BIO
DYNAMIC
AGRICULTURAL
ASSOCIATION OF
AUSTRALIA

Applying the compost preparations.

‘An unedited excerpt from…’

A PRACTICAL INTRODUCTION

TO THE AUSTRALIAN DEMETER BIODYNAMIC METHOD OF FARMING.

Applying the Compost Preparations

Application of the bio-dynamic compost preparations is an essential component of the Bio-Dynamic Method. In Australia, this is achieved by either or both of the following methods:

1. Application of Compost

Where compost is made – and this is essential for market garden enterprises, where a number of production cycles occur before again planting a green manure; or for dairy farms which have to deal with a large accumulation of manure at the dairy – the preparations must be applied to a correctly made compost heap in the manner described under Chapter III "Bio-Dynamic Compost Making".

2. Bio-Dynamic Sheet Composting

For broad-acre farms, the making and application of **high quality** compost is not practical under most Australian conditions. In such situations bio-dynamic management is centred around creating conditions which allow an "in-situ" or sheet composting to occur. The compost preparations are applied to the land via the use of Prepared 500.

i) Sheet Composting Pasture

a) Bio-Dynamic management of livestock revolves around *dynamic rotational grazing*, including the harrowing of cattle manure after each grazing This activity forms the foundation for pasture sheet composting activity.

Rotations are based on pasture growth and not a fixed time period as is often advocated under "cell grazing" type practices. The principle at work here is again one of *status narcendi* (refer to *"Living Agriculture"*) a dynamic interaction between root and upper plant. After grazing, a corresponding proportion of roots are shed, becoming available as food for the soil biology. As the pasture is allowed to regrow (i.e. by removing the stock from that paddock) the roots also extend downwards. Under a well managed Bio-Dynamic system, it is not uncommon to find pasture roots extending to 2 ½ to 3m down. Combined with 500 this root activity ensures well structured soil to this depth or even greater.

Pasture plants should not be allowed to stagnate. Where plant stagnation occurs, root activity (growth and penetration) also greatly reduces, resulting in reduced soil structure activity.

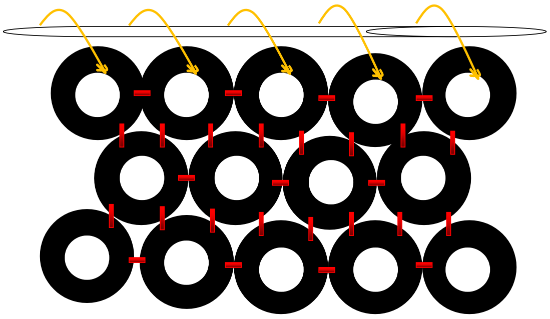
Simple effective pasture harrows

A simple, yet very effective way to harrow your pasture is by making a set of harrows using old truck tyres (note: cut car tyres tend to fold under and are not as effective). The tyres are cut in half so that the full circle can be laid with the cut facing downwards (see diagram below). At least 3 rows of such cut tyres are needed, with the width of harrow being made to suit your own farm set up. The width can be quite wide if a chain is placed on the side of the harrow to allow it to be pulled through your gates. The tyres are bolted together using bolts and very large washers. The first row of tyres are joined to a long length of pipe by wrapping a chain around them and the bar. The harrows are then pulled behind your tractor or even a ute

Cut the tyres in half through the middle of the road contacting surface.

