



New species of Wheatbelt spider



The new spider species discovered by John Cornish on his property in Grass Valley

By Kate Raston

John Cornish noticed an unusual white-headed, black and brown-legged spider on his back veranda in July.

Using a jar, he carefully captured the spider and took it to the Department of Environment and Conservation's Northam office.

Staff then called upon spider expert Mick Davis from Wheatbelt NRM, who soon realised the significance of the discovery.

"This spider has been nicknamed the albino trap door spider, and is about the size of a 50 cent piece," Mick Davis said.

"We've handed it to the WA Museum, which has identified it as a new species of trap door spider from the Idiopidae family."

Mark Harvey is the WA Museum's Curator of arachnids and myriapods.

He said the species was similar to a group of spiders found further north at Ballidu and Eneabba.

"The difference is in the way they mate, and the structure of the male pedipalp which transmits sperm to the female," Mark Harvey said.

"The spider is venomous, but is not considered dangerous."

Mark Harvey said the spider was yet to be formally named.

Wheatbelt NRM's Mick Davis said the discovery raised the question of whether there were other species in the area waiting to be discovered.

"The finding is significant, as it highlights the richness of our wheatbelt backyards - where something never seen before can literally just walk up to your back door," Mick Davis.

"It's fantastic people like Mr Cornish are keeping their eyes open and making the effort to find out more about our unique biodiversity

"If people reckon they have seen something unusual and want to know more, we'd love them to contact us on 9690 2250.



Bushcare Grants now open

Do you have a special patch of bush that needs looking after?

Wheatbelt NRM wants to help communities and land holders to protect their local natural areas.

The Wheatbelt NRM Bush care Grants will support community organisations and individuals to manage and undertake on ground works which will manage remnant bush and protect the important biodiversity values of the region.

Grants are available up to the value of \$15,000 for works including revegetation, fencing of remnant bush and pest control.

Closing Date:

To be considered for funding applications must be received or postmarked on or before 15th October 2011. Applications received later than this date will be assessed individually pending adequate funds (if any) remaining from the assessment.

Applications close 15th October 2011.

For more information or an application form

Please contact Mick Davis on 9690 2250 or email mdavis@wheatbeltnrm.org.au

Peter Sadler of Koorda



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Issue 13, Spring 2011

Designed, edited and produced by Wheatbelt NRM

Wheatbelt NRM update

Thankyou for taking the time to read the Wheatbelt NRM newsletter for Djilba - Kamarang (Spring).

We are delighted to announce that Wheatbelt NRM has been successful in receiving funding for continued restoration works at Gwambygine Pool through the State NRM office. In addition to this Wheatbelt NRM has been successful in securing funds for riparian management of Bridle Creeper and athel pine and demonstration of the SaltCap decision making tool through Caring for our Country (CFOC) competitive funding. Staged, best practice management of bridal creeper and athel pine, will be applied in the WA Wheatbelt. The project will engage community groups, Aboriginal trainees, local governments and private land managers. Project activities over two years are expected to deliver a long term project that can be managed by land managers and community groups. SaltCap is a decision support tool that enables landholders to select and establish appropriate saline management systems. The SaltCap tool will be applied at 20 local demonstration sites within two priority areas, Bruce Rock & Trayning.

Wheatbelt NRM has experienced a few staff changes recently; we farewelled our CEO of the past 7 years Peter Sullivan who is moving onto new career opportunities in consulting. We thank Peter for his hard work, dedication and leadership and wish him all the best in the future. We also farewelled Hayley Blakiston, Executive Officer and wish her all the best in her new career with C.Y. O'connor TAFE. Wheatbelt NRM has recently welcomed two new staff members to the Aboriginal NRM team; Kerry Horan will be taking the role of Aboriginal NRM Facilitator and Anika Dent will take the role of Project Manager (Aboriginal NRM).

Wheatbelt NRM will be holding its Annual General Meeting on Thursday the 27th of October at the Bridgeley Centre in Northam.

This year's AGM will feature Professor Paul Hardisty , Global Director of EcoNomics™ and Sustainability for Worley Parsons as the guest speaker. EcoNomics™ is a service which embeds profitable sustainability into all aspects of the project delivery life cycle. Paul has over 20 years of experience advising corporations and government on environmental and social sustainability. He has particular expertise in environmental strategy and decision making, and the financial and economic aspects of sustainability, climate change, water resources and waste management. He is a visiting Professor in environmental engineering at Imperial College of Science

and Technology, London, UK, and an Adjunct Professor at the University of Western Australia School of Business, where he teaches sustainability and climate change issues to MBA students. He is the author of a new book "Environmental and Economic Sustainability" which has just been published by CRC Press . He is a contributor to President Gorbachev's Climate Change Task Force, and a Director of Green Cross Australia, an international NGO dedicated to creating a value shift in society towards a more sustainable future.

