

Making Headlines:

Word from the Chair

Plantations, carbon storage and climate change

On-ground support

Trees as windbreaks

Oil Mallee industry developments

Scenario Planning and Investment Framework

New markets for eucalyptus oil

Desert timbers

Brushwood industry developments



Edition 6

Winter 2008

FOCUS ON A TREE FARMER

COLIN MILLS - OIL MALLEE GROWER

Colin Mills and family have been planting mallees for the last eight years for windbreaks and to lower the watertables in paddocks at risk. The belts of mallees have done their job well, having saved at least one large paddock from salinity. One of the best advantages of the system is that they do not get the wind blows. 'We are not as concerned about these paddocks in summer any more and the alleys give extra protection for the sheep' said Colin. 'If we do end up being able to harvest the mallees for biomass production, then that will be a bonus'.

The planting design consists of ten metre wide belts of four rows with mostly 36 metres between the belts to suit their machinery. This was calculated to suit twelve metre sections based on a forty foot bar and eighty foot boom. This gives them approximately 10 to 20% coverage with mallees in those paddocks. In areas where the mallees may struggle for moisture Colin is happy to reduce the ten metre wide belts to three rows. Their worst winds blow from the northwest so alleys run at angles to this.

Over the years the Mills' have perfected their planting methods and can count on a 90% survival rate. Each year the Mills' crop approximately 1,000 hectares per year and target the paddocks for planting in line with the need for trees and their cropping program. They currently have approximately 100,000 mallees planted in alley systems on their farm.

Lessons they have learned:

- 'Don't put weaners in newly planted mallees!' However, over the years Colin has found that you can put older sheep in six months after planting, 'especially if they have been in mallee paddocks before and know they don't like to eat them.'
- 'Spray just before planting. There is a lot of resistance around and you cannot spray once the trees are growing.'
 - 'Leave an access gap in the alleys for sheep work every 150 to 200m.'
 - 'Don't rip too far ahead as this may dry the site out.'
 - 'Don't accept sub standard seedlings – don't hesitate to turn them back, best not to even let them off the truck.'
- The Mills no longer mound as they have found that if pregnant ewes lay down they often cannot get back up and can die.

For more information on how you can incorporate oil mallees, contact the Avon's Farm Forestry Development Officer, Antony Crum on 9690 2268.

AVONGRO T. 08 9291 8249 www.avongro.com.au E. mdurcan@iinet.net.au

W E S T E R N A U S T R A L I A

A Word from the Chairman

Welcome to this sixth edition of the AVONGRO newsletter. Once again it is being produced thanks to funding from the Avon Catchment Council.

I am pleased to announce that PFDCs have graduated in their sphere of influence and are represented on the newly created Plantations and Farm Forestry Ministerial Advisory Committee, advising the Minister of Agriculture the Hon Kim Chance, by myself and Leonie Offer of Trees South West. Ian Stanley of Kalannie and I are mainly representing land managers from the low rainfall zone of the Wheatbelt with an interest in tree crops. This will allow us to have greater professional input to government decision-making on the issues involving the concerns of managers of private forest estates, including farmers. These are important issues as we need to develop a close working relationship as became apparent at the recent national Private Forestry Development Committee meeting - such as private forest management which has become targeted in some regions by extreme groups preventing freehold landowners from managing their own forestry estates. We need clear guidance going forward for the management and harvesting of our tree crops and long term security of the asset. A Ministerial Advisory Committee is not a secret society or closed shop, we are encouraged to report back to our constituents and report concerns back to the Committee. Please do not hesitate to contact me to discuss any issues you would like me to bring to the attention of the Committee.

Private Forestry Development Committees' Business and Strategic plans have been reviewed by consultants, URS, and while WA did not line up with the Eastern States' expectations, this has inspired us to review our Strategy earlier than originally intended. It is not that our Business Plan had shortcomings, it was rather that it was regarded by the reviewers as being too broadranging. I am not yet sure how we are to reduce the Business Plan as we are actually doing what is covered.