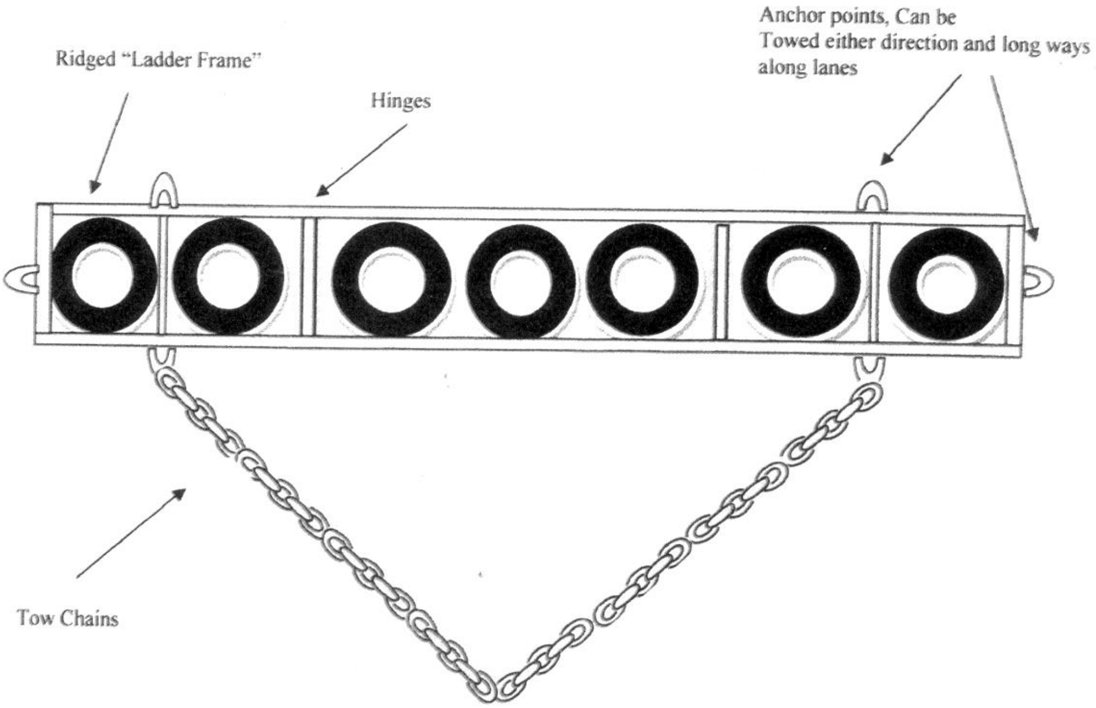
And place the tyre, cut side down

Lay as many tyre halves side by side as you wish to have the harrows wide, making sure that the harrows are at least 2 or 3 tyres deep.



Variation of the above harrow:

Mark Peterson (dairy farmer near Nathalia Victoria) has modified the above harrow to suite his flat irrigation country. Below is his version of the tyre harrow.



- These harrows work best on flattish land, and with very fresh manure (1 to 3 days old).
- A ridged "ladder frame" sits on top of the tyres, thus reducing wear on metal parts significantly.

- Truck tyres of 9.00 X 20 or 8.25 X 20 work well
- The bottom of the tyre's bead is removed to stop it filling with dirt and being too heavy to pull. Cut along the dotted line with a chainsaw:

Note: use only crossply tyres NOT radials (they have wire inside them)

b) Within Orchards or vineyards correct and regular slashing of permanent pasture forms the foundation for management in these systems. In effect this activity replaces the livestock rotation effect described above. In orchard/vineyard situations the introduction of livestock is not recommended as it is often **detrimental** to the development of a healthy nutrient recycling activity, it is therefore strongly discouraged under Bio-Dynamic management.

ii) Sheet Composting via use of Green Manures

In cropping or broad-acre horticultural activities development of deeply structured soil is essential for crop health. Application of raw manure and growing at least two green manure crops along with the use of Prepared 500, will achieve a deep rooting "in-situ" composting activity. (Refer to *"Bio-Dynamics Agriculture of the Future"* and the article *"Cosmo Earthly Ecology & Green Manure"* - found on page 35 of this publication.)

In order to develop the skills necessary to create conditions required to achieve Bio-Dynamic sheet composting, the new Bio-Dynamic practitioner will need to learn from an experienced local member of the BDAAA or from attending a BDGAI field day.

E. USING THE SOWING CHART

Another tool available to the Bio-Dynamic farmer and gardener is the use of the "Sowing Chart" which is supplied to all members of the BDAAA and BDGAI each year.

The information the chart provides allows an endless possibility of further refinement to many of your everyday activities. This can range from maximizing the effect of weed cultivation, to optimizing healthy root production in your carrots.

As with any tool, it has the potential to be used wisely, or to be abused. Today, especially in our highly intellectual society, it has been used in an abstract dogmatic manner, or – as a result of the very complex interweaving of so many planetary factors – caused inertia "because the sign's aren't all right!" Both reactions are to be avoided, with common sense and local knowledge and understanding of weather patterns to be the final decider in all matters. Please refer to *"Bio-Dynamic Agriculture Introductory Lectures"* Volume 1 Chapter 4 for further information on the use of the sowing chart.