

GETTING STARTED IN BIODYNAMICS

– how to apply the Preparations *by Cheryl Kemp*

Stirring and spreading Biodynamic Preparations is at the core of Biodynamic practices. How often and in what combinations a farmer chooses to apply the Biodynamic Preparations to his land will greatly influence the speed at which his soil and overall farm health regenerates.

In our last article, (Vol.20 Vol 3 Spring 2003,) we discussed the Biodynamic Preparations and why we use them. Now, we take a look at how, when, and with what equipment you can easily apply these preparations to get your farm soil and atmosphere more active, balanced and healthy.

USING WATER TO HARNESS ENERGY

One of the key principles of Biodynamics is to harness and maximise energy from nature. When applying Biodynamic Preparations, this is done through a process of stirring the preparations in water.

The Biodynamic preparation is crumbled or placed in the water, which is then energised for one hour by hand, or by using a specially designed stirring machine or Flowforms that creates vortices of energy.

In Biodynamics, we work with very small quantities of the preparations which hold immense forces, and to activate the preparations we need to incorporate them into water that is sensitive and able to carry these forces out onto the land. For

instance, with the Horn Manure Preparation (500) you require just 75g per Ha stirred in 34 litres of water. With the Horn Silica preparation (501) you require just 2g per Ha.

The stirring process creates life giving vortices which increase oxygen and give the water a pulse. The water actually takes on the memory and vitality of the Biodynamic Preparations that are added to it. After approximately 30 minutes of stirring, the viscosity of the water changes and becomes

more slippery and easier to stir.

Once the preparations have been energised in good quality water for an hour they are then applied to the land using either a spray tank mounted on a tractor, utility or small aircraft, or put out by hand application for smaller areas.

EQUIPMENT AND CALIBRATION

As with any organic practice, the type of equipment used is of paramount

USING WATER TO HARNESS ENERGY

“Everything living is rhythmical. Everything is born through the watery realm. Water cannot refuse; it’s the most sacrificial element. Flowing processes, into which life can slip. We are trying with stirring to slip positive processes into water. Water moves in circling processes. Vortices reorganize and remove the memories within water, wiping it clean. A vortex in water is only a tiny part of the whole body. Thrust in water generates symmetrical forms. Mountain streams are a chaos of rhythms. Rhythm is the product of resistance. Movement does a great deal to neutralize negative influences or memories in water. Memories in water are the vibrations between the bonds of oxygen and hydrogen. Water can be seen as 2 dimensional, sliding over itself in layers, veil like structures, with many surfaces”.



Flowform Tank Setup

AREA OF LAND	EQUIPMENT REQUIRED
Small garden – 1 ha	<ul style="list-style-type: none"> • 1 ha 20 litre bucket or old copper; • Hearth brush for putting out soil sprays; • Backpack for putting out atmospheric sprays.
1 ha -14 ha	<ul style="list-style-type: none"> • 200 litre plastic drum with large pole suspended; or flow form or stirring machine; • backpack and 1 large droplet spray nozzle and 1 fine mist spray nozzle.
Large to broad-acre	<ul style="list-style-type: none"> • Flowform or stirring machine; • Tractor, utility or aircraft mounted spray tank; • Fine mist rig and large droplet rig.



Vortex Hand Stirring

importance to the final result. The equipment chosen will very much depend on the size of land you are working with. If doing a small trial block of say 1-2 Ha, then hand application is still possible, however for larger areas the use of specifically designed mechanised equipment is more realistic.

Hand Application

If the area to cover is only small, the preparation can be stirred in a bucket or old copper, or earthen ware pot. However, it is important to choose a container that

will comfortably stir the amount of water required i.e. for 1/2 Ha, you require 17 litres of water.

Use your hand or a stick to form a vigorous vortex in the centre of the water. Once the hole of the vortex reaches the bottom of the container, change direction with your stirring, causing great chaos. Stir the other way until the vortex reaches the bottom again, then back the other way again.

You can pause to watch the amazing patterns in the water, but it is important to



Stirring Machine in Action

keep the water in motion all the time for the hour. Some people choose to stir alone, using it as a quite meditative and reflective time, whilst others get the whole family or friends involved to help share the stirring and putting out of the preparations.