We hope to see you there.

Kind regards,

Wheatbelt NRM
September 2011

Nyungar Seasons

Djilba - becoming warmer
(August to September)

Kamarang - rain decreasing
(October to November)



Community tree planting to rehabilitate river's edge.



Some of the Wheatbelt NRM team tree planting near Gwambygine Pool: (l-r) Chris David, Kerry Skinner, Rebecca Palumbo, Mick Davis, David Grasby, Taryn Beagley, Sally Rayner, Guy Boggs, Natarsha Woods, Karen Smith, Sue Carter and Hayley Blakiston.

By Kate Raston

Staff normally more at home behind a computer have left the confines of their offices to help rehabilitate a stretch of the Avon River between York and Beverley.

Employees with the Department of Water and Wheatbelt NRM spent a wet day in August helping to plant more than 3000 seedlings by hand.

They had chosen a spot on the property of David Fleay, three kilometres upstream from Gwambygine Pool.

Revegetation and fencing activities at the property are part of a project to improve the health of the pool.

The Department's Michael Allen said a key focus was trying to reduce sediment levels in Gwambygine and prevent further sediment accumulating.

"By planting trees this will help to stabilise the banks of creeks that flow into the pool and river," Michael Allen said.

"We've already seen an improvement in the condition of the pool after the excavation of 8,000 cubic metres of sand.

"Now we need to work to stop further sediment from entering this important waterway."

Michael Allen said planting by hand meant it stopped further disturbance along the waterways.

"The areas we plant by hand are often water logged and vehicle access is limited," Michael Allen said.

"Planting by hand is a cost effective method of planting out relatively small sites.

"This year we have been involved in planting six sites with a total of 40,000 seedlings."

Natarsha Woods from Wheatbelt NRM said it gave staff the chance to get their hands dirty.

"So often we help facilitate important works like this, but unfortunately we don't often get the opportunity to be at the coal face," Natarsha Woods said.

"It's also good to know these trees will have a great start, with all the wet weather we've had."

The project was made possible thanks to funding from the State government's natural resource management program.

Andrew and Suzi Sprigg



By Monica Durcan

Land manager's name(s): Andrew and Suzi Sprigg with Kaitlyn, Charli and Isabella

Farm Name: P Sprigg and Co

Location: Bonnie Rock/Wialki

Annual rainfall: 300mm

Catchment Group: None but there is the Ninghan Farm Improvement Group

Farm size: 16,000 hectares with 12,500 arable. 20% is original bush

Enterprise mix: Cropping and grazing but seasonally dependant. Growing wheat, barley, some lupins and canola

Soil type(s): All soil types. Wodjil, gravel, breakaway, salmon gum clays, loams, some heavy. 'Goes from good to bad real quick'.

Area and species planted: 200 hectares sandalwood hosts, 5 hectares of brushwood, 600 hectares Carbon Conscious mallees and 50 hectares of their own mallees. Plus some saltbush

Been planting since: 1995

Survival: Depends on the season, usually about 80% survival however have lost some on granite sites where there is no depth of sand.

Approximate % of farm planted: 5% plus about 20% original bush

Benefits of tree crops: Putting wodjil soils and other non

productive soil types to trees and crop the rest or better soil – 'this will be about 10% of the farm'.

Why did they start planting/what triggered their interest:

The need to take poorer performing soil types out of annual agricultural production so they can concentrate on continuing to farm the better land.

Their tree cropping journey:

The Sprigg family started in 1995 with planting 10 hectares of sandalwood hosts, then 130 hectares and have kept planting 'bits and pieces' after that.

'In the beginning we trialed various configurations, made adjustments, then chose a wider spacing and have kept to that for ease of management'. Andrew Sprigg

While the Bonnie Rock area gets an average lower rainfall than some other areas, they can get more summer rain which can mean more weeds in a wet year but in any case they have found that summer rainfall is of great benefit to their tree crops.

In 2008 they were successful in their application to Envirofunds and were granted 62,500 sandalwood host seedlings – which enabled them to plant 200 hectares of light soils prone to wind erosion.

