



Acacia brunioides

Australian Native Plants Society (Australia) Inc.

ACACIA STUDY GROUP NEWSLETTER

Group Leader and Newsletter Editor
Bill Aitchison
13 Conos Court, Donvale, Vic 3111
Phone (03) 98723583

Seed Bank Curator
Victoria Tanner

Email: acaciastudygroup@gmail.com

No. 132 March 2016

ISSN 1035-4638



| Contents | Page |
|--|-----------|
| From the Leader | 1 |
| Welcome | 2 |
| From Members and Readers | 2 |
| Lightwood | 3 |
| Acacia viscidula | 4 |
| Acacia 'Abundance' | 4 |
| Acacia atrox | 5 |
| Seed Collecting | 6 |
| Acacia latzii | 6 |
| Propagation of Acacia wardellii | 7 |
| Acacias in the news | 8 |
| Seed Bank | 9 |
| Study Group Membership | 10 |

hybrid (*A. auriculiformis* x *A. mangium*) has become the most widely planted species in Vietnam for the production of pulpwood and sawlogs. If any other members would like to advise of their hybrids, please let me know.

I also received little response to the invitation in the last newsletter to Study Group members to take part in a small experiment in relation to how to prolong the vase life of Acacias – in fact zero response – perhaps it would have been better to carry out such an experiment at a time of year when more wattles are in flower.

A reminder that members may still register their interest in one or more of the possible field trips referred to in our December 2015 newsletter (see page 2 of that newsletter). So far there have only been a couple of expressions of interest in an excursion to WA. If this takes place, it would most likely be next year, but unless there is more interest, it must be doubtful as to whether it is viable. But if you may have an interest in joining a WA excursion, please email acaciastudygroup@gmail.com. In relation to the Grampians and Girraween excursions, if you haven't already registered your interest, it is not too late to do so.

I am grateful to Warren and Gloria Sheather who have offered to write a series of articles for the Newsletter on the Acacias of the Northern Tablelands of NSW. The first such article, on *Acacia viscidula*, appears on page 4.

During the last few months we have received a number of donations to the Study Group Seed Bank – thanks to those members who have made these donations (see page 9). Thanks also to Victoria Tanner who has replenished our stock of some species through a purchase (about 100 different varieties) from Nindethana.

Bill Aitchison

From The Leader

Dear Members

In our previous Newsletter No. 131, we asked members to advise what *Acacia* hybrids they are growing. I only received two responses, one from **Brendon Stahl (Elliminyt, Vic)** who advised that he has an *Acacia cognata* x *verniciiflua* 'Curtain Call'. The other response was from **Bill Molyneux (Dixon's Creek, Vic)** who has written an article on *Acacia* 'Abundance', a hybrid between *A. floribunda* and *A. genistifolia*. Bill's article is included on page 4. Thanks to Brendon and Bill for their responses. I don't know whether the lack of responses simply means that few *Acacia* hybrids are being grown by members. I note that a recent article published in *Forest Ecology and Management* (Vol 367, pages 97-111) reports that an *Acacia*

Welcome

Welcome to the following new member to the Study Group.

Lib Bartholomeusz, Moonta Bay, SA

Lib is a member of the APS Northern Yorke Peninsula Group. She would be interested in getting together “locally” with other APS members in South Australia who have an interest in Acacias. She advises that the NYP Group is busy propagating Acacias – mostly local ones from seeds they have collected – for their annual plant sale. If anyone would like to make contact with Lib, let me know and I can provide her contact details.

From Members and Readers

Doug White (Longwood, Vic) refers (7 January 2016) to an item in our previous Newsletter No. 131.

“I notice a reference in the current Newsletter that *Acacia pendula* seed should not be treated with boiling water. I didn’t know this and recently treated a hundred or so seeds that way a couple of months ago. Germination was close to 100%.”

In our previous Newsletter, **Gerard Casey (Ballarat, Vic)** referred to the Fireblight Beetle being responsible for the defoliation of *A. mearnsii* trees throughout the Ballarat region. Gerard has now advised (9 March 2016) that most of their *A. mearnsii* have recovered well since the October attack by the larvae of this beetle.