For larger areas, say up to 5 Ha, 170 litres of water can be stirred in a 200 litre drum, using a strong stick with a paddle on the end to get a smooth flowing vortex. It works best if you have the top of the stick tied to a tree branch, shed or verandah beam overhead, to take the weight and stop the stick wobbling in the water flow.

In Germany they use a tripod set up over a wine barrel, it's very balanced and a pleasure to stand and stir the preparations this way.

Mechanical Application

Two mechanical devices for effective stirring are available to the Biodynamic Farmer:

- the Stirring Machine, developed and accepted approximately 40 years ago, which enables 160 – 400 litres of preparations to be stirred at a time, and
- the Flowform, a more recent innovation, appearing about 15 years ago, which enables the farmer to stir 500 litres to 2800 litres per hour.

These innovations have greatly enhanced the uptake of Biodynamic practices by larger commercial farmers. Both devices still stir for one hour and work on the principal of creating vortices; the stirring machine creates vertical vortices as does hand stirring, while the Flowforms create horizontal vortices, all leading to the same energetic pulsing of the water.

Stirring Machines, usually made of copper or stainless steel, are built to stir the water to create a vortex in one direction, then switch back the other way initially creating chaos and then a vortex in the other direction. The paddle in the stirring machine should develop a vortex in 18-24 seconds, rest for 5 seconds and then start the cycle in reverse.

Flowforms are a series of bowls that

VORTEX FLOWFORMS





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allow the water to flow around in a vortex either side of the double bowl and then drop in chaos, to form another vortex – like an elongated vortex that you would get in the bowl. The water flows to the bottom container and is then pumped up to the top again to go through the series of forms again.

Phil Sedgman, Flowform manufacturer, describes them as living lungs that aids in the reoxygenation of water to restore it as close as possible, to its mountain stream state.

Flowforms vs. Stirring Machines

The choice of device will come down to a combination of personal preference, the size of the land, and economics.

Stirring machines were very popular when they were first invented here in Australia as they saved lots of time.

They are good for small to medium sized properties, with a capacity of 160 – 400 litres per hour, farmers can cover approximately 4.7 Ha per hour. However, when used on large properties where large quantities are required, 3-4 batches need to be mixed each afternoon over the week to cover the land. If you have to keep coming back to refill, it soon palls, and the important application of the preparations tends to get put off.

For larger farms, the increasing trend is towards the flow forms as lot of water can be stirred at once. Using a flow form, farmers are able to fill a large 1,000 to 2,000 litre tank on their tractor and spray many paddocks, often covering the area at 25 – 40 Ha per hour.

While not many trials have actually been done, it is generally considered that hand stirring is best, as it puts the farmers energy in direct contact with the preparations going out onto the land. However, outcomes and results by farmers using Flowforms over the past 15 years show that the preparations are working very well when applied in this manner.

Flowforms also offer the flexibility and the ability to expand, with a range of models varying from 3 bowls that handle



Hand Applications of 500

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1000 litres/hr, 5 bowls 1900 litres/hr and 7 bowls 2800 litres/hour. There is also a small model that can handle 500 litres per hour for smaller property owners.

Spray Rig

All tanks must be clean and have not been used for any chemical application, as residues will remain in the plastic and impact greatly on the effectiveness of the Biodynamic Preparations. All rubber and

plastic fittings and nozzles also need to be free of any chemical residues.

For large droplet application, a central three-jet nozzle mounted low to the ground will give between 10-15 metres of coverage at a pressure of 10 (0.7 bar) to 40 psi. For fine spray mist application, fine nozzles and a higher pressure of approximately 25 -100 psi. is used.

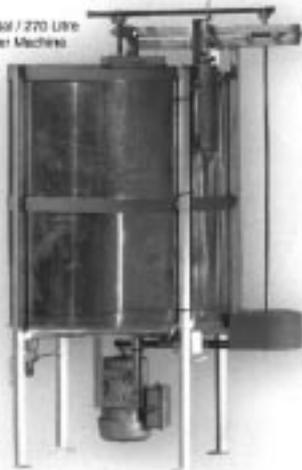
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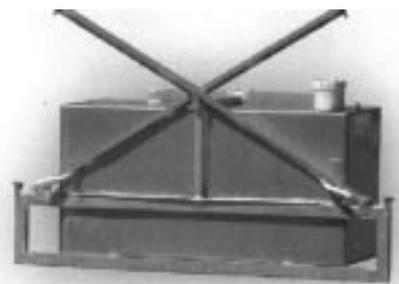


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Biodynamic Preparations are filtered through a fine mesh filter sock or stocking before going into a spray rig or irrigation system to avoid any unnecessary clogging of pumps, pipes and nozzles.

