#### ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

# ACACIA STUDY GROUP NEWSLETTER No. 89 December 2003

#### Dear members

I'll start by mentioning my conscience about not organising activities for 'Wattle Day'. I was involved in a number of displays (within and outside SGAP) featuring acacias during August when flowering is at its peak in the Brisbane area. By September 1<sup>st</sup> the peak is well past and I relaxed. I suppose I was more focused on the actual acacias as opposed to the celebration of 'being Australian' which is represented by the wattle flowers. I'll mend my ways next year. An email from Jack Fahy, the President of the Wattle Day Ass. Inc., on this subject is included below.

A number of newspapers have mentioned acacias in the lead up to 'Wattle Day'. Warren and Gloria Sheather sent an article from the Sydney Morning Herald of Sat 30<sup>th</sup> August which included the very appropriate comment 'Wattles live by the rock star formula: live fast; die pretty'.

Acacias have again been in the limelight with memorial services for victims of the Bali bombings featuring the flowers. The Wallabies Rugby Team even had wattle flowers embroidered on the right sleeve of their jerseys during the Rugby World Cup as part of the memorial.

Again I have counted my chickens before they hatched. With enough rain at the appropriate time I have been watching a bumper crop of ripening acacia seed pods in great anticipation of a good harvest of seed. Again the parrots (mainly Pale Headed Rosellas and King parrots) are beating me to it. This really brings home the importance of the acacias to birds. *A. bancroftiorum* is one of the most striking examples. The very large seeds are in long pods and a dozen plants were loaded but I have been lucky to harvest a small amount. The seeds are neatly removed from the pods while they are still green. I was surprised by the amount of seed left on an *A. paradoxa* last week and it was only when I had finished collecting the almost- ripe pods that I noticed a large Carpet Snake stretched around the branches. No doubt he was waiting for the odd unwary parrot. More than just parrots appreciate a good crop of acacia seed.

#### From members letters and emails

As mentioned above I was slack about 'Wattle Day 'and blamed the early flowering of acacias up this way.

#### From Jack Fahy

This is the very problem that a continent like ours has when it wants to come together to celebrate its' being. In 1992 all the States and Territories agreed after much to-ing and fro-ing to the first day of spring being National Wattle Day and it was so proclaimed/legislated.

Agreed, in a continent our size spring comes at different times of the year and the wattle blossoms when it wants to not when someone says it should. The idea is that from the1830s 1890s-pre-Federation,1910s-Wattle Days (which were celebrated in NSW, Vic, SA, Tas on the

1 Sept.), Gallopoli, Canyoning disaster in Switzerland, Bali commemoration, wattle was a UNIFYING symbol for Australia.

I see nothing wrong in showing/displaying/celebrating the wattle at any stage throughout the year .when it blooms. But can we not unite for one day to celebrate what the wattle has grown to mean to all Australians

# It is a simple celebration on 1 Sept, -----WEAR a sprig of WATTLE or the country's colours----- the green and the gold.

From The Wattle Day Association media release:

#### WEAR A SPRIG OF WATTLE ON 1 SEPTEMBER

National Wattle Day is celebrated all over Australia on 1 September, when the golden blossom of the wattle festoons our gardens and surrounding bushland heralding an Australian spring. This year it is especially meaningful to Canberrans as they continue the process of recovery from the January bush fires. To mark this day in Canberra, everyone is invited to wear a sprig of wattle, or green and gold ribbons on 1 September and to say *g'day* and share a smile. School children will present the new Governor-General, Michael Jeffery with a basket of wattle at Government House to commemorate this uniquely Australian Day.

As the wattles regenerate in bushfire devastated areas, this process of renewal is taking place among the homes and families who were affected by the fire. The National Wattle Day Association has planned a program of activities in Canberra to celebrate the coming of spring under the theme of *renewal*.

The wattle blossom is an enduring symbol of the Australian spirit and Wattle Day has been celebrated for over 90 years.

