



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
Esther Brueggemeier
28 Staton Cr, Westlake, Vic 3337
Phone 0403 078708

Email: acaciastudygroup@gmail.com

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From The Leader

Dear Members

Down here in Victoria, we are now past the main peak of wattle flowering, but many people have commented on what a brilliant flowering year it has been – both in the bush and in gardens. Roadsides have been quite magnificent with outstanding blooms of golden yellow, sometimes continuously for kilometre after kilometre. These observations relate specifically to Victoria – it would be interesting to hear from members in other states as to whether you have had similar wonderful displays.

Some of you may have recently seen Esther Brueggemeier, and her wattle garden, feature on the ABC's Gardening Australia program (on 3 September). Congratulations to Esther. For those who did not see the program, I believe that you can either read the transcript or download the segment from the ABC's Gardening Australia web site. Esther recently represented our Study Group at a Wattle Workshop, "Wattle we eat for dinner" held in Alice Springs. A report from Esther on the Workshop is included on page 7 of this Newsletter.

Thank you to all the members who have already paid their subscriptions. There are still a number who have not yet renewed – if you could attend to this as soon as possible (or let me know if you do not wish to renew) that would be greatly appreciated. If you are not sure as to when your subscription is paid to, let me know and I can advise you what our records indicate.

Our financial statement for the year to 30 June 2011 is included on page 9.

Cheers
Bill Aitchison

Welcome

A special welcome to the following new members and subscribers to the Newsletter:

Ian Evans, Eaglehawk, Vic
Peter Kelly, Whyalla, SA
Marg Sprigg, Arkaroola Wilderness Sanctuary, SA
John Weatherstone, Gunning, NSW
Eric Wilkinson, California Gully, Vic

From Members and Readers

Last year **Bob and Dot O'Neill** sold their property, Katandra Gardens (at Wandin North east of Melbourne) and purchased a smaller 1 acre property at Narre Warren South. Bob writes (4 August 2011) as follows:

“Thanks for the thorough keeping up with information, it is appreciated.

A bit of an update for us. Our new garden is now more or less done as far as we can at this point. Being home on the job for 7 months, most of the planting has been done, the balance to be completed once the warm weather is back with us. We have an 8ft x 14ft hothouse to play with, which is currently an intensive care unit for small and sad plants. I am very heartened with the restoration of dying plants to good health by placing them in protected conditions and the application of a dose or 2 of liquid fertilizer.

In the garden we have had problems with wet feet due to an almost flat block and a poor draining soil type. We lost a number of plants, others we lifted and repotted. This all means that we simply select the right plants for the right places as best we can and do not try too many delicate plants for the moment. On the other hand, we have had successes with a very good range of plant species which is most rewarding.

Acacia wise, we have only a few species in the garden and there are a few seedlings that we have raised, currently in the hot house. We will not be world leaders in the growing of these plants simply because an acre is not a very large space to play in.”

In recent newsletters we have referred to *Acacia araneosa* (the Spidery Wattle). **Chris Nayda** (Port Augusta, SA) advises that the May 2011 Newsletter of The Friends of the Australian Arid Lands Botanic Garden includes an article on this species (www.australian-aridlands-botanic-garden.org/friends2).

Acacia Name Issue

As advised in previous Newsletters, the Acacia name issue was one of the matters raised at the Nomenclature Section meeting of the International Botanical Congress recently held in Melbourne.

Many of you will be aware of the outcome from the Congress, but the following is a summary of the decisions taken in Melbourne.

Essentially, on the first day of the Nomenclature Section, there were two important votes that supported the procedure used in Vienna in 2005 and endorsed the decisions taken in Vienna. This therefore confirmed that the type species of Acacia remains with an Australian species, so that Australian acacias retain the name. Each of these votes was carried with a large majority (and in fact support was widespread and not confined to Australian delegates). The decision to ratify the Vienna Code was passed with a vote of 373 in favour and 172 against.

Later in the Nomenclature Section meeting, proposals were considered in relation to "compromise solutions" to the problem. However, these compromise proposals were rejected, again by large majorities.

The decisions of the Nomenclature Section meeting were subsequently formally ratified by the full Congress.

So in summary, the decisions taken in Melbourne confirm that the Australian acacias retain the name. It is expected that further discussions will be held in the months ahead in relation to a new name for the African and American species.

