PRACTICALITIES

DESIGNING WINDBREAKS TO TRAP BLOWING WEED SEEDS

THERE is little more infuriating than keeping your own property weed-free, while annually a new crop of weeds blow in from your neighbours'! Whether you are concerned about access of weeds to paddocks or bushland, windbreaks can help.

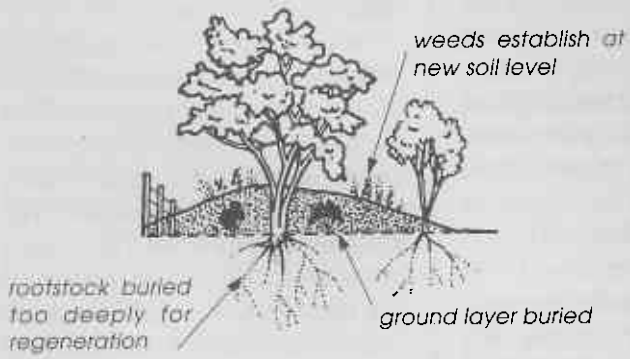
If you doubt this, look at road verges in windy areas. It is a sad fact that the original soil profile - and so capacity to regenerate - on many sandplain roadsides is buried under layers of deposited soil, seed, straw and dung blown off adjacent paddocks and dropped when the wind slows as it hits the verge. This deposited mess is non-wetting, too, which compounds the degradation.

So, if you are designing a successful weed barrier, ensure that it has lots of vegetation and lower foliage for the weed seeds to get caught up in. This means that tree lines grazed by stock are not good weed barriers, as the weeds (often whole plants, eg radish) simply bowl along underneath. In fact, such strips may become wind tunnels, increasing wind speed and accelerating erosion.

Windbreaks, of course, do more than just trap weed seeds. By raising wind off the ground, they provide shelter for adjoining land - the effective distance depends on the height of the plants making up the windbreak.

Windbreaks should not be a solid barrier (as might be created, eg, by lines of even-aged pine trees), as this can create turbulence. A permeable barrier, with species of different heights and form, will filter the wind. A mixture of trees, mallees and shrubs should be aimed for. Make them as wide as your property planning and space available allows.

Effects of wind-blown debris deposition in remnant vegetation



Windbreak

WINDBREAKS ARE WORTH CREATING!

IN 1996, when Muriel White purchased her property at Byford she had to contend with a severe wind erosion problem which had created a blowout 30 cm deep along a fenceline. Her solution was to place logs along the fenceline to prevent further erosion and to plant mixed trees and shrubs inside old tyres with a generous helping of horse manure underneath. A parallel row of fencing was added to prevent horses from eating the growing plants. Within 2 years the trees were several metres high. Today, after nearly 5 years, the plants are more than 6 metres tall creating an effective windbreak, stabilising the soil and providing habitat for birds.

Claire Hall

Summer 1996, windswept, eroded fenceline

Winter 1998, young trees up to 2 m tall

Summer 2001, good windbreak with lots of shelter for the horse (photos: M. White)