Fertilisers Part 1: Biodynamic by David Mason-Jones

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Case Study: Albury Wodonga Equestrian Centre

The biological approach has been taken by John Dowell, Grounds Manager at the 100ha Albury Wodonga Equestrian Centre near Albury on the Murray River, NSW. The centre consists of 37 agistment paddocks as well as specialist areas and playing fields for polocrosse, cross country, dressage and other events. John has been grounds manager for two years.

"The centre has been in existence over 11 years," says John. "Prior to that it was a run-down old cattle paddock where many generations of cows had been grown and turned-off without restoring the nutrient value of the soil.

"Prior to my arrival there had been some application of super-phosphate in an attempt to get things going again. There had been no attempt to analyse the soil to find out what it really needed. Anyone can look at yellow grass and say that it needs fertiliser, and that's basically what happened. The results were poor.

"I have always favoured a biological approach and made enquiries about a vermiculture based fertiliser. (NutriSoil) We trialled a biological fertiliser on the main event arena – an area 190m by 190m and the results were great.

"We have followed up with further application to event areas. Soon we will use the fertiliser on the agistment areas. The good thing I feel about this process is that we are stimulating the natural sub soil biological processes, not just spreading chemical synthetics and hoping for the best," says John.

Further information:
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Above-left: Enjoying the green arena in hot dry January 2009; Aboveright: John standing in area treated with single pass of NutriSoil at 5L/ha. Centre of arena behind him & left pic with 10L/ha.

(MAIN BODY OF ARTICLE)

The health and nutrition of pastures is a significant factor in the health and nutrition of horses.

Definition

A fertiliser is any substance used as a means of lifting the available nutrient reserves in soil to improve the quality and vigour of plant growth. Fertilisers can also condition the soil by altering the chemical, physical or biological composition of the soil. Fertilisers can be derived from industrial and chemical processes – such as in the manufacture of many nitrogenous fertilisers – or can be derived purely from biological or organic processes.

There is no absolute rule that one type of fertiliser is better than the other but, for many small horse property owners, it can make sense to seek fertilisers that are more biological than chemical in nature.

Organic and Biological Fertilisers

Risks of indiscriminate chemical/synthetic fertiliser use have been identified in recent decades. These risks include undesirable residues and lack of support for the health of natural soil microbes essential to long term plant health.

In this shift of awareness there are people who have become extremists. They have formed almost ideological hate of the whole concept of fertilisation. But such a position is not practical and not sustainable. Land management practices of the past, such as overstocking and exploiting the land without replacing 'exported' nutrients, have meant that the nutrients are simply depleted. They are not there and no amount of watering or rest will put them back to the level they once were. It is in this situation that fertilisation, in its broadest sense, needs to be carried out.

One fertilisation strategy, increasingly popular, is to use the life forces and processes in the soil to rejuvenate the land. The addition of balanced organic and biological fertilisers can be a way of supplying the necessary nutrients to the soil mix and of stimulating the bugs and microbes to process these nutrients in a way as to make them most easily available to the roots of plants.

Landscape regeneration

Another fertilisation strategy is to allow weed growth in your paddocks. The deeper roots of weeds enables them to recover nutrients from deep in the soil and deposit the at the surface, potentially becoming a natural method of fertilisation for grasses, which as conditions improve, will out-compete the weeds. A few trees help with the same process as will reeds growing in creeklines.

Don't give your horse manure away!

The first step in restoring the nutrient cycle on horse paddocks is to conserve what is already present. Spread the horse manure from the stables back onto the paddocks. This returns the nutrients to the soil.

Use the manure to close the nutrient cycle on horse paddocks and nutrients lost by selling horses. Use fertilisers – preferably organic and biological – to make up for the 'exported' nutrients.

Further information: John Dowell, Albury Wodonga Equestrian Centre 0407263 881 or NutriSoil 02 6020 9676.