'We actively seek out funding opportunities. There is so much work to do and so many areas that would benefit from being planted that we just could not fund all of the work ourselves.' Suzi Sprigg

Black-flanked Rock Wallabies



DID YOU KNOW?

Black-flanked Rock Wallabies (*Petrogale lateralis* subsp. *lateralis*) are listed on both state and federal threatened species lists

By Mick Davis

Once widespread in WA, Black-flanked Rock Wallabies now only live on isolated rocky outcrop areas in areas like Barrow Island in the north-west, Kalbarri on the coast and also Quairading and Bruce Rock in the central wheatbelt

THERE'S A LOT MORE to granite rocks than just orchids and water... The crevices and sheer faces on granite outcrops across the wheatbelt provide crucial shelter for these rock-hopping specialists.

However, predators like foxes and cats, plus increasingly challenging climatic conditions are placing more and more pressure on the isolated 'island' ecosystems which support each population

SO WHAT CAN YOU DO... to help this species survive? Landholders around Bruce Rock and Quairading can consider getting involved in feral animal control programs like 'Red Card for the Red Fox', and, considering Landholders who have granite outcrops on their property, or are adjacent to isolated populations of Black-flanked Rock-wallabies may be interested in talking to Wheatbelt NRM about what they can do 'in their backyard'. Its only by working together that we can ensure these unique animals are here for future generations to admire.

Contact Wheatbelt NRM on 9690 2250 or email: mdavis@wheatbeltnrm.org.au



Award for Talbot Brook "River Rats"



Some of the Wheatbelt NRM team tree planting near Gwambygine Pool: (l-r) Chris David, Kerry Skinner, Rebecca Palumbo, Mick Davis, David Grasby, Taryn Beagley, Sally Rayner, Guy Boggs, Natarsha Woods, Karen Smith, Sue Carter and Hayley Blakiston.

By Kate Raston

Volunteers working hard to rejuvenate a local waterway west of York, have been recognised for their efforts in the WA Landcare Awards.

The Talbot Brook Land Management Association has won the Department of Water "River Rats" award for 2011.

The region's peak natural resource management group has extended its congratulations to the 80 volunteers.

Wheatbelt NRM's Natarsha Woods said Talbot Brook helped make up an important part of a bigger environmental jigsaw puzzle.

"13 Mile Creek and Talbot Brook both flow into the Avon River, the focal point for much of the environment within the Wheatbelt," Natarsha Woods said.

"It's work like this from many tireless community members that's helping to cut nutrient and sediment loads into the river."

The president of the Talbot Brook Land Management Association Colin Cable said volunteers had fenced seven

kilometres of tributary and planted more than 60,000 trees.

"We engaged the Bush Ranger cadets from Emmanuel Catholic College at Success and the Ross Strata Primary School at Willetton," Colin Cable said.

"Our volunteers, who were mainly local landholders, also planted out rushes to filter out sediment, fertiliser and detergents.

"There was just a natural desire to do something with this environment, and it's really started to pay off."

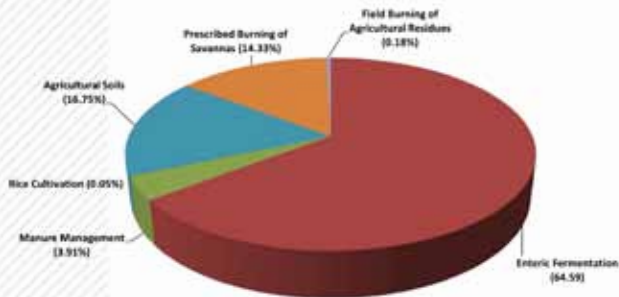
Colin Cable said the award gave the group recognition for their years of hard work.

"Since the group formed in 1993, the community has pulled together and planted more than half a million seedlings and fenced 150 kilometres of fence line," he said.

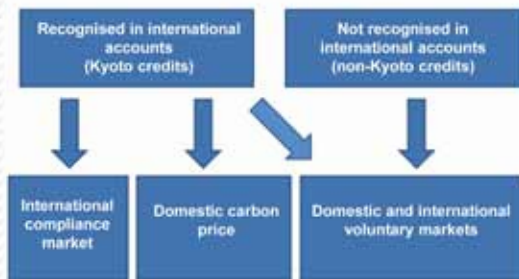
Natarsha Woods said the Talbot Brook Land Management Association was one of Wheatbelt NRM's 50 member groups, helping to shape natural resource management in the region.