#### From Warren and Gloria Sheather, Armidale

This is the photo gallery we have on the ABC website to celebrate Wattle Day: <u>http://www.abc.net.au/newengland/photogalleries/wattles/index.htm</u>

# Hazel Kelly, Moonbi on 18th August

My A. *iteaphylla* is flowering for the first time – has been since March, also A. *podalyriifolia*, A. *juncifolia*, A. *boormannii*, A. *cardiophylla*, A. *vestita*, A. *florabunda*, A. *amoena*, A. *decora* and A. *neriifolia*. A. *neriifolia* grows naturally here and is absolutely magnificent. Driving from home here to Moonbi it's hard to keep your eyes on the road – it's just gold on both sides of the road on some patches.

#### Brendon Stahl, Birregurra

I received the red wattle *Acacia leprosa* – Scarlet Blaze for Father's Day two years ago and it was planted in October, 2001. It is now three metres by two metres, growing well and flowering

this month (August). I will attach a couple of photos of it, for you. *Acacia leprosa* – Scarlet Blaze is readily available down here and sells for approximately \$30.00.

Brendon's photos show a magnificent plant. There is a very strong temptation to try to grow it here but I have been told by a wholesaler who brought plants up from south that they could not cope with the climate in Brisbane. I know it is being trialed in Toowoomba which has a drier, colder climate but I have not heard results.

**'ACACIAS of NSW' by Inez Armitage** Does anyone have a spare copy ? Lachlan Garland, who is involved in bush regeneration is after a copy. Lachlan's email is

lachlan@hermes.net.au

# Warrumbungle Wattles by Warren and Gloria Sheather

The year, 2003, was the 50th anniversary of the Warrumbungle National Park. Last century we were privileged to work in the beautiful Park for a period of time. This area bulges at the seams with interesting native plants. Spring is a spectacular time with hills becoming alive with blooming Acacias. These are some of the species that we remember bringing a blaze of colour to the Warrumbungles.

Acacia paradoxa is known as the Kangaroo Thorn and was previously known as Acacia armata. Kangaroo Thorn is an apt name because this medium, spreading shrub is armed to the teeth with pairs of sharp stipules at the base of each small phyllode. In spring, the arching branches are covered by large, bright yellow, globular flower heads. Acacia paradoxa is probably too prickly for the smaller town garden but would come into its own in a large garden or rural property. Kangaroo Thorn could be planted in clumps to provide a wall of colour in spring. Small nesting native birds may also use the prickly foliage. Acacia paradoxa is considered to be a weed in parts of Victoria. In the Warrumbungles it is part of the natural scenery. Kangaroo Thorn is also very welcome in our garden.

Propagation is from seed. Taking cuttings would prove to be too painful.

We lived on the western side of the Park and our house was almost surrounded by groves of *Acacia cultriformis*, the Knife-leaf Wattle. *Acacia cultriformis* is a variable species. Growth habit, phyllode and flower shape all vary. The form in the Warrumbungles is a tall shrub with bluish-green phyllodes and flower heads are half way between balls and rod-shaped. We have observed another population that grows into a medium, rounded shrub with ball-shaped flower heads. The Warrumbungle form becomes a column of yellow in spring. *Acacia cultriformis* propagates from seed and probably cuttings.

Acacia deanei is another Warrumbungles species. This tall shrub was named after Henry Deane, a railway engineer/botanist who collected the original specimen from Gilgandra. Acacia deanei colonised a number of contour banks on the western side of the Park and is a beautiful shrub with light green, bipinnate foliage and pale yellow flowers. Some flowers are present throughout the year. We are always on the lookout for Wattles that flower out of season. We now have a number of Acacia deanei growing in our garden. They flower continuously and are reminders of our time in the Warrumbungles. Propagate from seed.

These are by no means the only Wattles native to the Warrumbungles but are the species that made the greatest botanical and horticultural impact during our time in the Park.