I am pleased also to announce that AVONGRO has been contracted by the Avon Catchment Council (ACC) to co-deliver the remainder of the ACC's Native Plant Industry Development program in partnership with the Forest Products Commission. AVONGRO's tasks will be to assist with various areas of industry development. This contract has enabled us to sub-contract Helen Job to place the 160,000 ACC subsidised Brushwood seedlings and lead the Brushwood Industry Development Planning. We will be assisting the Australian Sandalwood Network with the 7th edition of their newsletter 'The Sandalwooder', and with their Autumn Field Day and Research Update. Thanks to this contract we will be able to help both the Brushwood and Sandalwood growers towards developing self-sustaining Collaborative Business Models with the assistance of Peter Wells of Cooperatives WA. For their part, Forest Products Commission (FPC) have employed a Farm Forestry Development Officer for the Avon whose main tasks will be to place the 85,000 ACC subsidised Sandalwood hosts, establish two further *Casuarina obesa* trial sites and GPS existing trial sites that may provide important information as to other species with commercial potential for the Region. Based at the ACC offices in Northam, the FFDO will also be available to answer general farm forestry enquiries. This close working relationship between the ACC, AVONGRO and FPC can only bode well for the future of farm forestry in our region. All aspects of the contract must be delivered by the end of June this year.

Disclaimer

The information provided in this newsletter have been collated from the best available information at the time of writing. Please check with a reputable revegetation advisor prior to making any decisions based on the information presented here.

Ian Hall
AVONGRO Chairman

'A sustainable commercial tree crops industry integrated with existing regional land use systems which enhances the social and environmental benefits for the Avon River Basin.'

Plantations, Carbon Storage and Climate Change

By David Thompson, Plantations 2020 Vision Coordinator (02 67713833 or david@care.net.au)

As the climate change issue reaches fever pitch, interest in the use of forests as a means of removing carbon dioxide (CO₂) from the atmosphere has accelerated rapidly. Carbon storage in new forests can provide a cost-effective form of net greenhouse gas abatement, and a valuable source of transitional emission reductions until new energy technologies are developed. Forest establishment can contribute to other social and environmental outcomes.

How much carbon do forests store?

Forests planted on cleared agricultural land can remove 5-30 tonnes per hectare of CO₂ equivalents from the atmosphere annually.

Australian forests store 10.5 billion tonnes of carbon, mostly in native forests. On average, 4 tonnes of carbon per hectare is stored across the entire Australian forest estate. The Australian forest estate stores 38.5 billion tonnes of the greenhouse gas CO₂. In 2005, the Australian Greenhouse Office estimated Australia's total CO₂ equivalent emissions were 559 million tonnes, so Australian forests are storing 69 years worth of 2005 annual emissions.

Future carbon storage

The potential of Australian forests to store more carbon depends on the rate of new plantings or forest regeneration, harvesting and growth rates, and tree deaths by fire, pests and disease. 73,000 hectares of new plantations are planted annually, and 40,000 ha of harvested plantations are re-established. Continued or increased carbon storage in plantations depends on the maintenance or acceleration of this activity.

Accounting rules, plantation investment, carbon trading

Rules for using plantations for carbon storage and trading are still under development. In theory, under Kyoto, only the carbon stored in forests planted post-1990 on cleared land are eligible for trading. Accounting rules exclude any carbon that might be stored through 'forest management' mechanisms (eg. native forest management, management of older plantations), in part because of the downside risks to the national account.

