system for the long term. To learn and understand more on building these resilient grazing systems Grazing Bestprac are holding a Technology of Growing Grass workshop in Dalby on the 9th and 10th September and a Soil and Plant Nutrition Workshop in Goondiwindi on the 1st and 2nd September. For bookings and information contact Noela or Cathe at Grazing Bestprac on 07 4938 3919 or 0749 383219/ 0438 395255.



Heathly Grass, Cattle & Soils Workshops

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



**CQ Best-Practice Group & CHRRUP present:
ROTATIONAL GRAZING**

What – Grazing Management – Rotational Grazing

Where – Albeni, Springsure

When – 13th October 2010

Development planning/ Water plans/ Layout/Mob size/ all issues discussed.

Book Early for catering.

A Once in a lifetime opportunity.....

Bookings – Noela/ Cathe on 49 383919

"This project is supported by funding from the Australian Government Department of Agriculture, Fisheries and Forestry under its Farm Ready Industry program".