



Five-year-old swamp sheoak (*Casuarina obesa*) and debarked posts from 2002 thinning operation.

Market potential for sheoak fence posts

A case study by **TIM EMMOTT**, Greening Australia WA

MANY landowners in the south-west of Western Australia have established trees on their properties for a range of benefits including land protection, salinity control, shade and shelter and income.

To achieve an income from timber, the trees need to be managed, and commercial markets for both the thinnings and sawlogs found. One potential market for the thinnings is fence posts.

In the Great Southern region of WA, the Bandicoot nursery managers are growing a variety of eucalypts, acacias and sheoaks for sawlogs on their property.

New tools for protecting and restoring local environment

Greening Australia has developed a new package for addressing priorities in catchments and regions across Australia.

Through '*Changing Lives and Landscapes*', Greening Australia will work in partnership with leading scientific and research agencies to give communities access to cutting edge techniques and information to tackle local environmental issues.

"The National Action Plan on Salinity and Water Quality and the Natural Heritage Trust have challenged Australia's regions to devel-



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op, implement and monitor catchment based strategies for natural resource management," Chief Executive Carl Binning said.

"Through Changing Lives and Landscapes we will work communities to devise, target and deliver programs that produce the natural resource outcomes sought by all stakeholders."

The package comprises;

- veg link – comprehensive technical advice, tools and training in vegetation management
 - river recovery – techniques, tools and incentives for restoring the health of Australia's rivers & waterways.
 - catchment scorecard – improving regional outcomes through better monitoring & evaluation
 - bush benefits – techniques, tools and incentives for conserving Australia's unique plants and animals
- Further information is available at: www.greeningaustralia.org.au



Norman Bario of Minorba post treatment plant discussing market potential of sheoak posts with tree grower, Bill Hollingworth.

It has been decided to thin three sheoak species and investigate the potential to use the thinnings for fence posts.

The three species are: swamp sheoak (*Casuarina obesa*), swamp oak (*C. glauca*) and rock sheoak (*Allocasuarina huegeliana*).

The trees were planted at 1000 stems/ha. At age 12 to 36 months the trees were progressively form and clear bole pruned, and at age four years the stand was thinned to 250 stems/ha and crop trees pruned.

This year the trees will be five years old and will be thinned to 150 stems/ha and the retained trees high pruned to above three metres.

Thinning of the swamp sheoak and rock sheoak stands, and treating some of the posts are currently taking place.

A sample of 100 posts (50 swamp sheoak and 50 rock sheoak) was selected and, following debarking and trimming, the posts were transported to a commercial treatment plant.

Posts were then treated with copper-chrome-arsenic (CCA) using the standard full cell treatment method in a vacuum/pressure cylinder.

Plant manager, Norman Bario, indicated that hardwood posts are denser than pine posts and require a higher loading of preservative in the

sapwood, meaning the sheoak posts will need a second treatment.

If large numbers of hardwood posts were available, the treatment plant could be adapted to treat hardwood in one schedule and still meet the Australian standards. A sample from the sheoak posts will be sent to a laboratory to confirm CCA penetrations and loading.

Unfortunately no genetically improved seed was available when these trees were sown and this, combined with the low initial stocking, has produced poorly formed posts.

The poor form would also make it difficult to install them using a mechanical post driver. It was

accepted that post quality was not high enough for the retail market, but could be used as a lower quality 'farm-grade' post.

Norman indicated that the cost of treating your own posts at his plant was about half the cost of buying CCA-treated posts from a local supplier.

Sheoak posts can also be readily treated with other preservatives, including high temperature creosote (HTC), using the on-farm methods of hot and cold bath or cold soaking.

HTC is an oil-borne preservative and gives good protection from weathering.

In 1994 a fence post trial was established near the Wheatbelt town of Popanyinning, which is assessing the performance of swamp sheoak and rock sheoak fence posts treated with HTC.

After nine years in-service, the posts are performing well with no signs of decay or termite attack. These posts are expected to last another 10 years.

Finding markets for thinnings will provide growers additional income. Fence posts are one such market; other potential markets being investigated include biomass for green power generation and firewood.

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Greening Australia has a national contract with Agriculture, Fisheries and Forestry – Australia to deliver Farm Forestry Regional Support, which aims to increase recognition of the benefits of farm forestry among landowners, community, government and regional bodies.