#### Acacia flexifolia and Acacia polybotrya

We will continue the Warrumbungle's theme and discuss two species that we remember growing out side the Park. On a trip to Binnaway, near Coonabarabran, early one spring, we stopped to look at a number of small, roadside wattles that were covered in lemon-yellow flowers. We were so impressed that we returned in summer to collect seed. The species was identified as Acacia *flexifolia* and has become one of our favourite Wattles. *Acacia flexifolia*, the Bent-leaf Wattle, is a small to medium shrub with distinctive curved phyllodes and masses of lemon-yellow flowers in late winter and early spring. We regard this Wattle as a \_Herald of Spring\_ as it bursts into bloom before the other spring flowering Wattles. The Bent-wing Wattle has featured in many gardens over the years. Both seed and cutting propagation has proved to be successful.

Between Gunnedah and Coonabarabran the Highway passes through a section of the Pilliga Scrub. Along the roadside, in this area, there is a medium to tall Wattle with slightly pendulous branches that are clothed in blue-green, bipinnate foliage. This is *Acacia polybotrya*, sometimes known as the Western Silver Wattle. In spring this wattle produces masses of bright yellow, globular flowers. Growth habit, foliage and flowers are attractive features. Foliage colour is similar to *Acacia baileyana* and could be cultivated as a substitute for this well-known Wattle. *Acacia polybotrya* will not grow as large as *Acacia baileyana* and is small enough to be accommodated in most gardens.

Propagate this beautiful Wattle from seed.

#### **Species List by Margaret Moir**

Margaret Moir has prepared a local species list for the Shire/local land care group in her part of WA.

The area is inclusive roughly of Margaret River, plus parts of the Busselton shire. The following is a list of the wattles with cultivation notes as well as a description.

#### Key: <u>Priority taxa:</u>

#### **Conservation** Codes

#### P4: Priority Four - Rare Taxa

Taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5-10 years.

Tree Key:	Tree sizes:	Notes:	General
<b>D</b> = extra drought tolerant			sizes:
<b>Hv</b> = important habitat values	<b>Sml</b> = 8m or less	<b>O</b> =ornamental	
$\mathbf{W}$ = tolerates wet	<b>Med</b> = 8-15m	$\mathbf{A}$ = adaptable and hardy	Sml= 1m or
$\mathbf{F}$ = extra fast		<b>WB</b> = windbreak, wind tolerant	less
phytophthera resistant	Tall=	<b>Sh</b> = needs shelter and/or shade	Med=1-2m
	15m+	Yall=Yallingup area.	Tall= 2m plus.

1=may help to prevent phytophthera. In any event, it is best practice to plant a suite of leguminous plants in any planting program. Leguminous species are denoted with an \* before the first plant in a genus.