In our previous Newsletter No. 131, mention was made as to a question relating to what the *Acacia* species is in the banner on the front page of the Newsletter. It was suggested that the species is *Acacia conferta*. We were wrong! Thanks to **Jan Sked** for solving the mystery. Jan writes (31 December 2015) as follows:

“I have just finished reading your latest Acacia Study Group newsletter. You asked if anyone had a contrary opinion about the *Acacia* species featured in the newsletter banner. When I took a good look at it, I thought it seemed familiar; so I went into my graphics files and, lo and behold, it appears to be one of mine. It is *Acacia brunioides* and, according to my computer information, it was scanned into my graphics file in August 2003. It first appeared on the Acacia Newsletter cover in Issue 91, May 2004, when Thais Eisen was Study Group Leader. I guess I must have given it to her to use. Anyway, attached is a copy of the graphic from my computer. You are welcome to continue to use it. Perhaps you should put the botanical name underneath.”

Jan’s image is reproduced below.



Peter Cox (Garfield, Vic) has provided some more recommendations on Acacias for home and park. He lists the following:

A. guinetii 1.1m unusual soft foliage, nice flower, seed readily germinates, responds to light pruning

A. trigonophylla 3m x 2m in spite of its vicious-looking foliage it is harmless, good flowers, responds to pruning

A. merinthophora 1m x 2m leafless small wattle with pendulous habit

A. willdenowiana 1m x 0.5m another leafless wattle that is worth growing

Ros Walcott (Red Hill, ACT) reports (9 February 2016) on some recent propagation activities:

“Victoria gave us some seed from *A. grandifolia* which I had admired at the ANBG. Ben got three seedlings and we have put the best one into the ground and it is growing well. We also got three really good seedlings of *A. falciformis*, put them in the ground, and they all died. Very disappointing.”

We have had the strangest weather in Canberra, extremely hot with no rain at all in December, 100 mm of rain and cool in January (!), and now hot again. All my banksias are starting to bloom - I think they are as confused by the weather as we are."

Ros subsequently advised that they have just put in an *Acacia cremiflora*, which is new to them, in the front garden – and are looking forward to seeing that one bloom.

Also on the subject of propagation, **Phil Price (Jamison, ACT)** writes (9 February 2016) as follows:

"I use the scarification method for any seed big enough to hold easily, and check for swelling before planting. I'm also trialling sandier mixes for Acacia as it seems some (*A. gunnii* is a good example) don't like moisture or nutrients much at the germination phase."

Phil subsequently wrote (22 February 2016)

"*A. gunnii*, which local GA people tell me can be difficult to get established and growing, seem to be doing OK so far in a coarse sand mix. I assume that acacias generally like soils similar to those where they grow naturally, so there could be a big range from nutrient-poor sands to fertile soils high in organic matter. Getting the correct soil organisms for root nodulation may be another important factor."

Phil also has an interest in the specificity of Acacias for root nodule organisms. He understands that *Acacia* species are nodulated by *Bradyrhizobium* and *Rhizobium* and about four other genera. Some *Acacia* species are very strain-specific in what they will form root nodules with, for others just about any rhizobia-like soil organism will do. Phil suggests that adding to a potting mix a small amount of soil freshly collected from a natural site for the species might be helpful. He has tried this for *Acacia peuce*, but hasn't checked yet for nodules.

Lightwood

By Wendy Marriott, Stawell, Vic

With bark that is rough and textured, like an Ironbark, and entire leaves hanging vertically like many Eucalypts, it is surprisingly a Wattle. But the mature leaf is a phyllode curved like the blade of a scythe, and each leaf is suspended but free, cradling at least seven sisters. Leaf margins are entire, the surfaces - concolourous a darkish green.

The Lightwood *Acacia implexa* and Blackwood *Acacia melanoxylon* share the same timber profile - characteristic of wattles, pale honey with a dark heart. The leaves are quite similar and the flowers are cream to pale lemon in both, but the trees can be distinguished easily - the light one is open even lanky, the black one denser giving solid shade.

Panrock Ridge

It should be called Lightwood Ridge for 2 beautiful scent-filled weeks in January 2015. Lightwoods lit up the whole ridge, as every single tree glowed and offered bees a cooling caress. The pale purity of creamy flowers combined with a heady fragrance of cinnamon and honey. There may be a reason why there are so many here on this end of the Black Range: deep granite sand..., less eroded than the high wooded slopes,.... or the history of sheep grazing may have favoured them, and did the summer rain cause this simultaneous mass-flowering?

And now January 2016, before the summer rains, summer heat is endless, unrelenting. Last year's mass flowering has produced a mass seeding. The pods are ripe now but a whole year in the making. Some trees are also flowering a little, bees buzzing and butterflies fluttering.



