

TreeNote

No. 11
July 1998

Benefits of farm forestry

Why grow trees on farms?

There are many good reasons. Tree farming is profitable, and it can make other agricultural enterprises more productive. Trees on farms also provide environmental benefits and stimulate new jobs and industries in rural areas.

Trees grow well in many parts of southern Western Australia, providing farmers with opportunities to produce wood fibre to meet the expected growth in world demand. Long term forecasts predict an increasing global deficit in wood fibre, with continuing strong demand from the Asia-Pacific region.

Benefits

Farm forestry produces multiple benefits for farmers, the environment and the wider community.

Benefits for farmers

Tree farming can boost farm income. Private growers aiming to produce sawlogs after 20 to 30 years can start earning income from thinnings (for posts and industrial wood) after eight to 12 years. Blue gums for pulpwood can be ready for harvest within 10 years of planting.

Forestry companies are offering farmers high rents to grow blue gums in sharefarming arrangements on farm land. Tree establishment, management, harvesting and

marketing are financed and organised by the companies, reducing the farmer's risk. Payment can be arranged as an indexed annuity, or a share of the crop at harvest. The extra income and time give many sharefarmers the freedom to start new projects, or upgrade the rest of their farming enterprise.

Earnings from farm forestry add diversity to farm incomes and can provide a 'buffer' against cyclical downturns in prices of other farm products such as wool and meat. Harvesting can be deferred or brought forward to provide income when it is most needed. Some growers use investment in longer 'rotation' tree crops as a kind of superannuation.

Up to 20 per cent of the farming landscape can be planted to trees without loss of agricultural production (or traditional agricultural jobs). Trees can increase overall farm productivity through the beneficial effects of shelter on pastures, crops and livestock. Western Australian studies have shown the combined productivity of tree crops integrated with traditional agriculture can be greater than for either component alone.

Integrated farm forestry can make an aesthetically pleasing landscape, add to a farm's market value, and make it a more interesting and enjoyable place to live and work.



This well integrated farm forestry system provides additional income from trees, which in turn, confer benefits to the farm and the wider environment.

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Benefits for the environment

By intercepting rainfall, and removing water from the soil, trees can prevent saline ground water rising to the surface, where its effect on agricultural production and nature conservation is disastrous. About 2 million hectares of agricultural land in southern Western Australia is already affected by salinity, and a further 4 million hectares is threatened.

Trees can reduce waterlogging, and erosion caused by water and wind. A windbreak can reduce wind speed across a paddock for a distance of 10 to 20 times its tree height.

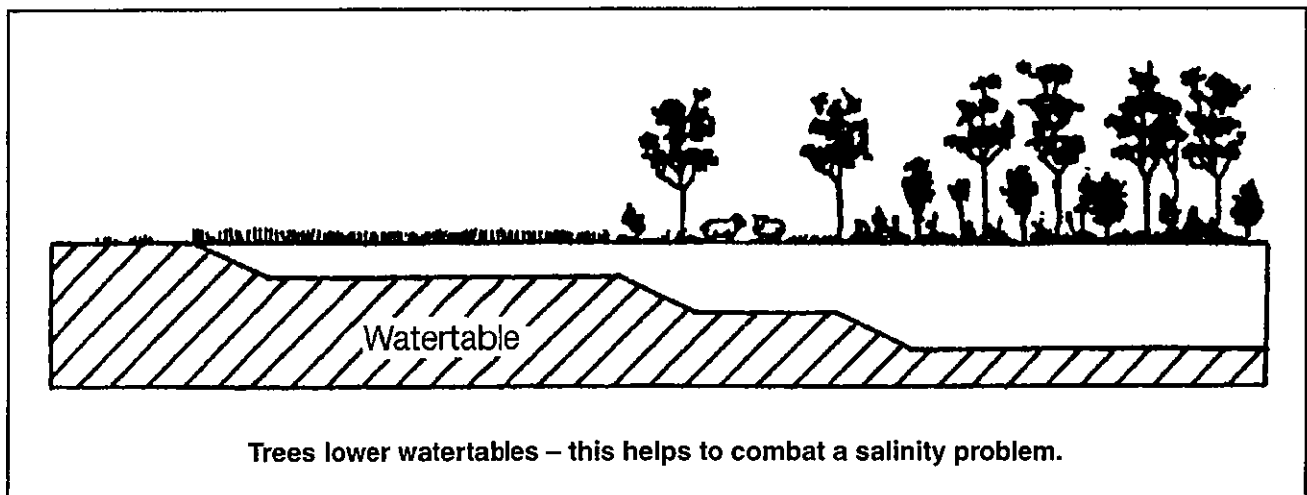
As well as providing an expanded habitat for wildlife, tree plantings can be designed as buffer zones between agriculture and valuable natural assets such as watercourses and wetlands.

Intensive livestock industries with nutrient-rich effluent can use the effluent profitably to grow trees and prevent the pollution of water resources.