Species	Common name	Notes	Flowers	Wetland /riparian	Soil	Propagation	Birds Seed	Birds Nectar	Birds Insects	Frogs	mammals
<b>*1</b> Acacia alata	Winged Wattle	Sml-med Sh	white, cream, yellow, pink, Apr-Dec	Х	Various		Х		Х		browse
<b>1</b> Acacia alata var alata	Winged wattle	Med. May help prevent dieback Sh	Cream, yellow July Oct	Х	Sand, loam, gravel, clay	Seed, easy	Х		Х		Browse
Acacia browniana		Med OShA	cream, yellow, May- Nov	Х	sand, loam, gravel	Seed	Х		Х		
Acacia browniana var browniana		Med. May help prevent dieback.	cream, yellow, Jul- Oct	Х	Sand, gravel	Seed	Х		Х		
A. browniana var.obscura		Sml-med	cream, yellow, Sep- Nov	Х	Sand,loam,gravel	Seed	Х		Х		"
Acacia cochlearis	Rigid Wattle	Sml-tall WB	yellow, Jul-Oct		Sand,coastal	Seed	Х		Х		
Acacia cyclops	Coastal Wattle	Med-tall WB	yellow, Sep-May		Sand,coastal	Seed	Х		Х		"
Acacia divergens	Wattle	Sml- med,prickly	yellow, cream, Aug- Nov	Х	Various	Seed	Х		Х		
<b>1</b> Acacia extensa	Wiry Wattle	Sml-med OA	yellow, Aug-Oct.	Х	Sand,gravel	Seed	Х		Х		"
Acacia flagelliformis		P4, rush- like,sml,O	yellow, May-Sep.	Х	Sand	Seed	Х		Х		"
Acacia gilbertii Acacia hastulata		Med. Med. prickly	White Oct-Feb Cream/yellow	Х	gravel Swampy	Seed Seed	X X		X X		
Acacia huegelii		Sml prickly	White/cream Oct-Feb		sand	Seed	Х		Х		
Acacia inops		Sml, prickly	White/cream Sep-Nov	Х	Sand, clay swampy	Seed	Х		Х		
<b>1</b> Acacia latericola		Med,O	yellow, cream, May- Oct		Gravel	Seed	Х		Х		
Acacia littorea		Med prickly WB	yellow, Aug-Nov		Sand,coastal	Seed	Х		Х		
Acacia mooreana		Sml prickly	Yellow/cream May- Sep	Х	Sand, gravel	Seed	Х		Х		
Acacia myrtifolia		Med-tall	cream, yellow, May- Jan		Sand,gravel	Seed	Х		Х		"
Acacia nervosa Acacia obovata Acacia pentadenia	Rib wattle Karri wattle	Sml Sml Med- Aromatic foliage [may	Yellow Jun-Oct Yellow/cream/white Cream	X	Gravel Gravel Loam, clay	Seed Seed seed	X X X		X X X		
		be unpleasant]									

<b>1</b> Acacia	Prickly		Yellow May-Dec	Х	Sand, clay, loam	Seed	Х	Х	
pulchella <b>1</b> Acacia pulchella	Moses Prickly moses	Med	Yellow May-Oct		Sand, gravel	Seed	Х	Х	
var.glaberimma <mark>1</mark> Acacia pulchella var.goadbyi	Prickly moses	Sml	Yellow Jul-Oct	Х	Sand, gravel,	Seed	Х	Х	
IAcacia pulchella var.pulchella	Prickly moses	sml	Yellow Jul-Dec		Gravel	Seed	Х	Х	
Acacia saligna	Golden wreath wattle	Tall OAWB	yellow, Jul-Nov	Х	Most	Seed	Х	Х	Browse
Acacia scalpelliformis	Wattie	Med	Yellow Sep	Х	Wet	Seed	Х	Х	
Acacia semitrullata		Sml	White/cream	Х	Sand, clay	Seed	Х	Х	
<b>1</b> Acacia stenoptera		Sml, prickly	Cream/yellow Mar-Dec		Sand, gravel	Seed	Х	Х	
Acacia subracemosa		Tall	Cream/white/yellow		Sand	Seed	Х	Х	
Acacia tayloriana		Prostrate O	Cream/white Jan	Х	Sand/gravel/clay/loam	Seed	Х	Х	
Acacia tetragonocarpa		Med rush-like O	Yellow Mar-Jun	Х	Sand/loam/gravel	Seed	Х	Х	
Acacia uliginosa		Sml	Yellow/cream Aug- Oct	Х	Sand/gravel/clay	Seed	Х	Х	
Acacia urophylla		Tall	Cream/white May-Oct	Х	Gravel/loam	Seed	Х	Х	
Acacia varia		Med	Yellow/cream/white May-Oct		Any	Seed	Х	Х	
Acacia varia var.varia		Sml,suckering	cream, white, yellow, Jul-Oct		Sandy loam, clay	Seed	Х	Х	

### Seed Bank

In spite of the parrots, fresh seed of over 20 species of acacia have been added to the Seed Bank. As a result the likelyhood of infertile seed being sent out is gradually decreasing. Rob Potter tested most of the old seed in the Seed Bank (20years or over) but members have indicated that some seed which should have been OK, wasn't eg *A.gittinsii* and *A.paradoxa*. These are not species known to have short lived seed but ten year old seed in the bank has not germinated. This seed has now been replaced. Of course some seed is very short lived (for acacias).