Water

The water should be the best available, either spring or rainwater. Those on town water should avoid the use of any chlorinated or fluoridated water. If using bore water, ensure that there is no contamination with iron, aluminum and calcium.

In colder climates, some farmers choose to warm the water to blood temperature either by wood or gas fire. This however, is up to the individual farmer. Many a good Biodynamic farmer still gets results without warming the water.

THE METHOD

Application of the various Biodynamic Preparations can be classified into two main groups: -

- those preparations that are for the soil and

MANUFACTURED TO SUIT BIODYNAMIC PRINCIPLES

Kevin Wills, who has been in the sheet metal fabrication trade for 35 years, started manufacturing biodynamic equipment in 1986.

Having moved from Sydney 20 years ago to raise their young family in the country and to form a new life style, the Wills live on a 140 acre beef cattle farm west of Wingham (which is situated on the mid north coast of NSW)

His equipment, which is hand crafted from all new materials, is manufactured to suite biodynamic principles, and has been sent to Tasmania, Victoria, South Australia, NSW and Northern Queensland.

Designed to follow biodynamic principle, his equipment has covered many aspects of biodynamic agriculture i.e. grapes – wine making, pasture improvement, commercial biodynamic vegetables, dairies and beef cattle.

Stirring Machine

Made of copper (preferred material) with a galvanised steel frame, the stirring machine simply plugs into a 240V outlet and is ready to use.

Run by a one horse power electric motor, the stirring action is top mounted with a full depth vortex. It has an automatic reversing action (equal rotation each way) and a high volume outlet drain.

Spray Tank

Made of 1.2mm thick stainless steel and mounted in a galvanised steel frame, the spray tank is ready to attach onto a tractor 3-point linkage.

The spray tank has an 8 metre spray coverage and features a high volume filler, approved easy to clean jet nozzles, and folding boom arms for ease of storage and mobility. ■

- those that are for the atmosphere.

Soil Preparations

Soil preparations include Horn Manure Preparation (500), Manure Concentrate (Cow Pat Pit), Fermented Casuarina and Winter Horn Clay. All these preparations are stirred in water for one hour (with the exception of the Manure Concentrate & Fermented Casuarina which are added for the last twenty minutes).

The soil preparations are applied in large droplet form to the soil, late in the

TABLE 1

Biodynamic Preparation Soil Preparations	Frequency	Timing	Rate	Method
Horn Manure Preparation (500)	2-4 times per year in Spring & Autumn	After 3.00pm	30g per acre in 13 litres or 75g per Ha in 34 litres	Stir in water for one hour.
Manure Concentrate (CPP)	Weekly, monthly or with rest of soil preparations	After 3.00pm	120g per acre in 13 litres or 250g per Ha in 34 litres	Stir on own for 20 minutes or in with Horn Manure Preparation 500 add at last 20 minutes of stirring.
Fermented Casuarina Tea	Can be used on own or with the rest of the soil preparations	After 3.00pm	1 litre per ha diluted in 20-40 litres of water as a soil spray or just added to Horn Manure Prep 500 mix.	Stir on own for 20 minutes or in with Horn Manure Preparation 500.
Winter Horn Clay	2-4 times per year in Spring & Autumn	After 3.00pm	4g per acres or 10g per ha	Stir in water for one hour with Horn Manure Preparation (500).
Atmospheric Preparations				
Horn Silica Preparation (501)	2-4 times per year, on morning following soil sprays or on own prior to fruit/grain harvest	Early morning sunrise	0.5g to 1g per acre in 13 litres or 2g per Ha in 34 litres	Stir in water for one hour. Ensure all spraying finished by 10.00am otherwise severe burning can occur.
Summer Horn Clay	2-4 times per year in Spring & Autumn	Early morning sunrise	4g per acres or 10g per Ha	Stir in water for one hour with Horn Silica Preparation (501).
Fresh Casuarina Tea	Use with Horn Silica Preparation (501) or on own in stress fungal conditions	Early Morning Sunrise	85ml per Ha in 34 litres of water.	Stir for 20 minutes or add into Horn Silica Preparation (501) mix.
Plant Tonics				
Biodynamic Seaweed Brew	Weekly or monthly depending on crop	Anytime	Dilute at the ratio of 1:10 litres per Ha.	Agitate when mixing in water. Best to use on own.
Biodynamic Fish Emulsion	Weekly or monthly depending on crop	Anytime	Dilute at the ratio of 1:10 litres per Ha.	Stir for 20 minutes or can be added into 500 mix..

afternoon from 3pm onwards (when the rhythm of the earth is said to be breathing in) and usually in a descending moon phase.