Acacia implexa

Photo Wendy Marriott

And the Sulphur-crested Cockatoos converge on a random tree, and then another. Squawking their arrival they are acrobatic in frenzied feeding. When they fly again, they leave the ground thickly strewn with crisp, curled clumps of pods, intricate orange spirals with, still dangling, their shiny black seed and pure white aril. Under the tree, whole branchlets intact and intertwined, and often the target food lies, apparently wasted in countless numbers. But no, look again. Is it hours later or immediately, that multiple scatters of black are obvious? See the seed, freed of their protein-rich pure white appendage and discarded. Ants smaller than

a grain of granite sand, have already fed and larded a cache, their nest entrance is the centre of each black scatter.

Bronze-Wing Pigeons arrive for their share of the summer bounty. And now the summer rains wash drifts of seed aside - who knows under what circumstance or how long will the seed wait for its dormancy to be broken. How much selection there has already been!



Acacia implexa

Photo Wendy Marriott

Acacia viscidula

by Warren and Gloria Sheather, Yarrowyck, NSW

This is the first in a series of articles on wattles of the Northern Tablelands of NSW.

The Northern Tablelands of NSW is home to over 60 wattle species. Many have a wide distribution and are found in other regions and a few species are indigenous to the Northern Tablelands.

In this series we will describe some of these local wattles. Perhaps other members of the Study Group may be encouraged to put pen to paper or fingers on the keyboard and describe some of the wattles that grow in their areas. *Acacia viscidula*, a Sticky Wattle, will be the first in our series. The Sticky Wattle is one of seven species that is native to our property, Yallaroo, west of Armidale on the Northern Tablelands of NSW.



Acacia viscidula

Photo W & G Sheather

Acacia viscidula is a bushy, erect shrub that will reach a height of three metres. The phyllodes are narrow, linear, leathery, curved with a small hooked point and very sticky (hence the species and common name). Flower-heads are globular, numerous and pale yellow. The flowering period is from September to November. Blooms are followed by pods that are straight and about five millimetres wide. Prune after flowering to maintain bushy growth and maximum flowering.

Acacia viscidula is found in northern New South Wales and southern Queensland.

On our property Sticky Wattles have regenerated in large numbers. The removal of domestic stock triggered a proliferation of Sticky Wattles, particularly on rocky slopes. This hardy wattle would be an ideal addition to a native shrubbery. Also the species could be the component of a hedge. Plants could be pruned regularly as a formal hedge or if pruned once annually a hedge that is less formal.

The type specimen was collected on the banks of the Lachlan River, NSW in the early 1800's by C. Fraser.

Propagate from seed and possibly cuttings.

Acacia 'Abundance' – Acacia floribunda x genistifolia by Bill Molyneux, Dixons Creek, Vic

With such a wide selection of wattles to select from for any landscape need, I was hesitant in responding to the question regarding hybrid acacias that growers may have in their gardens. But as an earlier discussion was had on *Acacia* as street trees, I felt that I should join the conversation.

In the early 1990s a seedling appeared amongst a dense boundary planting of semi-weeping *Acacia floribunda* at Austraflo. While having some characteristics of this

species, the leaves were much smaller and narrower, though still soft. The only other species nearby was *A. genistifolia*, in a narrow bed about 5 metres away, on the other side of a driveway. This form was open and slim in habit with rigid leaves and globular yellow flowers, different from the rod-shaped flowers of *A. floribunda*.



Acacia 'Abundance' Photo Bill Molyneux

I nurtured this seedling offspring more out of curiosity and it soon became obvious that it displayed modified characteristics of both parents. This became clearer later when I germinated a number of seed (a rare occurrence for hybrids) when it first flowered with profuse shortened rod flower heads among the tightly set short soft dense foliage. The mixed characteristics were even more evident when it flowered again at around three years.



Acacia 'Abundance' Photo Bill Molyneux

It grew to be a tallish narrow dense shrub 2-4 metres tall and 2m across. We named it *Acacia* **Abundance** and it has now been successfully grown and marketed under this name for more than twenty years. Our original plants at Dixons Creek still survive, have no borer problems and respond to regular pruning, although with a naturally tight habit it doesn't need this very often. As a hedge or street tree, it

suits many applications and it is worth growing for the floral display alone.

