

## Heavenly Hectares

### Planning the great Plant! *Getting it right on the land*

By Chris Ferreira

I am constantly amazed that people, with all the best intentions in the world, often readily commit large sums of money, time and hope on planting with only the scantest understanding of what they are getting themselves into. For starters many people will have little more than a 'skin-deep' appreciation of what constitutes the dirt into which their newly found plants will be permanently set. For these misguided souls the soil is nothing more than the ground you walk on and occasionally cast your eye over as you avoid lurking rocks and sloppy cowpats. But in truth the surface of your paddock holds little relevance for your plants. After all, it is the sub surface – in particular the first 30-50cm depth of soil – where the bulk of the 'feeder roots' will permanently find their home and will toil away to gain (or fail to gather) all the sustenance they need to survive and thrive.

So getting a bit of an understanding of your soil, especially as it changes, down to about 50cms, will go a long, long way. Now, you don't need to become a bearded and crusty old soil scientist who spends all day digging large pits in the paddock, but you certainly want to know the *types* and *distribution* of soils on the property.

### Getting up close and personal with your soils

#### Fantastic plants in 5 easy steps...

Well...yes, especially if you add, as a major ingredient to your planting program, a healthy dollop of persistence.

*Questions you should ask, things you should know:*

- 1. What are the main characteristics of the soil to be planted?** *Is it a clayey or sandy clay, does it dry out as soon as the rains finish or does it support a green 'tinge' over summer?*
- 2. What are the limiting factors of the site?** *Does it become waterlogged in winter or succumb to the perils of water repellency; is it prone to erosion or does it usually get swamped with weeds?*
- 3. What are the best ways to improve the soils?** *Do you need to*

*beat back the weeds, break open the hard crusty soil surface and mound up the planting areas to get the poor plants 'out of the drink'? Or do you need to scalp away meagre soils and add soil amendments to capture and hold every precious drop of moisture?*

**4. What plants will thrive here (and won't become weeds)?** *For every soil some plants will 'bomb' whilst others will thrive; it's just a factor of living in such a harsh and marginal part of the world and if you don't make use of the right info when you are choosing your plants then heaven help you as you will need all the assistance you can get!*

**5. What lurks to nobble my planting efforts?** *Remember your plants can't move nor defend themselves and so for at least the first 18 - 24 months of their lives they will be at the mercy of whatever is around that may like to consign them to oblivion. Whether it's Muffy the horse, the rogue rampaging roo, an overzealous patriarch on the lawnmower or the effervescent weeds, you will need to anticipate and plan for the needs of your newly-planted beloveds.*

You can gain a lot by taking a closer look at your soil and picking up the clues and what they mean. If you don't put this basic information at the very heart of your planting strategies you may as well accept that your planting success will be little more than a lucky dip!

Crudely speaking (and seriously generalising) you can broadly split the soils of the Southwest into the five main soil types set out below. There is a very good chance your precious land will contain one or more of the following:

**Heavy Clays** *Usually found on wide flat valleys and near waterways, clays are normally a challenge to work whatever the season – boggy and squelchy in winter and spring, then they switch completely, becoming rock-hard and impenetrable through summer and autumn.*

**Sand Over Clays** *Once again usually found on wide valleys and sometimes near waterways. These soils are best described as a 'hotchpotch' and can vary their characteristics markedly over the paddock. They can get waterlogged in winter and rock-hard in summer.*

**Sandy Soils** *The good ol' 'gutless sands'. They make Hobby Farming so much fun, don't they? There are 5 main sands – the beach sands (known as Quindalup), the original gutless grey sands (the Bassendean sands),*

*the dark-brown sands often associated with chunks of limestone (the Cottesloe sands) and the orange-red sands (the Karrakatta / Spearwood Sands).*

*These can be pretty harsh and unforgiving soils as they are usually drought-prone and the very first to dry out once the winter/spring rains cease. In fact the Bassendean sands are so deprived that they have been declared the world's worst agricultural soil by the UN Food and Agriculture Unit!*

**Hills Gravels** *Despite their reputation for being difficult (if not impossible) to work, the gravels, with their mixture of different-sized rocks are actually some of our most productive soils. These soils are usually associated with the Darling Scarp and other significant hills. Like our clays they are usually difficult to work and will bake hard in summer but, being associated with slopes (as they generally are) they rarely suffer from waterlogging but can be cursed by water repellency and terrible erosion*

**Loams** *If you have got them you are indeed in a pretty rare and exclusive club in WA. Loams are the premier soil and given our reputation for having a pretty bare cupboard when it comes to soil resources you can imagine there ain't too much of it to be found in poor old WA. As a consequence, those that do exist will often be flogged by successive agricultural pursuits and given their growth potential often be a haven for weeds.*

***A tip...***

The scale and scope of your impending battle with weeds will largely be influenced by the soil they grow in. As a general rule the darker the soil, the more 'squelchy' it gets in winter and the more it forms into and stays as clumps when you mould it, the more productive it is and the more you can expect it to be a veritable storehouse of large and tenacious weeds!

**Regardless of the site or the plants to be used you should aim to create planting sites that are:**

- ***moist and expected to stay that way for at least four months after planting.*** This helps guide you to ensure that you put the plants in at the *right* time of the year for your different soils. For example, your 'gutless' sands will only give you the magic minimum of *four* months needed to get your plants established if

you plant right at the start of the winter as these sands will dry out as soon as summer conditions begin to reappear Heavy clays on the other hand will retain moisture for longer and indeed may become waterlogged over winter. Therefore you might put the plants in at the end of winter with great success in those sodden sections. Put simply, know your soils and plant at the best time for your plants. Remember, when it comes to planting, as always on the land, there really is no 'one size fits all' approach.

- ***soft and friable.*** No plants enjoy breaking through hard, compacted soil or thick matted weeds so your planting and your plants will be much more successful if the soil is easy to dig and grow in. Make sure that you can, without much difficulty, dig down to at least 30-50cms.
- ***well drained.*** This is important because wet, poorly drained soils become waterlogged and only a comparatively select few plants can tolerate these extreme conditions. If the ground oozes and squelches underfoot then all plants – except the very waterlogging tolerant – will die there!
- ***weed-free.*** This is vital because weeds are public enemy number one for your precious plants. Given a sniff of a chance they will always, always, ALWAYS out-compete your seedlings (yet another example of Murphy's law of Landcare). If there are any weeds of any size within 30-40cms of your new seedlings they will grow up to retard or kill your plants.
- ***protected from stock and other pests.*** Your poor old plants can't move away from, hiss at, bite or attack any pest and therefore, as they get established, their progress is completely at the mercy of your management.

***Ideally these conditions should prevail for at least 12-24 months  
AFTER planting.***

***Good Luck***

***This is an excerpt from Chris Ferreiras up and coming Book Heavenly Hectares – a guide to creating a beautiful, productive and sustainable landscape. More details: [chris@landcaresolutions.net.au](mailto:chris@landcaresolutions.net.au) and for info on Free Heavenly Hectares workshops visit [www.greatgardens.info](http://www.greatgardens.info)***