#### As Bruce Clark wrote

Marion Symmons, in "Growing Acacias" mentions soft coated seeds including A.cambagei, A.harpophylla, A.peuce and A.xiphophylla which do not require pre sowing treatment and should be sown soon after collection.

Species in this group present a problem for the Seed Bank and it is probably best to try to obtain fresh seed when it is requested.

**Hazel Kelly,** Moonbi, has again sent in a beautifully presented report on her trials comparing seedlings from young and old seeds. These trials were initiated by comments from a few members that older seed produced poor quality seedlings. Hazel compared seedlings from recently collected and old (30 years) seeds of *A.gittinsii, A.glaucoptera* and *A.juncifolia*. From this limited trial it would appear that the age of the seed does not affect the vigour of the resulting seedlings. Many thanks to Hazel for her detailed results. If any other member would like to take part in this type of comparison please mention it when ordering seed.

Again I would like to make a plea for seed. Many plants have now set seed and if you have time to collect any the Bank would appreciate them.

# **New Members**

Welcome to new members

**Morton Kaveney**, 253 Eureka Rd, Rosebank 2480 Morton is already growing a number of acacias in his red soil (Mt Warning basalt).

Simone Stelmasiak, 64 The Esplanade, Maribyrnong 3032

# Some Leaf Eating Beetles (Family Chrysomelidae, Subfamily Chrysomelinae)

This is a very large subfamily of mainly leaf eating beetles with over 2000 species world wide. Many are economically important eg the Colorado Potato Beetle and Pumpkin Beetle. In Australia, native species are common on eucalypts and acacias and may reach pest proportions in eucalypt plantations. Species which are not common in Australia but were exported with their host plants have caused problems for eucalypts in California and South Africa. This occurred in the absence of their normal parasites/predators.

I will only deal with one type of beetle from this group here and mention others in the future.

#### Black and White Photos ( coloured in email )

**Plate 1** An adult chrysomelid beetle with eggs she has just laid. These are yellow and in some species may encircle a small twig. This species is brightly coloured in metallic dark and light green with broad orange stripes down the inner edges of the wing covers. The wing covers are densely marked with small depressions. Other species may be equally eye catching and metallic colours are common as are smooth wing covers. Unfortunately the colours often fade with death so mounted specimens may appear quite dull. The beetles are small (7 mm) but may be very common often feeding with the larvae. If you wish to catch one put a hand below it as they commonly drop to the ground if disturbed.

**Plate 2** A group of larvae feeding on *A.podalyriifolia*. The damage is typical. This beetle and its larvae are also common on a number other acacias with small phyllodes or true leaves eg *A.glaucocarpa, A.baileyana, A.brachycephala, A.jucunda*. I have not seen it on acacias with large phyllodes eg *A.leiocalyx*. Larvae and adults may be present in such numbers that almost all new growth on a plant is damaged. It then becomes quite a job removing enough insects for the plant to have a chance of some summer growth.

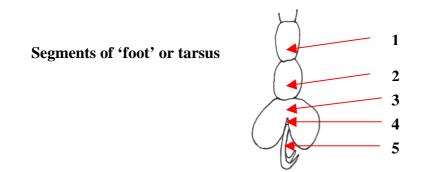
**Pl 3** A close up of a larva. Length about 5mm. These are yellowish green with a black head and prothorax. Other species have larvae which are more gregarious. These are elongate and so resemble saw fly larvae. Photos of these later. When a larva is mature it drops to the ground and pupates.

**Pl 4** Two beetles on A. glaucocarpa. One is the species shown above and the other is a metallic tan colour.

**Pl 5** The larva of a much larger chrysomelid beetle. These are solitary and up to 10 mm in length. The front of the abdomen is yellowish/ green shading to brown at the rear. The head and prothorax are black and the abdomen is covered in black dots surrounding small tubercles. Again pupation occurs in the soil

**Pl 6** The adult of the larva above. This beetle is common on A.leiocalyx and some similar species of acacia. It is usually solitary and rarely present in large enough numbers to cause obvious damage. It is a shinny brown beetle about 13 mm long with pitted wing covers.