Abundance has proven hardy in temperate to sub-tropical and semi-arid regions, as well as near-coastal. Faceys Nursery in Melbourne has been its main grower for many years and Mansfields Propagation Nursery is the primary tube grower.

Acacia atrox

by Warren and Gloria Sheather, Yarrowyck, NSW

In recent times we have been involved in the propagation of rare and threatened species, from the Northern Tablelands of NSW, in conjunction with the local Office of Environment and Heritage.

One species that we have attempted to propagate is *Acacia atrox*, a rare species from the Inverell district of northern NSW.

Acacia atrox is a dense shrub that reaches a height from 0.5 metres to six metres in height. The bark is grey-brown and becomes fissured with age. The phyllodes are light green to blue-green, up to five centimetres long and in the shape of sharp spines. The flowers are held in globular clusters and are cream to pale yellow. Flowering is sporadic. Pods or seeds have never been seen. Plants appear to increase by root suckers. An interesting feature is the galls that develop in the phyllodes. They assume the shape of *Hakea* fruits (see image). There is also a report of the appearance of a butterfly or moth cocoon in the shape of the galls.



Acacia atrox Photo W & G Sheather

We were supplied with some branches and root suckers. We had no success with either cutting or root sucker propagation. Because of the savage phyllodes preparing cuttings was painful and difficult. In all our decades, of cutting propagation, this was the first time that we had to remove foliage with pliers.

Acacia atrox is certainly not for the average garden. Perhaps if plants ever become available they could be used for the creation of impenetrable hedges. No doubt small birds would use them for secure nesting sites.

A. atrox was named in 2000. The species name means fierce, savage, severe or terrible. All exactly describe the effect of the phyllodes. Atrocious is derived from the same source.

Seed collecting

by Warren and Gloria Sheather, Yarrawyck, NSW

The early summer of 2015, in our northern NSW garden, was a bumper season for wattle seeds. Most species were covered in pods, after flowering. *Acacia leptoclada*, one of our favourites, flowered profusely in 2014 but produced virtually no pods. In 2015 flowering was again profuse and this time the plant was covered in pods and we harvested a large number of seeds.

We were not alone in our seed harvesting activities. We noticed, on one of our paths, a pile of seeds. They were seeds collected by ants who remove the funicle (the fleshy appendage holding the seed to the pod) as a food source. These seeds were probably from an *Acacia cultriformis* growing nearby. Whilst examining this seed collection we noticed very small ants carrying small wattle seeds. These seeds were definitely from *Acacia diphylla*. We also found a large bird dropping, probably from a Currawong, full of wattle seed husks.



Seeds in Currawong dropping

Photo W & G Sheather

Note: It is not only Warren and Gloria who have been observing the activities of birds with *Acacia* seeds. In a recent column in the Ballarat Courier (15 January 2016), **Roger Thomas** referred to the attraction to birds of seeds of *Acacia melanoxylon*. The black seeds of this species are encircled by a fleshy red coloured funicle. The article makes the observation that the seeds are attractive to birds in different ways. Bronzewing pigeons eat mature seeds, whilst rosellas and cockatoos also eat the seeds but do so when they are younger. Currawongs are different again, as they digest only the red funicle, with the actual seed being regurgitated as part of a 20mm pellet.

The red colour of the funicle makes it attractive to birds, just as birds are frequently attracted to red flowers. The fleshy funicle also obviously has some nutritive value, being slightly oily and rich in protein.

The article also notes that, like the currawongs, ants eat the funicle, but not the seed. Both currawongs and ants aid in the dispersal of the seeds – in the case of currawongs, they could carry the seeds a kilometre or more before regurgitating them.

Acacia latzii

Thanks to Margaret Lee who recently forwarded to me a copy of the latest newsletter of the APS Alice Springs Group, which included some references to Acacias, especially Acacia latzii. The following information is taken from that newsletter and from the Australian Government Department of the Environment Species Profile and Threats Database.

Acacia latzii (Latz's Wattle, Tjilpi Wattle) is rare in nature, known from only two disjunct populations 230km apart, one population being in the Bacon Range about 130km south west of Alice Springs, and the other in the Beddome Range



Ant Seed Collection

Photo Warren and Gloria Sheather

On another occasion we found a seed mound this time from *Acacia implexa*. Some years ago, whilst collecting plants, we came across a mound of seeds. This time the ant's species of choice was *Acacia dealbata*.

on the NT/SA border. The amount of recruitment within the existing populations is very limited, with seed only being produced during good seasons, and then good follow up rains being required for germination and seedling survival.