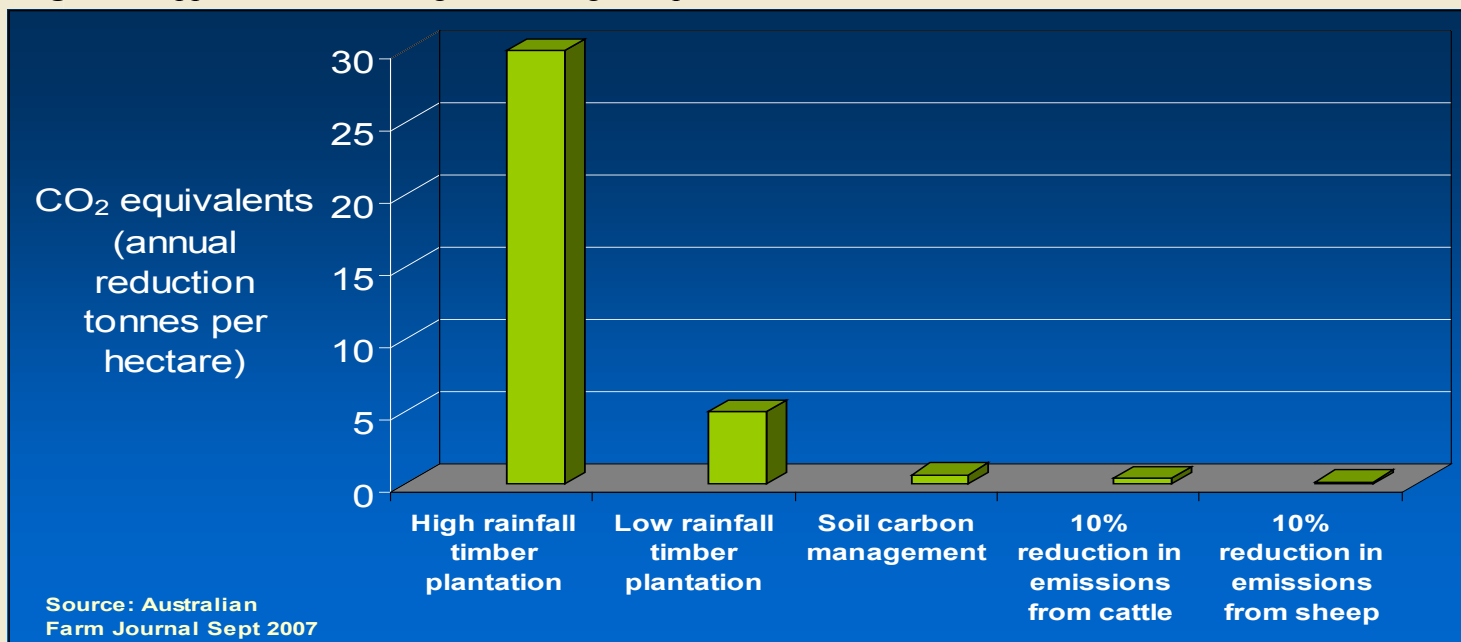
The concepts of additionality (Is a plantation additional to what would have been planted anyway?); and permanence (How long do trees have to remain in the ground, is harvested timber regarded as a carbon emission?); will influence the attractiveness of plantations as an investment for carbon storage.

Wood is a greenhouse friendly material

Timber from plantations performs favourably compared to competing materials and timber can store up to 15 times the amount of carbon that is released during its manufacture.

A positive environmental outcome from plantation expansion is the accelerated rate of greenhouse gas abatement from plantations relative to agricultural land uses. A number of mechanisms are being investigated to curb agricultural emissions. Current evidence suggests that plantations are ahead in their capacity to remove CO₂ from the atmosphere (Fig 1).

Figure 1: Approximate rates of greenhouse gas sequestration or abatement



Industry Profile - David McFall, Mallee boy



David McFall

David McFall has been responsible for organising the planting of approximately eight million oil mallees throughout the Western Australian Wheatbelt. His vision and passion for the oil mallee industry and other tree crops first began at Kojonup in the early 1990's and has since seen him work closely with land managers and representing the oil mallee industry at conferences and Field Days. David has also assisted in gaining financial support from the Avon and South West Catchment Councils through NAP to further mallee plantings in the regions.



David is currently the manager of the Upper Great Southern Oil Mallee District. His aim is to work with land managers to incorporate oil mallees and other tree crops into their broadacre agricultural systems. As a general rule David assists land managers design their plantings and correctly locate them so that they strategically fit in with machinery and cropping programs. The aim is for the tree crops to cover approximately 10% of the farm - the minimum some scientists feel is required to evenly lower the watertables across sites at risk from rising groundwater tables and salinity.

There is currently renewed interest in industries based around mallee biomass, particularly for renewable bioenergy technologies.