Carbon Farming Initiative

Sources of Greenhouse Gas Emissions: Agriculture



Scope of carbon farming initiative



Land Sector Measures

- **Biodiversity Fund** - \$946 million.
- **Carbon Farming Futures** - \$429 million.
 - Filling the research gap
 - Developing methodologies
 - Action on the ground
 - Extension and outreach
- **CFI non-Kyoto carbon fund** - \$250 million.
- **NRM planning for climate change** - \$44 million.
- **Indigenous Carbon Farming Fund** - \$22 million.
- **Carbon Farming Skills**

Land Sector Carbon and Biodiversity Permanence obligations – Biosequestration projects only

- Maintain carbon or hand back credits
- Re-establish carbon after a fire or drought
- Risk of reversal buffer
 - temporary losses whilst carbon is re-established
 - wrong doing that can't be remedied.
- Carbon maintenance obligation



CARBON FARMING INITIATIVE (CFI) LEGISLATION

The legislation to underpin the CFI was passed by Parliament on 23 August 2011. This legislation aims to provide long-term certainty to participants of the CFI and underpin the environmental integrity and market value of carbon credits. The legislation was amended to clarify that determined native title interests (including non-exclusive native title) will hold a consent right in relation to CFI sequestration projects.

The CFI Administrator will be operational in less than three months' time, from the start of December 2011. Project proponents can then register to participate and open an account in the national registry of emissions units. Where CFI methodologies are available, project proponents can begin applying for approval of their projects.

Methodologies for landfill gas, reforestation, manure management and savanna burning have been developed and are currently being assessed by the interim Domestic Offsets Integrity Committee. The Government is working with stakeholders to develop other methodologies including for reduced fertiliser use, increase in soil carbon, restoring rangelands, revegetation and avoided deforestation.

REGULATIONS ON POSITIVE AND NEGATIVE LIST

The Government has released exposure draft regulations for public consultation. These draft regulations deal with activities that would be considered additional and eligible to participate in the CFI and activities that would be ineligible. The commentary explains the criteria for assessing activities for inclusion on these lists and provides more detail on each listed activity.

The list of eligible activities includes the early dry season burning of savanna areas greater than 1 km sq and the management of feral camels (these methodologies are still being considered by the interim Domestic Offsets Integrity Committee as noted above).

For further information on the CFI, see:

www.climatechange.gov.au/cfi.

Or contact Georgie Troup, Project Manager (Sustainable Agriculture) on 9690 2258



Mount Marshall Sandalwood Project off to a flying start

By Monica Durcan

On Friday September 9th, the Honorable Mia Davies MLC, Member for the Agricultural Region, officially launched the Mt Marshall Sandalwood project.

Members of the Mt Marshall community have identified that some areas of wodjil soils do not provide sufficient returns from current agricultural practices.

'I keep trying to crop these areas of my farm', said local farmer Michael Hogan 'but often do not achieve a sufficient return on my investment. However I have been having great results with growing sandalwood and local native hosts on the very same sites'.

A group of Mt Marshall land managers have agreed to target taking up to 50,000 hectares of agriculturally unproductive soils out of agricultural rotations and putting them back to the original native vegetation.

'We are working on planting back what was originally here, but we need the sandalwood otherwise we would still have unproductive paddocks' said Michael. We will need more of the community behind this project to achieve the 50,000 hectare goal.'

The vision is that 50,000 hectares of biodiverse sandalwood plantings would protect good agricultural land from wind erosion while reconstructing the original native habitat and providing income for land managers and the community in the future through harvesting and value-adding to the annual nut harvest and the long-term timber.

WA sandalwood is a long-lived perennial native to the Wheatbelt. A book on the history of Mt Marshall noted that the largest and best sandalwoods originally grew on the wodjil soils,

'so it makes sense to replant those areas back to sandalwood if they are not proving economical for farming' said local enthusiast and planting contractor, Bob Huxley.

'Sandalwood is a hemi-parasite, so needs a host or better still a range of hosts in order to survive and thrive in the longer term.'

In conjunction with the launch, two workshops were held to further explore just what 50,000 hectares of sandalwood would mean to the community from the potential jobs to the investment required. A great amount of support was pledged as a result of the workshops from offers of links to scientific research to product development and marketing.



The Hon Mia Davies MLC planting the ceremonial sandalwood tree with host

The workshops and launch were funded by Wheatbelt NRM as part of their Soil Conservation Incentives Program with Caring for our Country funds. The project is currently being managed by a subcommittee of the Australian Sandalwood Network. For more information on the Mt Marshall Sandalwood Project contact Bob and Ros Huxley on 9684 8008 or email bob_huxley@bigpond.com.

