



DEVELOPING YOUR FARM PLAN - PUTTING IT TOGETHER
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INTRODUCTION - WHERE AND WHAT IS BUNDILLA?

Bundilla and Satimer are two properties in South Western Victoria run as a family syndicated farming enterprise by my brother Jack and myself.

Size:	1880 hectares
Land Type:	Undulating dissected by permanent rivers, streams and drainage lines
Rainfall & Elevation:	800 mm and 300 metres above sea level
Stocking Rate:	11 DSE per hectare
Stock Inventory:	14,000 adult medium merinos including 2,000 ewe Peppin Stud 50 cow Simmental Stud Herd
Pastures:	Victorian and Ellet perennial rye grass, cocksfoot, Phalaris, Demeter fescue, Mount Barker, Woogenellup and Trikkala subclover, Victorian Irrigation white clover.

OUR FARM PLAN - WHY DID WE HAVE ONE IN THE FIRST PLACE?

A conscious decision was taken to develop the Plan in 1984. This would encompass all future subdivision and land management. The phrase "whole farm plan" was yet to be coined, but the intent was the same. Our next step was to work out the parameters. About this time the Potter Whole Farm Plan came into being so the parameters were jointly worked out. Some of these were:

- . Land degradation control (a lot of which was already going on in our farm).
- . Water Supply -
- . Tree establishment (shade, shelter, wind, wildlife habitat and aesthetics).
- . Land use changes to ensure full production from a particular portion of land i.e. identifying land types.
- . Looking at the future development of the farm (crystal ball gazing 20 -40 years ahead).

I might add that this planning was not done overnight or without help, but at this time we were breaking new ground. Now Whole Farm Planning Courses are available. I would

recommend that these be used if you have them available, and if you don't, you should be demanding them from either your extension people or private consultants. Our plan changed many times as different factors emerged so the final plan was an amalgam of a lot of ideas and rehashing of the original plan. The final plan although basically the culmination of what we want, is still subject to change and as we gain more experience we find new directions of diversification.

IMPLEMENTING THE PLAN

Whole farm planning must become part of the budget planning and strategy. For shelter belt planting, erosion and salinity control measures and new subdivisions, to be a success they all must be part of an annual farm program included in prepared budgets, otherwise they do not get implemented.

WHAT IS OUR ANNUAL PROGRAM ON THE FARM?

December, January, February

Refer to the Whole Farm Plan and define this year's works: measure fence lines, estimate number of trees. We use 15 metre plantations of 4 rows of trees, each row 3 metres apart. The west row contains lower growing species, the next row contains mid range trees and the next row the tall eucalypts. The last row on the eastern side of the lee of the plantation contains the smaller growing trees and shrubs, once again 3 metres apart. So knowing the full length of this year's planting, ordering the trees is easy. Effectively, you are then planting approximately 1,000 trees per kilometre or one tree every metre.

April, May

Mark out fencing and complete before the end of August.

Rip the tree line, two rip lines per tree line and plant the trees in between the rip lines. Spray the tree line, using knock down and residual spray, but only spray the actual tree line to give the young tree additional protection from the wind.

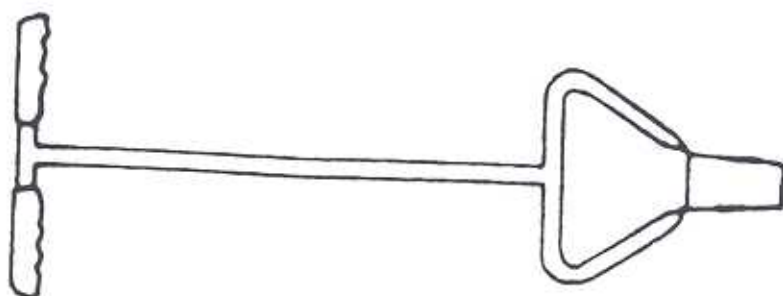
Having defined this year's works, care must be taken to see that the work goes on. Include in the daily planning, its another job like lamb marking, crutching, seeding, shearing and not an afterthought.

September, October, November

Planting time (for us, you must plant when it best suits your area). Logistically, it is very difficult to plant 2 or 3 thousand trees without outside help. We have found that using local service clubs gives us room to breathe. Prior to planting day, the trees will be sorted in their respective rows i.e. row 1 west side, row 2 etc. Tree guards will be ready with sufficient stakes.

On planting day it is best to organise the planters to work in teams. One person (with Hamilton Tree Planter (see Figure 1)) makes a hole in the shape of the tube in between the rip lines. This person drags a rope knotted at the approximate distance e.g. 3 metres. The next person wheels a wheel barrow of trees, whilst another plants. Another group guards the trees. We feel this is vital for protection against predators, rabbits etc., and also for wind protection for the young seedling. I believe the key to successful planting is successful preparation. Trees should need the minimum of maintenance using the above planting preparation methods.

Figure 1. Hamilton Tree Planter



WHAT TREES DO WE PLANT?

We plant indigenous species and in particular the ones that grow or have grown in our local area. These species are used where they can satisfy the desired role for they are already adapted to the site and local fire regime, and are most likely to regenerate. They are also the most rewarding to plant as their growth and survival rate is generally greater than introduced species. These trees flower at the right time for the migratory birds and provide the best habitat for local wildlife. Mixtures of tall trees and local under story species (shrubs and ground covers) in shelter belts and clumps will create a natural balance which will be more likely to remain healthy in the long term. If indigenous species cannot do a specific job then we use a specialist tree for the purpose e.g. salt tolerant species, fodder trees for emergency grazing, nut trees, timber trees, cut flowers (proteas, banksias) or high end-value softwoods (high pruned radiata for peeler logs and veneer production). Consider all the possibilities.