David can be contacted on 9881 5373
or email templemc@treko.net.au



Trees as Windbreaks - Ag Bulletin 4723

by Tom Sweeny, Department of Agriculture and Food WA (9690 2154
or tsweeny@agric.wa.gov.au)

There is a new bulletin (4723) that makes for worthwhile reading if contemplating the use of trees for windbreaks. While much of this is common sense the key points are:

- Locate them around areas that are considered most at risk;
- Construct them so that they are at right angles to the most damaging winds;
- Longer taller windbreaks give protection to the widest distances;
- Avoid gaps between or under trees;
- Sheep that are off-shears and lambing ewes need priority for those densely planted low growing trees/shrubs;
- With respect to spacing of tree belts, a rule of thumb is 30 times the height of a mature tree eg. 5m then 150m. This distance can be reduced for areas of high risk;
- 3 rows of trees is adequate;
- Deep rip along both sides to minimise root competition with annual crops and pastures.



Other references indicate that while tree belts are unlikely to reduce yields between them, gains of up to 20% occurred in seasons where there were severe wind events. Another interesting fact is that erosion increases 8 fold for a doubling of wind speed.



Other benefits from tree belts include use of sub surface moisture (assisting the fight against recharge – even if small), drying out of waterlogged areas, protection for stock and more efficient animal production as well as biodiversity effects.

For a copy of the Bulletin, contact your nearest
Department of Agriculture and Food WA office or contact Tom direct.

New Farm Forestry Officers for the Avon

Antony Crum comes to us from the Forest Products Commission's (FPC) Katanning office. Antony has a Degree in Environmental Science from Curtin University with a focus on NRM. He spent the past year working as an FPC Operations Officer, looking after the on-ground works for their sharefarming operations in that region. His main tasks were planning, supervision of contractors and monitoring.

His new role as full time Farm Forestry Development Officer for the Avon NRM region will be to provide on-ground support for land managers wishing to incorporate tree crops in their farming systems. He will also be placing the 85,000 Avon Catchment Council funded Sandalwood hosts and mapping existing demonstration sites in the Avon.

Antony's position is funded by the Avon Catchment Council but is hosted by FPC so that we as a region have access to the best farm forestry technical advice available. He is based at the Avon Catchment Council Offices at Northam but will be travelling around the region visiting land managers wishing to incorporate tree crops into their farming systems. Antony 'wants to make a difference' and is looking forward to tackling the environmental issues in the Avon with positive solutions.

Antony can be contacted on 9690 2268 or email antony.crum@fpc.wa.gov.au



Antony Crum

Tom Sweeny has been appointed by the Department of Agriculture and Food WA as their Integrated Farm Forestry Systems Development Officer and has started spending half of his time on farm forestry related issues. Tom will be providing an important link between traditional agricultural systems and the farm forestry industry in the Central Agricultural Region of Western Australia.

Brief work history:

Work Locations – Narrogin, Northam, Jerramungup and Albany

Northam – two visits – 1973-1989 and 2000 – 2008

Work experience – environment, agronomy, planning and extension

Qualifications – Bachelor of Agricultural Science, Master of Applied Science and Diploma of Education

Tom's thoughts on integrated farm forestry (or agroforestry):

- Believes it is important to start small and safeguard the bulk of farm area for mainstream agriculture as it has occurred in the past;
- Any new plantings need to fit in with existing farm practices;
- Has marginal interest in the >400mm stories;
- Important to work from the market backwards with any enterprise eg. Harvester and plant to take bulk produce;
- Expectations need to be realistic and all the challenges in the process need spelling out up front;

Tom will be keeping us up to date on ways to integrate commercial tree crops in the broadacre agricultural landscape. Please contact Tom direct to discuss your ideas on these topics or for any suggestions on how tree crops may better complement traditional agriculture.

Tom can be contacted on 9690 2154 or by email: tsweeny@agric.wa.gov.au



Tom Sweeny

Scenario Planning and Investment Framework Tool

by Philip Polglase and Charlie Hawkins (Charlie.Hawkins@csiro.au)

The Scenario Planning and Investment Framework (SPIF) tool is a forestry planning and extension geographical information system (GIS) that can be used to target where to establish deep-rooted woody perennials for desired growth, carbon sequestration, biodiversity enhancement, salinity reduction and water impacts outcomes. It is an easy-to-use demonstration, education and decision making tool designed for extension officers, consultants and landholders with basic computing skills and knowledge of GIS.

