



A quick fix on soil health

Our thoughts are with all those whose properties have been hammered by the recent weather. Pasture growth is dependent on soils regaining robust biological function. Soil that has been saturated will take time to recover and a light application of CalciZest or DoloZest, when practicable, will hasten that process. Email, or phone at any time for a recommendation.

It's not necessary to regularly directly measure and monitor soil quality to know whether it's performing as it ought. The ultimate test is the health and performance of the animals grazing the land. When the health of the soil is optimum animal health is always outstanding and the reverse applies.

As always there are provisos and they are; that stock are being as fully fed as possible at all times, and recently weaned animals entering a property have been satisfactorily reared.

Poorly reared animals may take some time to develop sufficiently to not require some form of veterinary support, and underfed animals will always struggle to cope with adverse climatic and other stressful situations.

From Danny and Liz Henman sharemilking on Peter and Robin Berryman's property.

"Hi Team

Just a few words about drenches etc.

We break all the rules - keep calves in the same paddock until weaning weight - follow the milking cows once weaned going into covers of about 16-19,00kgDM, don't use drenches or pour ons.



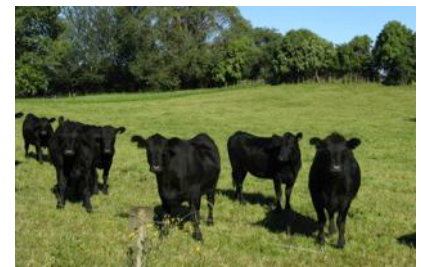
So why do we not have stock that are pot-bellied, manky, dirty, and light weight? Don't know, maybe it's to do with soil biology and soil fertility doing the work for us. Having healthy, well fed cows that give birth to hardy, fit calves. Calves are given 1st day colostrum

for 4 days and never starved, hungry or over crowded there on after.

We haven't used pour ons or worm drenches on any aged cattle for over 8 years now. If on the rare occasion that some stock get dirty tails, we put free choice minerals out. The key ones are sulphur, calcium and salt. Sometimes their protein intake is too high and can cause the dirty tails eg one or two gutzing the meal. Liz." March 2017

Stuart Pritchard owns and manages a grazing property near Levin and kindly provided the following.

*"Hi Folks
I wish to inform you that at our Forest Lakes Farm Otaki we do not have*



worms, or lice on our cattle. We have purchased Angus yearling Hfrs and drenched once on arrival to the farm, we hold stock in a Quarantine paddock for a week so most of eggs can drop, then shut this paddock for 4-5 weeks. We never drench them again, they have shiny coats and do not smell. If anything they have a sweeter smell, and are happy cattle. They have salt blocks and minerals mix in the troughs.

The cattle are on a biological farm now converted to Organic. Applied a balanced Functional Fertiliser program [with no N] this has developed 100% healthy soils and pasture. Over 4 years increased the carbon [zero – positive] gains. Stock are fed mature mixed pasture, 30- 45 day rotation with excellent weight gains." March 2017

Below is the data received from the local vets after 9 years of farming deer without worm drenches. Although strongly advised to drench the fawns, particularly for lung worm, the decision was made to drench only if necessary.

Submitter Reference: 216754A		LAB TESTS:		
Owner:	BURTON, PETER 67B BTE PUEA ROAD RD 4 ROTORUA	Notification:	Fax, E-mail	
		fax:	073461044	
Test Requested: 1 x Faeces - Ruminant Faecal Egg Count and Coccidia, Deer Lungworm larvae.				
PARASITOLOGY				
Animal ID	Varestrong (L1/gm)	Dictyocaulus (L1/gm)	Strongyle (eggs/gm)	Nematodirus (eggs/gm)
UNLABELLED	None Seen	4	None Seen	None Seen
Animal ID	Coccidia (oocysts)			
UNLABELLED	None Seen			

Larval counts of 20-30 larvae per gram of faeces may be suggestive of moderate to heavy burdens of Dictyocaulus in young animals. Because of the possibility of host immunity suppressing larvae shedding, similar lungworm burdens may be indicated by lower counts in older stock.



The fawns self-weaned, mating performance was excellent and at no stage did we think it necessary to administer a drench. The focus was always to fully feed and

although there were only 9 paddocks stock were rotationally grazed. Typically animals stayed in a paddock until they were seen to start fence line walking which we interpreted as looking for fresh feed.

The focus was on intervening as little as possible so yarding was only for stock going to the works, antler removal, the occasional assisted fawning, and fawn tagging, which meant careful planning was necessary to have fresh feed in the paddock leading to the yards at the appropriate time.

Our view is that by not drenching, each animal's immune system is encouraged to fully develop and when fully fed on highly nutritious pasture grown on biologically active well-structured soil, preventative drenching is unnecessary.

However Functional Farming systems are based on pragmatism and if drenching is necessary then it's important that it be carried out. A change in attitude from set interval drenching to erring on

the side of careful and frequent observation prior to intervention, is one that may take a little time.

In the early years of this work we wrote about the philosophy of ill-health being a result of mineral deficiency and although perhaps that's overly

simplistic, Stuart, Liz and Danny, along with numerous others have discovered it is sound, and pays handsome dividends.

Seldom will a soil fertility programme be able to cater for all the mineral requirements of the stock, and in the case of salt it is impractical to attempt to do so.

Soils do lose mineral status over time. Manganese is one that over the thirty years of regular leaf testing of pasture has steadily declined, to the point where it is occasionally added to fertiliser mixes.

It was uncommon to add cobalt to mixes for soils other than Taupo and Tarawera Ash, however it's now almost routinely added to all our mixes as a result of animals responding

positively to vitamin B12. Likewise selenium is a common addition, and more recently molybdenum has been shown to be marginally deficient in some areas not historically known as being so.

This means that the use of natural fertiliser such as rock phosphate, lime and dolomite today plays an even more important re-mineralising role than when we first started.

Sechura RPR from Peru is an ancient seabed deposit from what is now a desert, which means it is mineral rich and therefore an ideal phosphate input. Guano likewise contains a wide range of trace elements. Golden Bay dolomite is also mineral rich as are most of the limes available.

Regards,

Paul *Cerale*