WINDBREAK DESIGN AND PLACEMENT

On our property, we have used several designs of windbreaks. If you have an idea for a particular application, use it. The most often used design as previously described is the 4 row perimeter shelter belts:

Design No. 1

Row 1 West Side	Row 2	Row 3	Row 4
Plants 3 metres apart	Plants 5 metres apart	Plants 8 metres apart	Plants 3 metres apart
Banksia Casuarina Melaleuca Callistemon Bursaria Eucalyptus	Acacia implexa A. melanoxylon A. mearnsii A. decurrens Hakea nodosa H. suaveoleons	Euc. ovata E. camaldulensis E. viminalis E. maculata E. pauciflora	Banksia Casuarina Melaleuca Callistemon Bursaria

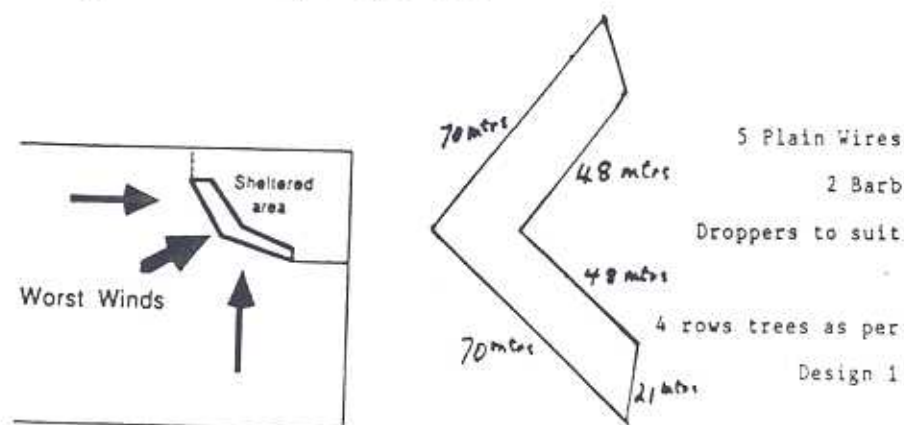
Distance between rows is 3 metres.

The above species selection relate to our area only.

Design No. 2

In the north eastern corners of paddocks exposed to bad weather from the west to south west we have built boomerang shaped shelter belts (see Figure 2) to provide stock shelter in times of extreme weather. As this shelter is located in the corner of the paddock, the stock get driven to it in times of storm.

Figure 2. A Typical Boomerang Shelter Belt



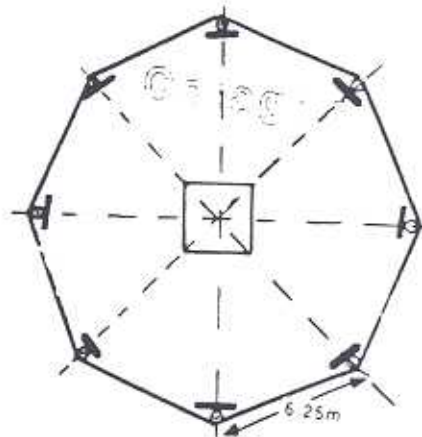
Design No. 3

The Octagon. An eight post or 16 post circle equally spaced for equal strain. An eight post octagon uses 50 metres of Cyclone, 6 - 70 - 30 ringlock with 1 plain wire. It contains 34 trees, in rows 3 metres apart. The 16 post octagon is 100 metres in circumference and contains 60 trees.

Figure 3. A Typical Octagonal Shelter Belt

Radius 100 metres - 31.6 metres
50 metres - 16 metres

Place quadrant
on ground to
obtain post
spacings

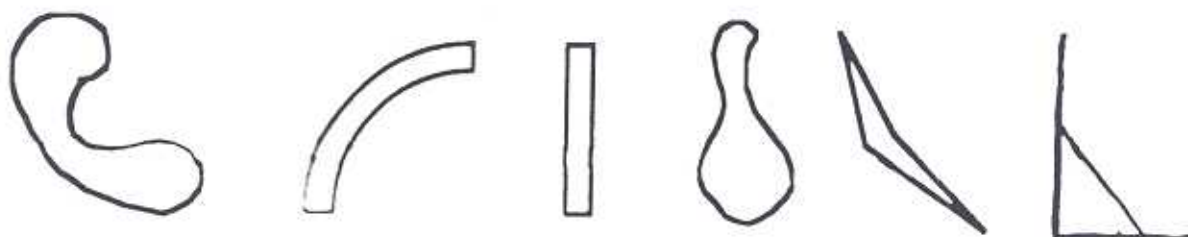


These are ideal for mid paddock shelter, providing a maximum amount of shelter for the minimum cost. These clumps can also be electrified if close to a source, or used as regeneration areas on the south east side of existing parent trees.

Other designs

There are numerous other designs which can be sympathetic to the lie of the land. Some innovative designs that have been used are shown in Figure 4.

Figure 4.



SALINITY CONTROL

On our farm a lot of band-aid work in has been done over the past 25 years in the areas where the problems are occurring. Over the past 4 years with enormous help from the Potter Farmland Plan we have attacked the problems where they are being caused, namely, the recharge areas and the tops of the hills and slopes.

The most promising strategy for dryland salinity control is to use the rain water where it falls. This must involve the use of deep rooted perennial pastures as well as trees, as we could not plant enough trees to solve the problem and continue farming, and that after all is our aim.

CONCLUSION

It is very difficult to prepare your whole farm plan by yourself. I believe outside guidance, in the form of consultants or the attendance at a Whole Farm Planning Course is essential. The experience of others is vital to complete a plan which will see your farm carry on into the 21st and 22nd century as a viable productive unit capable of sustainable agriculture.