Integration of targeted farm forestry systems with traditional agro-pastoral farming can provide positive commercial and environmental outcomes both on and off-site for the public and private investor given an understanding of the positive economic and environmental returns. It can:

- Develop growth and carbon sequestration GIS surfaces (maps) for the focus regions.
- Integrate existing (and generate where necessary) salinity, surface and ground water, spatial GIS surfaces.
- Provide and report detailing the process for:
 - Regional and farm-scale targeting tree planting for delivery of desired environmental and commercial outcomes.
 - Use of the “Annual Equivalent Returns” AER tool for determining the profitability of different forest systems across a particular area of interest.
 - Assessment of plantation proposals for commercial environmental outcomes.
 - Measurement of growth, carbon sequestration, Plantation Biodiversity Score, and reduction of in-stream salinity.
- SPIF can operate with high-resolution aerial photography so land managers can design their sustainable farm on software on the desktop or online.
- SPIF links profitability to positive NRM outcomes reporting information with maps and spreadsheets. Landuse change with farm forestry can be applied in a specific geography and the economics and environmental results can be rapidly visualised.
- SPIF has proven to be effective with decision making and uptake of sustainable production for positive NRM outcomes promoting biodiversity, salinity and livestock shelter benefits at farm scale.
- SPIF data sets provide farmers with national-scale farm/hectare scale data given availability of data at hectare scale.

The SPIF tool summarises complex scientific modeling into a visual GIS tool summarising the commercial and environmental outcomes associated with different integrated farm forestry systems. The tool helps create links between public and private sectors by reporting both environmental and economic outcomes associated with new plantings.

To date trials have been conducted in Victoria and in the Warren-Tone in Western Australia. We hope to be able to find the funds for a trial in the Avon in the near future.

Web address: (interim) www.ensisjv.com/cef <http://www.csiro.au/resources/pf14y.html>

Avon Catchment Council supporting tree crops

The Avon Catchment Council has recently funded several events in the region.

Wednesday March 19th: Research Update and WA Agroforestry Working Group meeting at Northam was attended by 24 people. Topics included agricultural adaption and climate change and water use in oil mallees.

Monday April 7th: Sandalwood Research Update and Autumn Field Day at Beverley was attended by 75 people. One research highlight was the use of *Acacia saligna* to boost Sandalwood growth in the early stages.

Oil Mallee Association goes National

At the recent Inaugural National Oil Mallee Conference held in Perth it was announced that the Oil Mallee Association (OMA) will broaden its borders to include anyone in Australia with an interest in being part of the industry.

The highly successful Inaugural National Oil Mallee Conference was held on Friday March 14th, attended by over 170 people from around Australia. Key presenters spoke of the economic resilience of the oil mallee system and its benefits as part of a new production system for low-rainfall agriculture. The Honourable Kim Chance, Minister for Agriculture, Fisheries, Forestry and the Mid-west officially opened the conference. He told delegates that 'Not only does it (the oil mallee) provide economic solutions for the farmer, but could offer solutions in the form of providing new rural industries, therefore retraining communities and benefiting farmers socially.'

The conference is part of national work being funded by the Commonwealth Department of Agriculture, Fisheries and Forestry to assist the OMA with a coordinated approach to developing the industry.

While mallees do seem to be the best fit to be incorporated with low-rainfall, broadacre agricultural systems, there are still challenges ahead which the OMA, the Oil Mallee Company, the Department of Environment and Conservation, Future Farm Industries CRC and others are addressing.

Some of these are the need to build on past achievements by improving:

- genetics and seed production; and
- yield predictions of above and below ground biomass.

New challenges include:

- reducing establishment costs;
- demonstrating the natural resource management benefits of the mallee system;
- increasing biomass production through delivering water direct to the trees through various methods;
- identifying a range of opportunities for the biomass;
- recognition of the co-benefits of mallees to the existing farming system and agricultural landscape;
- development of a prototype mechanical harvester and efficient transport system;
- creating specifications for biomass production (chip size);
- developing products for markets; and
- investment in planting and processing.

In the meantime it is recognised that oil mallees are the tree crop with great potential for our dryland broadacre agricultural areas and are well worth persevering with.



