

MFS Soil Carbon Project....preliminary results out

The first presentation of results was delivered at a joint MFS / SRCMA / NSW DPI and Sydney University field day on the 14th and 15th of March (Cooma and Bombala). The MFS results were combined with NSW DPI's, Susan Orgill's own carbon baseline testing work on the Monaro over the last 3 years, as well as the soil carbon trials being conducted by Lachy Ingram (Sydney University), at Coolringdon.



Rob Smith – Technical Field Officer – NSW DPI



Preliminary findings for the MFS AOTG Project...

- Strong positive correlation between C and N at all sites and depths and to some extent with P and S (within some parent material classes)
- Majority of the variation in carbon concentration and carbon stock's in the surface 20cm
- Little difference in soil carbon profiles with aspect, lime and pasture age

- Highest carbon stocks were measured for the perennial systems ie. pastures and the pines
- Good seasons preceding sampling may be masking the treatment comparisons
- Need to remember that this is a point in time sampling, the second sample results (to be collected in Oct 2014) will help with clarifying any differences between the comparisons

Take home messages....

What we cant manage:

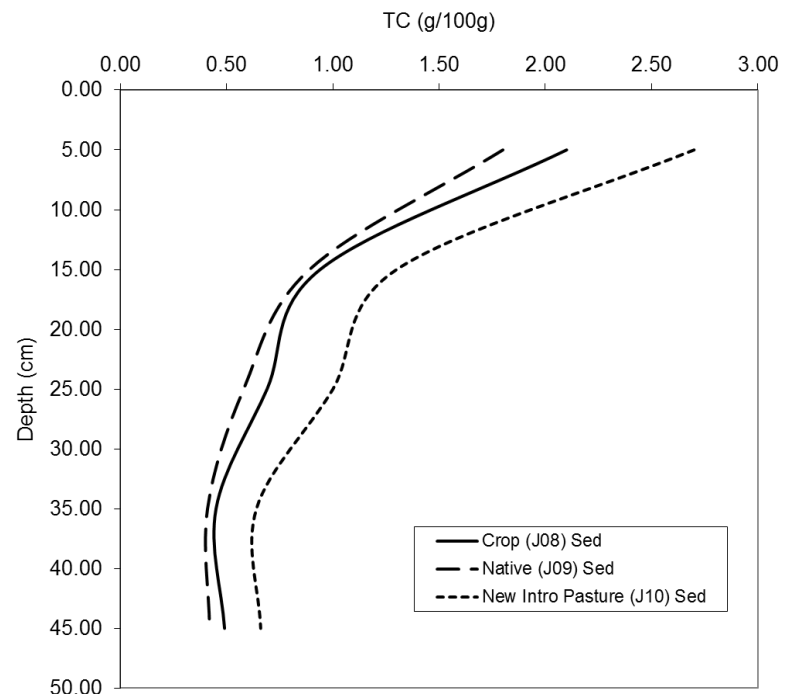
- Parent material and climate are major drivers of carbon

What we can manage:

- Soil nutrients, specifically N and S. But, this may come at a substantial cost
- Grazing to maximise plant growth, groundcover and organic matter supply
- Any rapid gains in carbon can generally be lost just as rapidly
- There are on-farm productivity and environmental benefits of organic matter in soil

Below is an example of three of the systems being compared (crop vs native pasture vs new introduced pasture) using a graph of soil carbon profiles. As already mentioned, the second set of results in two years' time (2014) will help to distinguish any significant differences between the systems.

Total Carbon (TC) Profiles



Up Coming events & current projects...

-2013 MFS Membership Update...

MFS has received a strong show of support this year with 51 farm business memberships renewed for 2013. This includes 3 new farm business members for 2013. We thank everyone for their continued support and remind members that because of the MFS organisation we have been able to be successful in securing over \$450,000 worth of funding for various projects over the last 5 years.

-Crookwell Farmers Visit....

On Tuesday the 9th of April, 8 farmers from the Crookwell region met with Oli Cay, David Mitchell, Mick Boyce and Nancy Spoljaric for a dinner in Bombala. The visit included a tour of Oli and Jane Cays property as well as Damian and Anna Rudds property to get an idea of "Monaro" farming and finished with a tour of Monbeef. The visit is to gain some insight into MFS and to get some ideas from MFS as to how to set up a similar farming group in the Crookwell region.

-2013 Agricultural Traineeship Program

Kristy Wassink (a local Cooma girl) and Alec Boyd (Castle Hill, Sydney) both commenced the MFS traineeships in February. They were the successful candidates out of approximately 45 applicants and are proving to be energetic and enthusiastic workers.

Kristy is working around the Cooma district and Alec, the Bombala district. More detailed stories on the trainees will be provided in the next newsletter. RB Sellars have very generously agreed to support the program again this year with a donation of clothing for both trainees.

Craig Mitchell, Nancy Spoljaric, Oli Cay and David Mitchell have provided feedback and advice to the National Rural Advisory Council (NRAC) on the MFS approach to workforce planning and the issue of skilled farm labour shortages.

-Working Dog School – Bombala 13th and 14th April 2013

MFS have organized a working dog school for the 13th and 14th of April on a property near Bombala. There are 12 starters for the two (2) day school but **still a place or two left if there are any last minute takers?**

Rob Cox from RJ Livestock, Manildra has done several schools on the Monaro in the past with some excellent feedback from those that have attended. People are encouraged to bring pups and older dogs and can bring

more than one dog. Observers are also welcome at a cost of \$100pp. ***Please contact Nancy 6458 4188 if interested.***

- Wool vs Meat? Enterprise Comparison Discussion

Nimmitabel early June (tbc)

MFS is organizing an event in Nimmitabel which will address the ever timely topic of where to put the emphasis in a grazing business ie. wool versus a crossbred enterprise.