Atmospheric Preparations

Atmospheric preparations include Horn Silica (Preparation 501), Summer Horn Clay and Fresh Casuarina. These preparations are stirred in water for one hour and then applied in a fine mist upwards at sunrise (as the earth is breathing out), it is important to be finished no later than 10.00am

FREQUENCY OF APPLICATION

A basic minimum program would be to apply all the Soil and Atmospheric preparations four times per year, twice in spring and twice in autumn. Some farmers however have been using the preparations monthly for the first year with a wonderful increase in soil life, a much improved soil structure, and increased rooting depth.

One farmer noted that when he ripped his land prior to planting, he only needed to rip once to 60cm, where as another area of land nearby, that had not received the Biodynamic Preparations, took 3 rips to get to the same level. The soil had much better water holding capacity and he surprised his ‘conventional’ farmer friends with the growth he achieved without applying water soluble fertilisers.

Depending on the crop and climate, the application of Biodynamic sprays can be tailored to suit individual farming enterprises.

Table 1 provides a brief and limited description of the basic application of Biodynamic Preparations.

Further details can be obtained from

selected texts (“Grasp the Nettle”, by Peter Proctor, “Agriculture”, by Rudolf Steiner) or by attending an Introductory Biodynamic workshop.

ENSURING SUCCESS

The Biodynamic Preparations are living substance and as such need to be used and stored with care.

- If a preparation has been allowed to dry out, or sealed too tightly, it can spoil.
- If ordering preparations, they need to be used within a few days of receiving them.
- If making and storing Biodynamic Preparations, then these need to be kept moist and cool. The recommended storage method is in a glazed earthenware, glass or enamel container, which is then placed in a wooden box surrounded by moist peat moss.
- Biodynamic storage containers should be kept in a cool shed or cellar away from any potential contaminants.

How often and in what combinations a farmer chooses to apply the Biodynamic Preparations to his land will greatly influence the speed at which his soil and overall farm health regenerates.

Knowledge of the current condition of your soil is also of great importance in ensuring success. As great as the Biodynamic Preparations are, they will be less effective if major nutrients are critically out of balance in the soil.

The first starting point is identifying the condition of your soil, by either reading the landscape or obtaining an Albrecht type soil test. The soil test will identify available nutrients, the Ca:Mg ratio and

the ph and cation exchange capacity of your soil.

Where major nutrients are critically missing, then these need to be rectified. Elements that are marginal can be observed and will usually improve with the continued application of Biodynamic Preparations. The soil test also acts as a useful starting reference on what improvements occur over the years as the Biodynamic Preparations are applied.

Biodynamic Preparations, nozzles, filters, Flowforms and stirring machines can be accessed direct or via Biodynamic AgriCulture Australia. As seen from the images that accompany this article, the imagination and ingenuity of the farmer is the only limiting factor in the type of equipment set-up that you choose for applying your Biodynamic Preparations. ■

In the next issue we will look at managing weeds and insects in the Biodynamic system.

* Biodynamic AgriCulture Australia

Biodynamic AgriCulture Australia makes commercial quantities for its members of all the Biodynamic Preparations. Introductory Biodynamic workshops are run across Australia throughout the year and members can also access a phone advisory service. Further details can be obtained from www.biodynamics.net.au or Ph 02 6655 0566 or email: cheryl@biodynamics.net.au

PELICAN'S NEST

- a Biodynamic Farm

Bed & Breakfast experience!

For the last 11 years, Susan Schmiedte and Greg Murphy have been running their farm, 'Pelican's Nest', at Morpeth in the Hunter Valley, biodynamically.