Over 20 years ago, the APS Alice Springs Group built two small enclosures to protect some individual plants in the Bacon Range population. Members of the Group now monitor these two sites, and take rainfall measurements there.

The Group's February/March 2016 Newsletter reports on their most recent trip out to these two sites, on Sunday 17 January 2016. The report notes that *A. latzii* never seems to succumb to dry conditions – plants look pretty consistent in appearance in good times and bad. No plants were in flower at the time of the visit. At one of the sites, a 2010 seedling at about 80mm high was looking stable, as were some 2000/01 seedlings.

The Group had lunch in the shade of a Tjilpi Wattle – looking at the trunk of this mature tree, and having an idea of the very slow growth rate, they marveled at the age these trees must be.

Footnote: The February/March 2016 Newsletter also noted that the bush around Alice Springs had recently taken on a golden tinge, with the flowering of two of their iconic *Acacia* species – *Acacia aneura* (Mulga) and *A. kempeana* (Witchetty Bush). It was noted that both of these species flower in response to good rainfalls, rather than at a specific time of the year.

Propagation of *Acacia wardellii*

One of the wattles recorded during our Study Group Field Trip in 2014 was *Acacia wardellii*. This was recorded east of Condamine. This is a rare wattle known from only a few locations in southern Queensland.

It has been a target species for a number of revegetation projects, and as a result of this, the Myall Park Botanic Garden was approached in 2012 to supply 1000 seedlings. Some research was therefore carried out on how to achieve greatest success in propagating this species. It was noted that field studies in the Thomby Range region of Queensland had highlighted that for many years, no seedlings were recorded even though mature trees produced seeds and those collected appeared plump and intact.

The July 2015 Newsletter of the Australian Flora Foundation included a report by **Dr Nita C Lester** on the research carried out. Some of the results and conclusions are set out below:

1. The **seed raising medium** used was 50% commercial seed raising mix and 50% sand.

2. Trials were conducted with two different **pre-sowing treatments** applied to the seeds. Firstly, seeds were placed in near-boiling temperature water and then left to soak. Seeds that did not swell were re-treated. Secondly, seeds were scarified by rubbing between fine sandpaper. It was found that rates of germination were similar under either method. The soaking process was preferred because the scarification treatment was time and labour intensive (important under a mass planting regime).
3. The research showed that *Acacia wardellii* is one of the species of *Acacia* that germinates best after a **period of storage**. The percentage of germination success for fresh seed was between about 6% and 8%. After storage of between one and four years, the rate of successful germination was about 60%. Germination was also slower for fresh seed, compared with the older seed.
4. It had been observed over many years that, in the wild, *A. wardellii* seedlings were often found in groups, at times with mass seedling numbers (and in situations where no records were found of individual seed germinations). It was conjectured that groups of seeds close together encourage germination under favourable conditions. For this reason, trials were conducted where some seeds were sown individually into small seed raising pots, and alternatively other seeds were planted in groups of five. Where **seeds were sown in groups of five**, the rate of germination increased from about 60% (as shown above) to between about 91% and 94%.
5. It was noted that it is sometimes recorded that small seeds should not be sown if larger seeds are available. However, this research indicated that size of the seeds was not an issue – it was noted that plump, intact *A. wardellii* seeds, no matter the size, could germinate and grow on to produce strong seedlings. It was speculated that, considering these findings, **seed size** may not be an important issue for other *Acacia* species.
6. It was noted that *Acacia wardellii* produces a **long tap root** within three days of germination. The breaking of this tap root during “potting out” hinders growth rate of the seedling considerably and often the seedling does not recover when compared with seedlings with an intact tap root. The pricking out process must therefore be carried out with care. For example, “washing” the seedlings apart in preparation for “potting out” is beneficial. The groups of five sown seeds were removed from the pots and placed in a bowl of water and gently agitated to “wash” the tangled roots apart. This procedure proved quite fast as the

sand and potting mixture freely released the roots. Being clean of the potting mixture assisted with the “potting out” process as a long narrow hole could be prepared in the new pot for the long tap root to be dropped into.