Avon Catchment Council supporting tree crops

Other ACC funded support for the 2008 planting season:

- 160,000 subsidised Brushwood seedlings
- 85,000 Sandalwood hosts
- 20,000 *Casuarina obesa* for demonstration sites
- 536,000 oil mallee seedlings on 25 farms
- Farm Forestry Development Officer
- Cross-regional Oil Mallee Project Officer
- Part-time Brushwood Coordinator
- Capacity building for tree crop grower groups
- AVONGRO newsletters
- Tree crop extension materials
- Oil Mallee grower stories
- Mapping of demonstration sites
- One Sandalwood newsletter

New Markets for Eucalyptus Oil

Geoff Pain, Elder Market Research (0437 703 616 or geoff.pain@bigpond.com)

Eucoil applications in Medicine

Geoff Pain was contracted by Verve Energy to research alternative uses and global markets for the projected large quantities of eucalyptus oil that might be produced by several full-scale IWP plants located in the Western Australian wheatbelt. He found that the current total world production of Eucalyptus oil (Geoff terms this 'Eucoil') is approximately 7,000 tonnes per annum which already produces billions of dollars worth of consumer products.

With each 5MW IWP plant expected to produce in the region of 1,000 tonnes of Eucoil per annum, Geoff proposes that new applications utilising bulk quantities of Eucoil will be needed. While conducting his research and writing his report, Geoff conducted his own experiments on Eucoil through which he demonstrated that asphalt can be recycled, high gloss enamel paint can be made (including its use as a marine anti-foulant), along with several other innovative uses.

Eucoil for flavour and odour applications

Industrial solvent

One of the largest potential markets for Eucoil is as a replacement for chlorinated solvents which are being eliminated due to their toxicity and destruction of the ozone layer. Geoff had identified potential for oil sands and oil shale extraction, pipeline, ship and tank cleaning. Eucoil has the advantage of easy recovery and reuse by steam distillation.

It is expected that the surge in oil prices will increase demand for recycling of asphalt and a reduction in fuel consumption in heating the asphalt. The use of diesel fuel for asphalt removal and as a release agent is no longer allowed by the US Environmental Protection Agency (EPA) due to the carcinogenic compounds present. The Australian market for road making solvents is over 35,000 tonnes per annum.

Eucoil influences organisms:

- Plant control
- Animal control
- Insect control

Proposed Eucalyptus Oil Demonstration Centre –Albany

A Eucalyptus Oil Demonstration Centre is proposed for Albany that will conduct pre-competitive research and development. The Centre hopes to expand the markets for blue gum plantation as well as mallee Eucoil.

The plan involves generation of new IP ownership in proportion to cash injection. The facility would collect, blend, refine and sell oil from various suppliers, from small scale to large 50MW eucalypt power stations. It would be a knowledge centre with a WA regional focus. Other states would be involved, e.g. Queensland DPI that has developed a literature database and initiated R&D over the last few years.

Eucoil has bulk applications

Proposed R&D topics include:

- Harvesting plantation waste
- Separation of minor constituents and identification of their bioactivity
- Allelopathy and its potential in increasing shelf life of food, including potatoes
- Insect interactions
- Post-distillation material markets, e.g. antihelminthics
- Clean coal
- Asphalt blends incorporating rubber and waste polystyrene
- Salt bricks from polystyrene waste

The emphasis would be on demonstration – taking full advantage of 3-year initial grant funds, matched dollar for dollar by industry. The program would establish Western Australia as leaders in the dramatic increase in volume of Eucoil produced and the world centre of expertise in exploitation of minor constituents which have not yet been fully evaluated due to their scarcity to date. Some of these sell for \$200,000 per kilogram.

Eucoil kills harmful organisms

Other topics by Geoff Pain:

Ethanol denaturant
Clean Coal with Eucoil
Environmental impact of using Bulk Eucoil

Strategy Review - update

AVONGRO is fortunate to have received funding from Lotterywest to conduct a review of the Avon River Basin Tree Crops Development Strategy. The original strategy on which we have been basing our work was compiled in 2003 by Tim Emmott with wide-ranging stakeholder contributions. At that time AVONGRO did not exist and so the national goals and objectives for all Private Forestry Development Committees (PFDCs) were not included. The original Strategy has guided us well yet many of the actions identified in the 2003 Strategy have since been achieved and with the review of the national PFDC program it is timely to conduct our own review to set the direction for AVONGRO's work over the coming years.