Aiming at biodiversity, they run a mixed farm with a small beef herd, two dairy cows, chickens for meat and eggs, an extensive herb and vegetable garden and a few acres of lucerne for hay making. In 1999 they built a two storey recycled timber yurt, which provides the perfect way for visitors to experience first hand a working biodynamic farm.

What goes on at Pelican's Nest

Susan and Greg bought their 20 acre farm, which is on a large floodplain in the lower Hunter Valley, in 1990. They started with organics in mind however, after a field day visit to the late Leon Sivyer's farm at Halton on the Allyn River, they were sold on Biodynamics.

"Leon was passionate about Biodynamics and an inspiration to many budding Biodynamic farmers and gardeners", says Greg.

"From having put out our first application of Horn Manure Preparation (500), we have continually been inspired and satisfied with the results of all the Biodynamic preparations and practices".

Susan and Greg both work Pelican's Nest full time and have done so for about 7 years. They farm their fertile 20 acres intensively with 2 house cows, 10 Murray Grey breeders and 1 bull, with the calves sold as yearlings to a small group of discerning meat lovers. Chickens for eggs and meat, raised in moveable open bottom cages on lucerne, also add to their product list.

They grow their own lucerne for hay mainly to feed their own stock, and sell



Making Compost - Pelican's Nest

any surplus. Then there's the vegetable garden, which is worked by Susan and Greg and 3 other families.

"This approach combines many years of gardening experience and gives us all great vegies," says Greg.

In addition to all this, about 4 years ago, Susan and Greg built a two storey yurt next to the house.

"The yurt is used as a Bed and Breakfast/Farmstay and sometimes doubles as a classroom," advises Greg.

"Many of our customers stay with us to learn about Biodynamics and take advantage of our 2 hour Introduction to Biodynamic Farm Tours.

"As we use all the Biodynamic practices and preparations on our farm, a farm tour includes demonstrations or descriptions of application, methods and storage of all the

practices and preparations.

"Others just come to relax, eat great home grown biodynamic food and enjoy our tranquil setting overlooking the Paterson River".

The aims at Pelicans Nest are to:-

- Improve and vitalise the soil using good farming practices and Biodynamic preparations, which results in increased sustainability of soil and highly nutritious food from the farm.
- Grow and offer safe, nutritious food to local people.
- Maintain and increase biodiversity on the farm in relation to vegetation i.e. varieties of pasture plants and trees, which increase insect, native bird and reptile habitat and a variety of domestic poultry and animals.
- See the farm as far as possible as a complete organism, where imported farm inputs are kept at a minimum, e.g., organic certified chicken grains that can't be grown on the farm.
- Provide work experience and learning opportunities to WWOOFers, interested people and students to learn more about Biodynamics. e.g. School, TAFE and University student work experience, and to run workshops, courses and field days in conjunction with biodynamic groups and other interested groups.
- Treat the riverbank with care and encourage vegetation to protect the banks and the health of the river, and to use the water wisely.

The Beginnings

In the autumn of 1992, when Susan and Greg purchased sufficient Horn Manure Preparation (500) from the Biodynamic



Vegetable Garden at Pelican's Nest

Farmers and Gardeners Association of Australia (now called Biodynamic AgriCulture Australia) to apply to one small paddock, they invited their children and close friends to celebrate this special moment with them.

They placed the Horn Manure Preparation (500) in a large hard plastic bucket with approximately 14 litres of warm water and stirred in the recommended way for one hour.

"We all had a go at stirring," says Susan.

"We explained to each person what our intention was and how the application of this preparation was going to affect our soil. Everybody got in the spirit and in no time we had completed the stirring and were eager for the spreading.

"We poured the contents into six buckets and handed out banister brushes for dipping into the Horn Manure Preparation (500) and spreading it over the paddock. Everybody had a go, with much fun and frivolity.

"It was a memorable start, and the first of many applications of Horn Manure Preparation (500)".

These days, the Horn Manure Preparation (500) is stirred in a 160 litre stainless steel stirring machine. They also have an old washing machine barrel which has been altered to fit inside the large stirring machine over the paddles in such a way that when the paddles of the larger machine rotate, they cause the paddles in the smaller machine to rotate and they create a very nice vortex in the smaller machine.

The smaller machine mixes the equivalent of one and a half acres (20 litres), and is used for stirring smaller quantities for the vegetable garden.