References:

Lester, Dr Nita C, *Acacia wardellii*: how to propagate *Research Matters Newsletter of the Australian Flora Foundation* July 2015
The website of Myall Park Botanic Garden is <http://myallparkbotanicgarden.com/>

Acacias in the news

A recent article in **Australian Geographic** magazine by Tim Low refers to the *Acacia* name issue that was resolved at the 2005 and 2011 International Botanical Congresses held in Vienna and Melbourne respectively. Tim Low’s article can be viewed at <http://www.australiangeographic.com.au/blogs/wild-journey/2016/03/the-wattle-war>.

The article suggests that Australians conned the Congress and stacked the vote at the Vienna meeting, implying that were it not for this, the decision in relation to the name *Acacia* would have been different. Kevin Thiele, former Curator of the Western Australian Herbarium, has refuted this suggestion, noting that the Vienna meeting was dominated by European and North American delegates, and that the number of Australian delegates was “vanishingly small compared with other nations, including Africans.”

The Tim Low article appears to be a rather strange piece of reporting, partly because it deals with events that have long been resolved. It also unfortunately makes a number of broad unsubstantiated assertions that, based on my understanding, are not correct. For example, reference is made to the 2005 decision being an exception to the International Code of Botanical Nomenclature. This is not correct, as the process that was followed was totally in accordance with the rules of the ICBN, and no different to what had been applied previously in dozens of other plant groups.

The article also implies that there were 163 African thorn tree species that would be renamed *Vachellia* as a result of the *Acacia* decision. This is not correct - there were only about 70 African thorn tree species affected by the name change.

It should also be noted that almost all of the African species that needed to be renamed *Vachellia* (following the 2005 and 2011 decisions) have now been formally renamed by African botanists (in various botanical journals).

Some Study Group members may be interested in reading the following paper by Bruce Maslin which includes a

summary of the extensive uptake of the new generic names worldwide:

Maslin, B.R. (2015) Synoptic overview of *Acacia* sensu lato (Leguminosae: Mimosoideae) in East and Southeast Asia. *Gardens’ Bulletin Singapore* 67(1): 231-250

In the 1950s, *A. mearnsii* (Black Wattle) was first introduced into China for afforestation and commercial forestry. It has recently been reported that at Kunming Changshui international airport, it has become invasive, and there is a risk that birds attracted to these trees could pose a threat of bird strike at the airport. This airport is the fourth largest airport in China, handling 20 million passengers each year.

The study suggests that *A. mearnsii* has been successful in invading the airport for a number of reasons. The airport was constructed in 2007 on land, part of which was previously planted forests, including this species, so that there is very likely an extensive seed bank in the soil. The species is also well suited to the local climate. Also, on-going flight activities can take more seeds of *A. mearnsii* into the airport environment. Construction activities at the airport can also help break the seed dormancy underground. This is in addition to the usual weedy characteristics of the species.

34 bird species have been recorded as often staying on or around the *A. mearnsii* trees.

The study recommends that management of the invasion be undertaken.

Acacia mearnsii has invaded many countries around the world (and some years ago was listed as being among “100 of the world’s worst invasive alien species” by the World Conservation Union). It is the only *Acacia* species on this list, which includes such things as the rabbit, cinnamon fungus, cane toads, lantana, fire ants and carp.

Reference:

Liu M, Yang M, Song D, Zhang Z, Ou X (2016) Invasive *Acacia mearnsii* De Wilde in Kunming, Yunnan Province, China: a new biogeographic distribution that Threatens Airport Safety *NeoBiota* 29: 53–62

Thanks to **Maria Hitchcock** for drawing attention to an article in the Cowra Guardian on 23 September 2015. The article was titled “**Wattle: A Misunderstood Producers’ Hero**”. It was written by a Hovell’s Creek grazier, Trudi Refshauge, who was impressed with a local Wattle Day talk by Graham Fifield, a project manager with Greening Australia in the ACT.

The talk covered the general benefits of native wattles to the Australian landscape and especially to farmers. Of particular note was the protection wattle provides for sheep.

Some of the benefits referred to in the article were as follows:

- Improved soil health – wattles release nitrogen into the soil.
- Wattles are a source of protein - they are a legume with 20% protein, and can be attractive to stock when protein in grasses dries up and gets down to about 8% or 10%.
- Wattles provide shade and shelter for stock, especially at stressful times of the year eg during extreme weather conditions and at lambing. It was reported that Gunning Sheep farmers, Bob and Rosemary Spiller, had just experienced their best ever lambing rate (116%), as a result of establishing wattle belts for shade and shelter in one of their coldest, windiest and poorest paddocks.
- Anti-worming properties – many wattle species tested have anti-worming properties, due to the wattles' tannins. Wattle pods are better at killing the worms than wattle foliage.
- Wattles increase biodiversity across the landscape.