Footnote: Dr Michael W Fuller from the Cactus and Succulent Society of Australia (CSSA) recently forwarded to me an article that he had written in relation to the Acacia decision taken at the Melbourne Congress. In this article, he makes the interesting observation that the decision in relation to Acacia is not dissimilar to an earlier decision in relation to another genus. The following is an extract from this article:

“Similarly, an earlier Code decision, affecting many CSSA members, was explained in the April 2011 issue of “Spinette.” Had the “priority” rules been strictly enforced, all our favourite Mamillarias would have had to be renamed as members of the genus Cactus. Fortunately, a decision of an International Botanical Code solved that problem by declaring Mamillaria to be a nomen conservanda—a name to conserved (retained and used) in the interests of “stability of nomenclature” or, in other words, “common sense.””

Memories of *Acacia flexifolia*

by Warren and Gloria Sheather, Yarrowyck, NSW

John Weatherstone, in ASG 113, wrote about *Acacia flexifolia*. This brought many happy memories. Back in the 1970's we lived and worked in the Warrumbungle National Park in central NSW. During time off we explored the surrounding area. A trip in late winter took us to the Binnaway district. Amongst roadside vegetation we came across population of smallish *Acacias* in full flower. We were so impressed that we returned to the area, in summer, to collect seed.

Subsequently we identified the species as *Acacia flexifolia* and since then have always included this species in our horticultural activities.

Acacia flexifolia, the Bent-leaf Wattle is a small to medium, upright shrub. The small phyllodes are narrow, about 18 millimetres long, grey-green with a sharp, upward bend near the base (hence the common name).

In our garden *Acacia flexifolia* begins flowering in early July. At this time plants become covered with lemon-yellow, globular flower heads that hide the foliage. We regard this wattle as a "herald of spring" as it is one of the first to bloom at this time of the year.

Acacia flexifolia is one of our favourite wattles and each flowering season brings back memories of an interesting period in our lives.

We maintain healthy plants that have dense foliage and bounteous blooms by pruning when the flowers fade. We propagate the species by both seed and cuttings.



Acacia flexifolia

Photo: W & G Sheather

The day after writing the above we had a day out and travelled to Inverell, west of our property. On the way we found another *Acacia flexifolia* population. This was in a roadside reserve about 70 kilometres from home. The

plants in this population are shorter, denser, more spreading with some evidence of suckering. The flowers are more yellow than lemon (see image). The phyllodes still have the upward bend.

We still feel the same way about this attractive wattle but in future our propagating activities will concentrate on this closer population as it has more horticultural potential.

Acacia amblygona

by Warren and Gloria Sheather, Yarrowyck, NSW

Whilst on the subject of small *Acacias* there is another species, in our garden, worthy of mention.

Acacia amblygona, a species name better written than spoken, is known as the Fan Wattle and is said to be a small wattle sometimes reaching a height of 1.5 metres and sometimes prostrate. The small, unusual, light green phyllodes are more or less triangular and crowned with a sharp point. Bright yellow, globular flower heads are both conspicuous and profuse. Seed pods may be curved or coiled.

Acacia amblygona is common in the Pilliga Scrub in central New South Wales. The plants there are usually upright shrubs about one metre tall.



Acacia amblygona

Photo: W & G Sheather

The specimen illustrated is from our garden and has developed into a dense ground cover with a spread of two metres. Dense interlocking branches inhibit weed growth.

The origin of this plant is lost in the mists of time. The specimen was probably purchased from a nursery. Regardless of its origin this is one of the best and densest ground covers in our garden.

We propagate *Acacia amblygona* from cuttings.

Acacia triptera and a wattle heaven

by Tony Cavanagh, Ocean Grove, Vic

In September 2010, we spent three very pleasant weeks in Queensland including a week at Carnarvon Gorge. The few days extra which we spent in Toowoomba to see the Carnival of Flowers meant that we were somewhat later in leaving Queensland than usual so were travelling through central western New South Wales around 22 September. Both Queensland and New South Wales had received excellent winter and spring rains and we noticed that the wattles in particular were striking, virtually all along the Newell Highway.