Having recently acquired a wine barrel, it is Susan and Greg's intention to stir (500) by hanging a paddle from the shed beam, similar to the way it is done in Europe. The reasoning is that they feel they will be putting more of themselves into the stirring, rather than having it done by a machine.

For the initial straining of the solids material, a double layer of panty hose is fixed to the outlet hose of the stirring machine. The horn manure is then further strained through a 'plumbers sock' (obtainable from a plumbers supply shop) into the spray tank.

"Our spray tank is unique in that it consists of a disused 18 gallon keg," advises Greg, "which is ideal for the spraying of 6 acres at a time.

"The pump is a Forbes pump which operates off the Power Take Off (PTO).

"We purchased a 500 spray head from Rob White, Technical Officer with Biodynamic AgriCulture Australia, and in the line up to the spray head, I have placed a small garden filter.

Greg says the reason he goes to all the trouble of filtering the (500) is that he doesn't wish to be caught with a blocked spray line in the middle of spraying a paddock.

Biodynamic Practices

Horn Manure Preparation (500) is sprayed over the whole farm at least three times per year during autumn and spring.

"If the soil is dry at the time of application, we then apply it again after suitable rain," Greg says. "From our experience, the application of Horn Manure on moist soil appears to be more effective".

As they are continually cultivating the garden beds, (500) is applied in the vegetable garden approximately eight times during the year

According to Susan, the Horn Manure Preparation (500), which works with the soil, needs to be balanced by spraying with the Horn Silica Preparation (501), which works with the parts of the plants that grow above the soil.

A special spray head, also manufactured by Rob White, is used for



Susan & Greg - Pelican's Nest

the Horn Silica Preparation (501).

When spraying the smaller area of the vegetable garden they use a back pack with a fine mist spray.

Susan and Greg also continually make and use compost on the farm, mainly for their vegetable garden.

Their farm operates with WWOOFers (Willing Workers on Organic Farms) and some of their tasks include the collection of cow manure and excess vegetation, which enables them to make compost. Operating as a Farm Education Centre, they also have plenty of opportunity to make compost with the various groups visiting the farm.

Another on-farm Biodynamic practice is the making of Manure Concentrate (cow pat pit). There are now two cow pat pits on the farm. The Manure Concentrate obtained from the pit is used in a number of ways as a great medium for putting the Biodynamic compost preparations over the whole of the farm.

The mixture is added to molasses and warm water and is sprayed over the pasture to give it a good boost and aid in the break down of organic matter to humus. It is also added to their liquid manures and sprayed on the pastures after grazing; when they feel the need to spray a second application of Horn Manure Preparation (500). They also add the Manure Concentrate in the last 20 minutes of stirring the (500).

Liquid manures are made from various plants growing on the farm, in 120–160 litre hard plastic ex-food containers, with shade cloth as lids, to keep the mosquitoes out and allows the universal forces in.

"We have a considerable number of containers and make the following Biodynamic liquid manures:- Thistle, Fennel, Inkweed, Comfrey, Lucerne, Willow, She-oak, Nettle, Cow manure and Seaweed, all with compost preparations added and left to breakdown over two to three months", states Susan. (Information on these and other plants in respect to what they put into the soil, can be obtained by reading "A Biodynamic Farmers Handbook", by Norrie Pearce.)

"We always endeavour to use rainwater with all of the preparations."

"Once ready, we mix them together in the stirring machine at the rate of 10 to 1".

The liquid manure, with the addition of the manure concentrate, are applied with a four jet boom spray.

With a number of fruit trees on the farm for their own use, Susan and Greg make it a practice to apply Biodynamic Tree Paste, which is made up with equal parts of cow manure, coarse sand and kaolin clay (potters clay) to the stone fruit trees on an annual basis, and to the citrus trees every second year.

After the trees are pruned, they are rubbed down with a wire brush to remove any loose bark and lichens, holes are cleaned out with a piece of wire and then the tree paste is applied with a banister brush.

The kaolin clay gives the trees a vivid white appearance, which looks great and also shows up any problems with the tree – best to avoid a rainy day when doing this activity.

The pastures are managed by dividing the paddocks into strips, which are divided into grazing cells so that the cows do not graze the same area for a period of 60 days. According to Greg, this not only gives the paddock a spell and a suitable time for re-growth, it also is a form of worm control.