For an idea of the types of sites that are being targeted, see Michael Hogan's story at www.youtube.com/watch?v=XmkP7lfgLrU

GREENER HORIZONS - DVD

By Monica Durcan

In Western Australia lies an area twice the size of Tasmania known as the Avon Wheatbelt. Of the 12 million hectares of land, approximately 8 million hectares have been cleared. This extensive clearing has led to environmental problems including wind and water erosion, salinity and loss of habitat. Agriculture is the predominant industry for this region but with narrowing margins and a changing climate, many who live in the region are looking for other options to be able to keep farming while still looking after the environment. Industry scale planting of tree crops not only addresses these environmental issues but can provide the resources for new industries. This will result in income diversification for farmers and increased local job opportunities, creating diverse agricultural production systems that are more resilient to climate change and variability. This video illustrates five Avon farming families, telling their stories about how they are trying to heal the land while developing new and sustainable production systems for their future, their children's future and the future of their communities.

Imagine – 10% of the cleared Avon Wheatbelt landscape planted to productive tree crops. 800,000 hectares of resources for new industries, regional development, and income diversification for farmers.

Imagine – the NRM benefits these could bring along the way



Andrew and Suzi Sprigg – Bonnie Rock

'its pointless to spend money each year on trying to grow a crop where none will grow. But we still want to farm so we will continue to put in tree crops on unproductive sites and continue to farm the better soils'

Andrew and Suzi Sprigg have planted very large, unproductive sites to different tree crops: mallees in belts, blocks of mallees for carbon, a 200 hectare block of sandalwood hosts, and some brushwood. Andrew has also developed some innovative machinery to suit his tree cropping enterprises. Andrew and Suzi talk of their vision for the future of their community and the role they hope tree crops will play in that future.

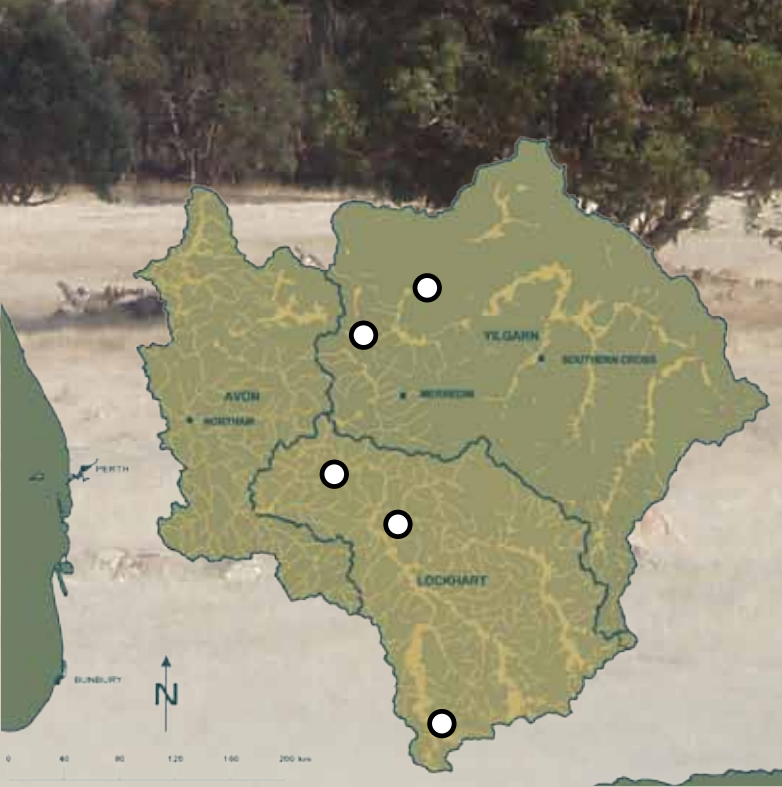
Ian Hall – Aldersyde

'by having the tree crops on these unproductive sites, they physically stop me wasting money'

Ian Hall has observed his landscape over his entire life and identified areas that were just not agriculturally productive. Areas of white sand were causing recharge but were also not providing any regular return and waterlogged areas were increasing. He has often partnered with funders to plant unproductive areas to different tree crops. Ian's approach is to block plant these sites to tree crops, stopping recharge and wind erosion.

Ian walks us through his landscape, showing how different tree crop blocks are making his farm enterprise more productive while also helping the environment. His vision is that this could be replicated across other farms in the Wheatbelt.