.This photo shows the 'big feet' which are typical of the members of the Superfamily Chrysomeloidea ( this includes longicorn beetles ). The fourth segment of the tarsus is very small and hidden under the third segment which is enlarged and deeply divided in two. This third segment is so prominent that it does give the impression of 'big feet'.

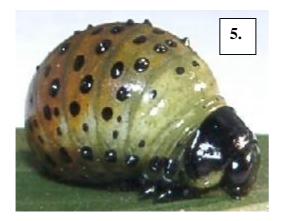


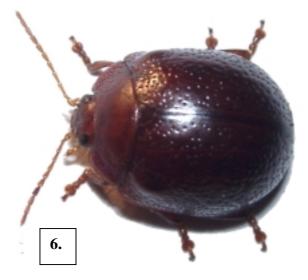












# **Coloured Plates**

#### Plates 1 & 2 A.guinetii

This is a little gem with a limited natural distribution. There are no records of its cultivation in the ASG archives so I have no idea of its potential as a cultivated plant.

According to the 'Wattle' disc it is naturally restricted to an area between Geraldton and Northampton in WA and grows on lateritic hills in heath. The latitude is similar to that of SE Qld so it is no surprise that so far it appears to do well in the few places it has been tried here.

The 'Wattle' disc gives a height of 0.3 to 1m for the spreading version and up to 2m for a more spindly shape. The species has hairy, true leaves and arching branches. The globular flower heads are produced in late winter to spring. They are solitary and protrude well beyond the foliage. Unfortunately flowering was almost over when the photos were taken.

The plant shown here is growing near Kingaroy and is about 80cm tall at about 18 months. It is growing as an understory plant which may account for its openness. The position is on a ridge and the soil is poor and shallow. It has experienced drought for most of its life and had some supplementary watering once a week when it was small. An older plant growing inland from Brisbane is densely bushy and has attained about 1m in height and twice that in diameter. Again it is growing in poor soil. Seedlings seem to grow well in tubes in the higher humidity of Brisbane but I know of none in the ground there.

#### A.handonis

Another little gem, this time from the Barakula area near Chinchilla in Queensland. This species is very rare and listed as vulnerable under the Nature Conservation Act. It grows on sandstone ridges in eucalypt forest.

It is bushy and up to 2m in height with small narrow phyllodes which are crowded together. The large flower heads, which are produced in spring, are solitary and protrude well beyond the foliage. Again these photos were taken when flowering was almost over.

There are no records of the cultivation of *A.handonis* in the ASG archives but some seed in the Bank is from a cultivated plant grown at Rockhampton. Grace Lithgow in '60 Wattles of the Chinchilla and Murilla Shires' calls it a 'showy garden shrub when in flower'. The plant shown is growing at Len Coe's at Booie in soil that was formerly cultivated. It is fairly deep loam with plentiful stones. The plant is about 60cm in 2 years. It has withstood drought and frosts of -6 degrees with no ill effect but was tip burned at -9 degrees.

I have some difficulty with seedlings in the humidity of Brisbane and probably lose about a quarter in the early stages. Those that survive seem to be very fast growing.

*A.handonis* is said to be short lived but is still well worth growing particularly considering its attractiveness and rarity. The seed bank has plenty of seed and even though some of it is almost 30 years old it still highly viable.

#### A.paradoxa

See the article by Warren and Gloria Sheather in this newsletter.

According to the 'Wattle' disc this species occurs in SA, most of Vic, eastern NSW and the far SE of Qld. It is introduced in Tas and probably in south-western WA.

This appears to be an adaptable species and according to the ASG archives it has grown well in a variety of soils from beach sand to grey clay. The plants shown have survived drought and frost (-9 degrees) near Kingaroy but some have died after shallow soil has become waterlogged in summer.