Sue Middleton of WA Grassroots Developments has been contracted to lead us in the review. We would like to acknowledge the generous funding from Lotterywest without which we would not have been able to proceed. If you would like to contribute, contact Monica (9291 8249 or mdurcan@iinet.net.au).



Funding Summary

AVONGRO, as with all Private Forestry Development Committees, is funded primarily by the Commonwealth Department of Agriculture, Fisheries and Forestry through the Natural Heritage Trust until June 2008 with matching cash and in-kind support from a range of State Government agencies. In Western Australia the Forest Products Commission and the Department of Agriculture and Food WA contribute financially as well as significantly in-kind. These funds go towards operational expenses however to do projects and progress actions identified in our Strategy we must find additional funds. Since our inception in early 2005 AVONGRO has managed to secure funds for the following projects. We wish to thank all sponsors of these projects without whom we could not achieved our aims.

FUNDING FROM	FOR	AMOUNT
RIRDC	Native Private Forestry Field Day	\$1,000
Lotterywest	Trialing direct seeding of pelletised mallee seed	\$28,500
SEDO	'Bioenergy in the Avon' Case Studies	\$38,500
Lotterywest	Review of the Avon River Basin Tree Crops Development Strategy	\$17,000
Wheatbelt Development Commission	Brushwood Industry Development Plan	\$12,800

Other funds have also been obtained with thanks from the Avon Catchment Council to produce these newsletters and extension packages and to assist tree crop grower groups with their capacity building, promotion and extension.

Eucoil Bulk Applications (by Geoff Pain)

- | | |
|---|--|
| <ul style="list-style-type: none"> • Anti-oxidant • Chiral precursors • Specialty chemicals • Supported catalysts • Cosmetic ingredient • Sunscreens • Asphalt solvent • Degreaser • Desulfurization of coal • Ethanol Denaturant • Frothing flotation agent • Oil sands extraction • Paint solvent and stripper | <ul style="list-style-type: none"> • Pesticide spray carrier replacement for kerosene • Plastic solvent • Rubber solvent • Soil remediation • Solvent • Wood polish & preservative • Wool wash • Firelighter • Fuel (liquid) • Fuel additive |
|---|--|



Desert Timbers: A valuable resource

by Alan Briggs, National Trust of Australia (WA)
(9321 6088 or alan.briggs@ntwa.com.au)

The National Trust of Australia (WA) is working to establish a centre of excellence to sustainably develop and utilise desert timber harvesting from the wood lines of Kalgoorlie, to be processed and marketed at the historic No 4 Pump Station near Merredin. The centre will conduct research into the sustainable management and use of desert timbers and it will draw on the workforce of the Merredin and Kalgoorlie regions, creating sustainable employment and developing business opportunities.

The National Trust is a not-for-profit community organisation, which has been leader in the heritage industry in Western Australia since its establishment in 1959. The Trust manages more than 80 heritage places around the state and undertakes numerous special projects each year.

No 4 Pump Station is jointly owned and managed by the Merredin Shire and the National Trust. The building and its surrounds provide excellent opportunities for the development, interpretation and marketing of the Desert Timbers Centre of Excellence, as well as the Golden Pipeline Project and natural heritage of the Wheatbelt. There is also the opportunity for the building to accommodate in-house artisans, producing fine wood products within a demonstration facility for visiting buyers and tourists.

The Centre of Excellence will conduct research and development into the utilisation and sustainable management of desert timbers in the Kalgoorlie region, the establishment, management and harvesting of plantation grown timbers in the Merredin region and the marketability of the resulting timber products. Research will also determine the viability of future bio-generation from the region, utilising waste products from the desert timber project, bio-waste from Merredin and stubble and other bio-products grown on land within the region. Education and training is a key component of this project. Through a partnership with CY O'Connor TAFE, training and apprenticeship opportunities will be provided to community members of all ages, focussing primarily on Indigenous people. Transferable skills and qualifications will be gained, adding to the development pool the Region.