Michael Hogan – Bencubbin

'if everyone in our area planted their unproductive wodjil soils to biodiverse sandalwood systems, we would soon have enough resources for local processing – what a difference that would make to our community'

Michael Hogan has large paddocks of aluminum-toxic wodjil soils, some high in the landscape so not only do they 'blow' without cover but also act as recharge areas for an increasing saline area lower down. He has unsuccessfully tried everything available to him with traditional agriculture to make a profit from these sites. In the last few years Michael has started planting these paddocks to biodiverse sandalwood systems which are thriving where he could not achieve any production before. Michael explains how this has come about and shows off some of his sandalwood successes.



Norm and Trudi Quicke – Kulin

'if we had not put in the trees, we would have lost a lot more land to salt than the land taken up by the trees'

The Quicke family is well on their way to planting 10% of their farm to oil mallees to address the salinity and wind stress problems. Planted in belts across his farmscape, Norm has tried many different configurations and has now developed spacings and design that suits his production system and machinery. Norm has noticed the environmental benefits of having mallees as part of his farm – water logging and salinity are decreasing and sheep are much happier grazing between the tree belts. He hopes that one day he will be able to provide biomass for the production of energy locally. Norm shows the different layouts he has tried and gives some tips and hints on establishing large paddocks to mallee belts.



Kingsley and Sandy Vaux – Ongerup

'every farm has awkward and unproductive areas, these can easily be planted to a variety of tree crops dependant on the site conditions'

Kingsley Vaux has planted trees with timber potential, brushwood and species for seed collecting however has more recently planted larger areas to sandalwood. Kingsley believes that revegetating problem sites can provide a return if they are well thought out and planned and that this will also help to stabilise these sites, losing less land along the way. Kingsley walks us through his tree crop journey, showing his various sites and what he has done to make his farm more sustainable environmentally and economically.

Mallees... More than just oil

By Mick Davis and Mike Griffiths

MALLEES are a group of uniquely Australian plants that characterise our national identity. They not only provide a source of Eucalyptus oil used all over the world, but they are tough, resilient to fire and flood, can live in almost any habitat and have a rough 'outback' beauty all of their own.



Dowerin Rose / Pear-fruited Mallee

(Eucalyptus pyriformis)

The large fruit on this mallee give it its common name, but this mallee is also famous for being the floral emblem for the Shire of Dowerin. Like many mallees, the abundant nectar is important for small mammals, birds and many insects.



Smooth-barked York Gum

(Eucalyptus loxophleba ssp. lissophloia)

This mallee form of York Gum has a distinctive 'sock' of grey bark on the lower parts of the stems. This subspecies is common in the eastern parts of the wheatbelt and is common around granite outcrops.



Caeasia Gum

(Eucalyptus caesia)

Although it is now known as a common garden plant, this mallee was originally from scattered populations restricted only to granite outcrops. The abundant nectar and large pendulous flowers are excellent at attracting birds to your garden, while the curly 'minni-richti' bark is an added attraction.



Ribbon-barked Mallee

(Eucalyptus sheathiana)

With characteristically long strips of bark hanging from its branches, this mallee is one of the easier mallees to identify. On a windy day the long strips of bark wave in the wind, eventually falling off to form mounds of bark at the base of the mallee.



Mallee Wandoo [mallee form]

(Eucalyptus capillosa ssp. polyclada)

Unlike its larger relative the Wandoo which grows in a tree form, the Mallee Wandoo naturally grows with multiple stems. Common on gravelly sandy soils, this species grows to 6m and is found around the Wongan Hills and Narembeen districts.



(Eucalyptus tenera)

This twisty and gnarled mallee is found on shallow sandy soils, often below breakaways. With no common name, this mallee is often overlooked in a tangle of other mallees, but has long creamy flowers on pendulous stalks.



Red-fruited Mallee

(Eucalyptus erythronema)

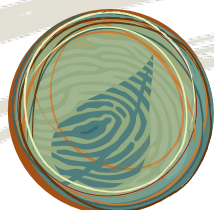
With striking white bark that peels off at the start of winter to expose deep red/purple bark, this species is common throughout the central wheatbelt on gravelly loams and breakaways.



Spider-fruited / Black-stemmed Mallee

(Eucalyptus arachnaea)

This mallee is common in the western wheatbelt on loamy soils, and is often inconspicuous. However it has distinctive, fine fruit with around 8 long bud-caps, which look similar to spiders legs. They often occur in dense patches surrounded by other mallees or shrubs.



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