A few years ago, we bought our first GPS system and we thought we would try it out on a trip to Queensland just to see if it could show us a shorter route. The first surprise came about 5 km out of Dubbo when we were told to take the turn off to a place called Mendooran which we had never heard of. We checked our maps and saw where it was and as the road ran through something called the Goonoo National Park, we went ahead. The Park is south of Mendooran and we were quite impressed with the variety of local flora, *Philotheca*, *Prostanthera*, *Grevillea*, *Hibbertia*, *Dianella*, *Dampiera* and *Leptospermum*, as well as a number of wattles most of which we did not recognise. Very few were out in flower but I remember thinking that this area could be magnificent if we were there at the right time. Well, 2010 was the right time. Coming south, the turn off is about 18 km out of Coonabarabran and we now always use this route as it is shorter and avoids a lot of the hilly areas around Gilgandra. The flowers really started in earnest about 20 km south of Mendooran and the road was golden for many kilometres with wattles of all shapes and sizes in full bloom.



Acacia triptera

Photo: Tony Cavanagh

A book we picked up on the trip lists some 33 wattles for this general area of New South Wales so if you are travelling in mid to late September in this area, go via

Mendooran. The book was a Bicentennial Project for the Parkes Shire entitled *The flora and fauna of the Parkes Shire* (edited by N.W. Schrader for the Parkes Naturalist Group) and was very comprehensive. The full list of *Acacia* is attached. You may not necessarily see them all as Parkes is south of Mendooran but it gives you some idea of what is likely to be there. The town has interesting murals and is claimed to be the oldest town on the Castlereagh River. It also has a free camping ground but to me its main attraction is that stretch of road through the Goonoo National Park and its wonderful display of flowers. The attached picture of *Acacia triptera*, very widespread and seemingly a pioneer species as it was quite happily colonising disturbed ground, will give you some idea of what (hopefully) to expect.

List of *Acacia* from *The flora and fauna of the Parkes Shire*

Acacia acinacea, amblygona, aspera, buxifolia, calamifolia, dealbata, deanei, decora, difformis, doratoxylon, genistifolia, gladiiformis, gunnii, hakeoides, homalophylla, implexa, lanigera, leuococlada, lineata, mollifolia, montana, oswaldii, paradoxa, pendula, penninervis, pravifolia, pycnantha, spectabilis, trineura, triptera, ulicifolia, verniciflua, vestita.

Pilliga Scrub and CSG Mining

by Bill Aitchison

The “Pilliga Scrub” is an area of 3,000 sq km near Narrabri in northern NSW, being a roughly triangular shaped area of native vegetation surrounded by a sea of agriculture. It is the largest remnant of semi-arid woodlands in NSW, and is highly significant in terms of the State’s biodiversity.

Recently, Eastern Star Gas has applied for approval under both state and federal legislation to develop a massive coal seam gas (CSG) field of around 550 gas wells in the Pilliga. This proposal represents a major threat to an area that supports 900 species of plants, as well as many species of frogs, mammals, reptiles and birds.

On learning of this proposal, I went searching for a list of *Acacia* species that occur in the Pilliga and found the following (2002) list of 48 species:

amblygona, burrowii (concurrans?), buxifolia, caesiella, caroleae, cheelii, conferta, crassa, cultriformis, deanei ssp. deanei, decora, doratoxylon, flexifolia, forsythi, gladiiformis, hakeoides, harpophylla, havilandii, homalophylla, implexa, ixiophylla, ixodes, lanigera, leiocalyx, leuococlada, lineata, mearnsii, nerifolia, oswaldii, paradoxa, pendula, penninervis, pilligaensis, pravifolia, polybotrya, rigens, salicina, spectabilis, stenophylla, subulata, tindaleae, triptera, ulicifolia, uncinata, venulosa, vestita, victoriae, viscidula

I understand that a campaign is currently underway calling on the NSW State and Federal Governments to protect the conservation values of this region. Whilst my knowledge of the issue is limited to some recent reading, if any Study Group member with more knowledge of the issue than I have believes that our Group should lodge a submission with the respective Governments, please let me know and I am sure we can do this.

Reference: Community Data Search and Biodiversity Survey of the Brigalow Belt South, NSW Western Regional Assessments (2002), by David Paull on behalf of the Nature Conservation Council of NSW.