The strength of this project lies in the depth of partnerships within and between Indigenous people, the general community and government at both State and Federal levels. The National Trust is working in partnership with the City of Kalgoorlie-Boulder, the Shire of Merredin, CY O'Connor TAFE, Inglewood Timber Products, the Goldfields Specialty Timber Industry Group and the Department of Industry and Resources to develop the project. With funding from the Wheatbelt Development Commission, a feasibility study is being commissioned to determine the viability of establishing and operating the proposed centre of excellence. It is hoped that this will be completed by the end of the year, allowing this exciting project to progress to the next stage.

For more information about the desert timbers project, please contact the National Trust or visit our website at www.naturalheritage.org.au

Economic development and sustainable production

Our major funders and supporters

All Private Forestry Development Committees are funded primarily by the Commonwealth Department of Agriculture, Fisheries and Forestry through the Natural Heritage Trust until June 2008 with matching cash and in-kind support from a range of State Government agencies. In Western Australia the Forest Products Commission and the Department of Agriculture and Food WA contribute financially as well as in-kind.



Dense stand of goldfields timber. Photo by Alan Briggs/ National Trust

AVONGRO Membership Form

ABN: 33 120 830 918

Membership to AVONGRO is open to anyone with an interest in tree cropping.

Membership fees (includes GST):

State Government	\$550
Commercial Industry (more than 5 employees)	\$275
National not-for-profit organisations and smaller businesses (less than 5 employees)	\$110
Volunteer groups (LCDCs, Conservation Groups...)	\$55
Farmers/growers/community members	\$20

Post this form with your payment to:
Monica Durcan, Executive Officer
56 Broadway Road
BICKLEY WA 6076

Yes please, I/we would like to join AVONGRO:

Name: _____

Address: _____

Town: _____ State/Post code: _____

Phone: _____ Fax: _____

Email: _____

Signature: _____ Date: _____

Payment of \$ _____ is enclosed

Brushwood Industry Developments

Helen Job, Avon Brushwood Coordinator: brushwood@iinet.net.au

On 14th December, 2007 we were successful in developing a coordinated plan for the Wheatbelt Brushwood Industry. We have formed a Steering Committee and subsequently advertised for consultants to compile the plan for us. It is with great pleasure that I announce that Dr Frank McKinnell has been appointed. We expect the plan to be available by the end of the year.

Two field days will be held in April, one in the Northern Catchment Region and one in the Avon Catchment Region. At these field days, the association of brushwood growers will be discussed and move to the next step of becoming a reality.

Some of the topics that will be covered in the field days are:

- Weed control of plantations
- Soils for each type of *Melaleuca* sp
- Plantation size and structure
- The debate about first cut: both sides of the story
- Update on the development plan.

At the field day in the Avon Catchment Region, there will be an opportunity to visit the site that has been harvested, inspect the regrowth and to view the brushwood panel that has been made from the harvested growth.



Helen Job with a Brushwood panel made from locally grown Brush

ACKNOWLEDGEMENT

We are pleased to acknowledge the Wheatbelt Development Commission for the funding provided to compile a whole-of-Wheatbelt **Brushwood Industry Development Plan.**



AVONGRO Associates:

Avon Catchment Council
Tel. Andrew Prior 9690 2250
www.avonnrm.org.au

Forest Products Commission
www.fpc.wa.gov.au

Department of Environment and Conservation
Tel. 9334 0186
www.dec.wa.gov.au
www.calm.wa.gov.au

Department of Agriculture and Food
Tel. Mr Kim Brooksbank 9892 8444
www.agric.wa.gov.au

Oil Mallee Company
Tel. Simon Dawkins 9433 1244
www.oilmallee.com.au

Oil Mallee Association
Tel. Mike Kerkmans 9961 1242
www.oilmallee.com.au

State PFDC Liaison Officer
Tel. Richard Moore 9780 6100
www.fpc.wa.gov.au

Australian Sandalwood Network
Tel. 9621 2400
www.sandalwood.org.au

Acknowledgements

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Photos courtesy of Alan Briggs, Richard Moore, Tom Sweeny, Helen Job and Monica Durcan