After the cattle have grazed the paddock, any uneaten pasture together with any cow pads that have not been collected, are mulched with a mulch mower. Liquid manure, together with Manure Concentrate, is then applied.

As a result of their biodynamic and good farming practices over the past 11 years, Susan and Greg have been able to achieve a vital and well structured soil that drains well after prolonged heavy rain and also holds moisture and produces good pasture well into an extended dry time. This provides healthy plants and pastures for their animals, which provides healthy and nutritious food while ensuring the soil is improving for the future, and isn't that what farming is all about? ■

Information on Pelican's Nest and their educational farm stays can be obtained at www.pelicansnest.com.au

HERITAGE SHEEP

A group of concerned sheep breeders have come together to preserve the unique genetic qualities of older breeds of sheep under the banner of Heritage Sheep Australia.

Having seen the rapid fall in numbers of some of the old breeds, this group of sheep enthusiasts formed Heritage Sheep Australia to honour foundation breeds, which were the basis of the sheep and wool industry in Australia and which played an important role in our early agricultural history.

Established in 2002, the aim of the organisation is to protect, promote and secure the future of breeds such as the English Leicester, Hampshire Down, Lincoln, Cheviot, Southdown, Shropshire, Dorset Horn, Ryeland and the Dorset Down.

According to Ian Bucknall, Chairman of Heritage Sheep Australia, the organisation was established to ensure the nine breeds, a mix of wool type breeds and carcase type breeds that played such an important role in the foundation of the sheep and wool industry in Australia, are preserved.

The organisation differs from the Rare Breeds Trust of Australia in that whilst some of these breeds could aptly be described as rare, some of the Heritage breeds continue to maintain a significant influence in the Australian sheep industry. The major breed doing this is the Southdown, which continues to enhance many prime lamb breeding operations even though the breed can be traced back to over 50 years ago.

Barely 12 months old, Ian says the pleasing aspect of Heritage Sheep Australia was that breeders have come forward to establish new flocks, and to preserve the genetic qualities of these breeds, thus ensuring that many will not fade into obscurity.

A lot of pleasure can be gained from running a flock of one of the Heritage breeds sheep.

ENGLISH LEICESTER

The English Leicester, one of the first of the British breeds to be imported to Australia, is genuinely heritage.

A dual purpose British longwool breed, the English Leicester was developed by Robert Bakewell in the late 1700's from local Midland sheep to provide meat, wool and lamp oil for the rapidly growing population post the industrial revolution.

Known as the 'improved Leicester', the English Leicester influenced all other breeds and were ideally suited to cross with the sheep in the New Colony, Australia, where constitution, wool and body weight was required.

The English Leicester arrived in

Australian in 1826 and was used successfully over the local sheep. The resultant crossbreeds inherited the genetic qualities of the Bakewell breed; were hardy and thrived under varying pastoral and climatic conditions.

Crossed with the traditional Merino, the English Leicester and other longwool breeds, were the foundations of the Australasian breeds. They enhanced length of staple, wool crimp and lustre as well as increasing body size.

Large numbers of English Leicester were imported up until the 1930's. After 1930 their popularity waned.

Today, with numbers declining, the breed still has its followers. Rams are used as crossing sires over the Merino and Corriedale to produce big bodied 1st X ewes, with the Leicester qualities, to produce heavy prime lambs. Lambing percentages are high and lambs have a good growth rate.

English Leicester's are large framed, with broad level backlines, strong constitution and quiet temperament. Ewes are attentive mothers producing a high ratio of twins, and are good milkers.

The wool is unique. It is highly lustrous, long, with a soft handle and heavy cutting, averaging 34-40 micron.

The stronger line goes to the carpet wool industry while the finer fleeces find markets with a variety of craft artist for hand spinning, weaving and felting. Selected fleeces are also used for dolls wigs – traditional dolls to rag dolls, even some with dreadlocks!

The young, commercially spun wools make strong, lustrous knitting yarns, which attract a knitters market – natural, or hand

died in brilliant colours.

Currently there are 23 registered flocks in Australia, primarily in Victoria and Tasmania.

There are only approximately 600 registered breeding ewes – a serious situation as the genetic pool decreases.



English Leicester wool showing long staple, and crimp

HERITAGE SHEEP AUSTRALIA

“Saving the breeds that were the foundation of our sheep and wool industry”

Breeds represented:
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“The genetic heritage of these sheep is to be treasured”