Fifield was reported as stating the following:

“Wattles are a seriously misunderstood plant. People say wattles don't live long, look messy and they are allergic to their pollen. There are 1000 different species in Australia and most wattle species don't do these things. They are often flowering when other allergenic pollens are in the air but it's unlikely that the wattles are the culprits for allergies. Wattle pollen does not get airborne and generally falls straight down on the ground”.

The Reserve Bank announced in February that a new Australian five-dollar note will be released this year on National Wattle Day, 1 September, and will feature a species of Australian wattle. This is the first of a new generation of banknotes, and the designs on all of them will feature a different species of Australian wattle.

Apart from banknotes, wattle also features on two stamps newly released by Australia Post. A \$1 stamp issued as part of the Love to Celebrate series of stamps features a wattle design (those members who receive a hardcopy of this newsletter posted will probably find one of these stamps on the envelope). There is also a new \$2.75 International Stamp which features a Golden Wattle diamond brooch that was presented as a gift to the Queen from the people and Government of Australia during her 1954 tour of Australia.

The Canterbury Times newspaper in England reported (6 January 2016) on an *Acacia dealbata* that has become a tourist attraction in Canterbury – a 7m high tree flowering in January. The plant is 6 years old and was brought over from France as a 2 foot high plant. The owner reported that normally it flowers in March, but this year because of the mild winter it has flowered earlier. Many people who stop and admire it also smell it, it smells beautiful.

Seed Bank

A list of species held in our Seed Bank was included in Newsletter 131 (December 2015).

Although we do purchase some seed from commercial sources, we also rely upon donations of seed. If you are able to help with any seed donations they would be very welcome (we would ask you to post any donations to Bill Aitchison, who will forward them on to Victoria Tenner). It also helps enormously if you are able to clean, sort and label the seed correctly. Also, we would like to have provenance information for all seed in the seed bank – so if you donate any seed, could you also provide any information you have in relation to provenance.

Our thanks to the following members for recent donations of seed to the Seed Bank.

Alan Gibb, Joanna McLachlan, Don Perrin, Jenny Simons, Warren and Gloria Sheather, Ben and Ros Walcott, Joe Wilson

The species included in these donations are the following:

acinacea, amoena, aneura (narrow pod), aneura (broad pod), baeuerlenii, blayana, cardiophylla, decora, denticulosa, diphylla, elata, falciformis, floribunda, imbricata, iteaphylla, leptoclada, loderi, penninervis, phasmoides, pravissima, sertiformis, sporadica, suaveolens, vestita

The procedure for requesting seed from the Seed Bank is as follows. Study Group members are entitled to lodge up to 3 orders per member per year, with 18 packets maximum in each order (negotiable). There is a charge of \$3 in relation to each order, to cover the cost of a padded post bag and postage. The \$3 may be paid in stamps or by direct credit to our Group's bank account. Some members include an additional payment with their annual subscriptions to cover the Seed Bank charge.

Requests for seed may be lodged in either of the following ways:

1. By email to our Study Group email address, acaciastudygroup@gmail.com (emails to this

address go directly to both Victoria and Bill Aitchison). If you make a request by email, you will also need to make the necessary payment by one of the above methods. If you are paying by stamps, these should be mailed to Bill Aitchison, 13 Conos Court, Donvale, Vic 3111

2. By mail (enclosing stamps if required). These requests should be posted to Bill Aitchison (address as in the previous paragraph). Bill will then advise Victoria of the request.

We would like to maintain some data on your results in propagating seed from the Seed Bank. We would therefore ask if you could provide a report on your results, recording information on species, number of seeds sown, number germinated and days after sowing.

Study Group Membership

Acacia Study Group membership for 2015/16 is as follows:

\$7 (newsletter sent by email)

\$10 (hardcopy of newsletter posted in Australia)

\$20 (hardcopy of newsletter posted overseas)

Subscriptions may be sent to:

Bill Aitchison, 13 Conos Court, Donvale, Victoria 3111

Subscriptions may also be paid directly to our Account at the Bendigo Bank. Account details are:

Account Name: ASGAP Acacia Study Group

BSB: 633-000

Account Number: 130786973

If you pay directly to the Bank Account, please advise us by email (acaciastudygroup@gmail.com).