Doug Alcock (NSW DPI) will use modeling to demonstrate the economic and management implications on your business from decisions such as running merino wethers and for how long? Comparing returns from xbrids versus merinos at different ratios and also on different pasture and soil types.

Incitec Pivot has been invited to talk about current fertilizer technology & **Commonwealth Bank** will give a presentation on risk management.

-MFS is currently discussing with Doug Alcock the possibility of continuing delivering the **GrassGro seasonal outlooks** at three strategic decision making times of the year. If it goes ahead, members will receive two emailed and one face-to-face seasonal outlook report from Doug covering the Spring, Summer and Winter/Autumn periods. These reports will also encompass relevant management issues.

-MFS Soil Club...data base being finalised

Dr Richard Simpson (CSIRO) is in the process of coordinating the last 3 years of MFS soil test results into a formal data base with funding provided by MFS as well as a significant amount of his own time.

This will then mean data can be much more efficiently and effectively retrieved and entered into the system. As a result, paddock histories and reports could potentially be generated for individual paddocks, detailing at a glance long-term nutrient profiles and highlighting P, N, S & K deficiencies against nutrient targets for that soil / pasture type.



MLA Lean Meat Yield Eating & Quality Demonstration Site

Recently Nancy Spoljaric / MFS was asked to be the site coordinator for a demonstration trial taking place on Brad Yelds property "Greenlake". The project is funded by MLA and titled "Proof of Concept Lean Meat Yield and Eating Quality Producer Demonstration Sites".

Briefly, the project is trialing, on-farm, the efficacy of research breeding values (RBVs) for lean meat yield (LMY) and eating quality. It is aiming to demonstrate that the RBVs for LMY, tenderness (SF5) & Intra Muscular Fat (IMF) can be translated through the lamb supply chain.

Currently there are sites throughout Vic, NSW and SA. At "Greenlake", 8 groups of 40 crossbred ewes have been AI with semen from 8 different terminal sires.

All 8 rams have different indexes / ASBVs for common traits such as WWT, PWWT etc. therefore, rams will have either high or low RBVs for LMY, tenderness (SF5) and/or IMF. The lambs will be blood typed to identify sires and then slaughtered at weaning and re-tested to demonstrate that the traits for eating quality are heritable and replicable.

MFS will have access to the results, both for the local Bombala trial site and Nationally via this site coordination role.



Michelle Humphries, B V Sc (Livestock Breeding Services) performs a laparoscopic insemination procedure

Work Related Injuries and Fatalities on Australian Farms – March 2013 Report

Summary of findings

The Agriculture sector employed 306 700 workers in 2010–11 with 46% of them self-employed. Over half of Agriculture workers were employed farming sheep, beef cattle or grain. This report uses a range of data sources to provide a profile of the types and frequency of work-related injuries and

fatalities that incurred on Australian farms. These data indicate that while males accounted for 67% of workers, they accounted for 92% of the fatalities, 85% of the hospitalisations and 77% of the workers' compensation claims in the Agriculture sector.

All sources point to the dangers involved with farm equipment and machinery as well as working with animals. The fatalities and hospitalisations data show the much higher risk of serious injury to older farm workers. These workers are mostly self-employed and are not covered by workers' compensation.

Work-related fatalities

Over the eight years from 1 July 2003 to 30 June 2011, 356 workers died while working on a farming property. This is 17% of all worker fatalities. Nearly one-third of the worker fatalities on farms were workers aged 65 years or over. Incidents involving vehicles accounted for 71% of fatalities on farms. Tractors were involved in 93 (26%) farm deaths, aircraft were involved in 48 (13%), light vehicles were involved in 28 (8%) and quad bikes were involved in 27 (8%). Of the incidents that did not involve a vehicle the most common involved being hit or bitten by an animal (18) and falling from a horse (11). There were also 9 fatal shootings while workers were attempting to remove vermin from around properties or destroying farm animals.

Work-related injuries

A survey of Agriculture workers in 2009–10 found 17 400 had incurred a work-related injury or illness in the previous 12 months. This equates to 56.4 injuries per 1000 workers which is slightly lower than the all industries rate of 57.9. Employees (non-self-employed) in the Agriculture sector are eligible for workers' compensation when injured at work. In 2009–10, 4660 claims for compensation from this sector were accepted around Australia, 39% of these involved less than one week off work.

One-quarter of claims involved Body stressing which includes musculoskeletal stress due to handling or lifting objects. Of these claims 29% were due to handling non-powered tools and equipment, 15% from working with animals and 11% working with mobile plant and transport. Being hit by an animal accounted for 9% of claims and Being hit by moving objects other than an animal accounting for 18% of claims.

Falls accounted for 21% of claims. These claims were mainly due to hazardous ground surfaces (41%) and 18% were due to falls from mobile plant and transport. Within the Agriculture sector, the highest incidence rate of injury was recorded by Other livestock farming (102.5 claims per 1000 employees). This was nearly three times the rate for the whole of the Agriculture sector (35.5). The

Other livestock farming sector accounted for 4% of Agriculture employees and includes the farming of animals such as pigs, horses, dogs, cats and goats. The Poultry farming sector recorded the lowest incidence rate of 20 claims per 1000 employees

Young workers, those aged less than 25 years, recorded the highest rate of compensated injury with 52 claims per 1000 employees. Injury rates decreased with age down to 13.2 claims per 1000 employees for those aged 65 years or older. However, workers in this oldest age group who are eligible for workers' compensation account for just 3% of all Agriculture workers and just 6% of employees in the Agriculture sector. Therefore the rates of injury for older workers may be understated.

Overall 22% of claims were due to working with animals, 19% from working with mobile plant and transport and 18% from working with non-powered tools and equipment.



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