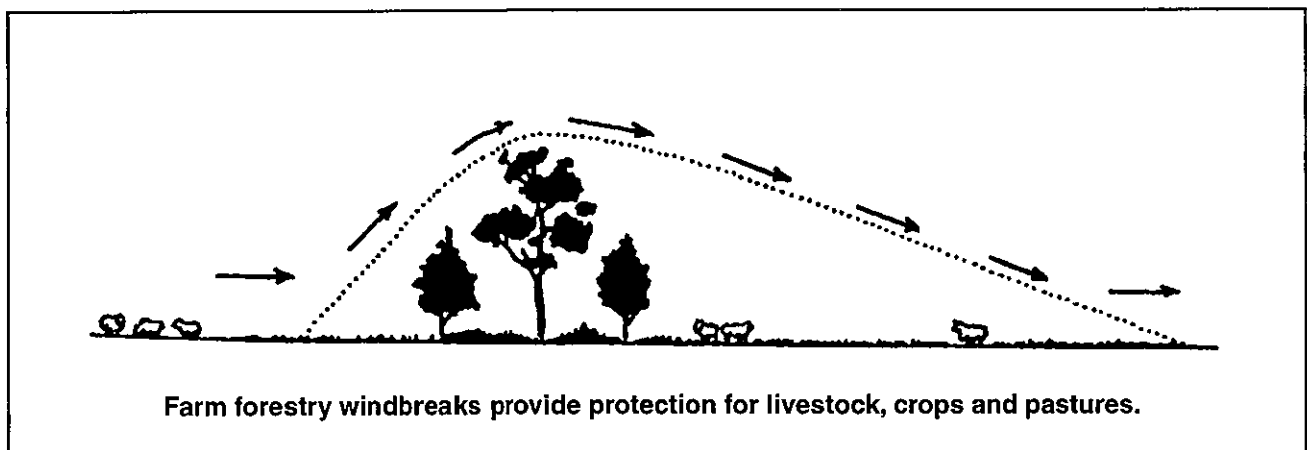
Benefits to the community

The community derives many benefits from farm forestry. For example, environmental benefits help protect our resource base of soils and water. This helps maintain agriculture as a leading export industry for Western Australia while also allowing our consumers to enjoy competitive prices for produce grown in our State.

A growing farm forestry industry creates many new jobs in rural areas, from raising and tending the trees through to harvesting, transporting and processing its products. Since Australia is presently a net importer of forest products, this 'home-grown' industry can reduce our reliance on overseas supplies, and improve our balance of trade.



Diagrams reproduced by courtesy of the Department of Natural Resources and Environment, Victoria.



Examples: "Why farm forestry is good for us."

Neil Hopkins and John Cutbush

Dairy farming partnership, Busselton

"Trees have greatly improved shade and shelter on our farm and they are a potential superannuation policy."

NEIL HOPKINS AND JOHN CUTBUSH

The main reason Neil and John established trees on their 500 ha dairy farm was to provide shelter for their dairy herd. That is, shelter from cold winds in winter and shade from the hot sun in summer. They hoped the combined effects from shade and shelter

- A need to stop further development of salt patches (with salt tolerant species).
- Attractiveness of additional income from timber (in medium and long term).

- A more comfortable and enjoyable working environment.
- A concern about the decline and loss of remnant vegetation on the farm.
- Tree plantings add value to the property.

A combined team from CALM and Agriculture Western Australia helped Neil and John develop a whole-farm plan, incorporating tree belts (blue gum, radiata pine and salt tolerant species) sited for best effectiveness. A comprehensive study of soils, groundwater, salinity and climatic factors was undertaken as a basis for the plan to give the venture the best chances of success.



A five-row belt of blue gums provides shelter from cold winter winds for these heifers on Neil Hopkins' and John Cutbush's dairy farm near Busselton.

(of better pasture growth and a more comfortable environment for the animals), would result in improved milk production. Milk production has gone up since the first trees were planted four years ago but Neil and John say it is difficult to attribute all of the increase to the trees because they have made other improvements to their farming methods. Tree plantings now comprise 13 per cent of the farm. Neil and John intend further plantings on a newly acquired 60 ha block.

Other considerations that supported their decision to plant trees were:

- A need to prevent further wind erosion on sandy patches.



Laneway on the Hopkins/Cutbush farm with three-year-old shelterbelts of pines (left) and blue gums (right).

Helgo and Helga Huebner

Orchardists, Donnybrook

"With farm forestry I can use my less productive land and turn it into dollars and cents."

HELGO HUEBNER

In developing their 'Sunny Hills' orchard, south-east of Donnybrook, Helgo and his wife, Helga have introduced farm forestry to their property.

Helgo says the farm forestry component arose simply because some of his land was not suitable for orchard trees. While it could have been used for grazing, a large amount of fencing would have been necessary (this was not considered feasible) to prevent damage to the orchard by livestock.

The Huebners planted blue gums on their spare land for the following reasons:

- Products from the trees will provide additional income (demand for pulpwood appears high).
- Trees benefit the environment (especially in controlling salinity).
- Relatively low inputs are required to establish and manage the trees.
- Trees are seen as a low risk investment.

- Trees improve the appearance of the farm landscape.
- Trees add value to the property.

Helgo's 5 ha of blue gums are now eight years old. Thinnings were sold for pulpwood in 1997, to reduce the stocking from the original 1250 stems/ha to 175 stems/ha. The remaining trees have been pruned to 6 m. Helgo is aiming for the high quality sawlog market with these trees but says a final decision on how the trees will be sold will depend on market conditions.

Helgo believes that most farmers would benefit from having some part of their land planted to trees - to capture the environmental benefits of shelter for pasture, crops and livestock and for control of rising watertables. He also says if contemplating farm forestry, it is important to consider how the trees will be harvested.

View looking across the Huebners' Donnybrook orchard to a 5 ha planting of blue gums. Planted on land not suited to orchard trees, these blue gums will provide a valuable source of diversified income in future.