Acacias near Castlemaine, Vic

I recently gave a talk at the monthly meeting of the Bendigo Native Plant Group (in the Goldfields region of central Victoria), and was fortunate to stay overnight with Ern and Lesley Perkins who live at Castlemaine (about 40km south of Bendigo).

Ern kindly provided a list of Acacias native to a 15km radius of Castlemaine, and this is set out below.

| | |
|---------------------------------------|---|
| <i>A. acinacea</i> | Low form. Widespread & common. |
| <i>A. aculeatissima</i> | Common to south. |
| <i>A. aspera</i> | Widespread & common. |
| <i>A. dealbata</i> | Moderately common. |
| <i>A. difformis</i> | A few patches. |
| <i>A. genistifolia</i> | Widespread & common. Peak flowering summer-autumn-winter. |
| <i>A. gunnii</i> | Widespread but small numbers. |
| <i>A. implexa</i> | Common on granite. |
| <i>A. lanigera</i> var. <i>whanii</i> | Common to south eg Fryers Ridge. |
| <i>A. mearnsii</i> | Not common. Mostly on granite. |
| <i>A. melanoxyton</i> | Uncommon at Castlemaine but more common to south. |
| <i>A. mitchellii</i> | Common to south eg Fryers Ridge, Glenluce. |
| <i>A. oxycedrus</i> | Moderately common to south. |
| <i>A. paradoxa</i> | Widespread & common. |
| <i>A. provincialis</i> | Widespread & fairly common. |
| <i>A. pycnantha</i> | Widespread & common. |
| <i>A. sporadica</i> | One small patch. |
| <i>A. verniciflua</i> | Maldon (& landcare plantings). |
| <i>A. williamsonii</i> | Only one, now dead. |

Reflections on Wattle Day

by Bill Aitchison

Early in the morning of Wattle Day this year, in fact at 12.32 am to be precise, I received an email from one of our NSW Study Group members, **Ken Smith**, simply saying

“Happy Wattle Day”. I thought that Ken’s kind thought really epitomizes part of what Wattle Day represents, that feeling of kinship and friendship and a day to celebrate.

I am sure that my own Wattle Day activities were somewhat lesser than for many of our members. Sue and I did go for a wander around our own garden, and compiled a list of all the wattles currently in flower – our list totalled 33 different varieties.

I also had a look at the web site of the Wattle Day Association (www.wattleday.asn.au), and admired the great work that the Association does and the way in which they promote this special day. I learned from this web site that this year the Association raised \$7,000 for rural fire fighters, from the sale of Wattle Day badges.

I also did a search of Newspapers for references to Wattle Day – I found a few references but I suspect that we still have some way to go before Wattle Day features prominently in the calendar of many Australians.

I have referred below to a few of the references I found:

In the **Melbourne Age**, it was noted that on this day in 1912, Prime Minister Andrew Fisher incorporated the wattle into the nation’s coat of arms.

In Broken Hill’s **Barrier Daily Truth**, it was noted that the City celebrated its 100th Wattle Day this year, and in the Town Square volunteers from Riddiford Arboretum sold native plants, badges, and sprigs of wattle to raise money for Red Cross and raise the profile of native flora and fauna.

The **Gympie Times** included a short article to celebrate Wattle Day, headed “Wattle” spring bring. This article commented that although Wattle Day was “originally conceived as a day to demonstrate patriotism for the new nation of Australia, the day now has wider significance as a way to celebrate our natural environment”. It noted that the sprig of wattle is “a unifying symbol for all Australians”, and referred to the words of the Sydney Morning Herald on 1 September 1910: “... The wattle stands for home country, kindred, sunshine, and love – every instinct that the heart most deeply enshrines”.

A report from the **ABC Canberra** referred to the first day of spring and noted that for a lot of people this means heading for the antihistamines. However, the report then noted that it is not wattles that are the cause – the following is an extract from the report:

“If you’re a hay fever sufferer, it’s not wattle that’s causing

your eyes to fill up with tears and your nose to scream out sneezes.

Murray Fagg is the Manager of Botanical Information at the Australian National Botanic Gardens and he says it's a myth that wattle is the cause of hay fever.

“Wattle has a bad reputation. It's not the pollen of the wattle that causes most hay fever. It just happens that the wattle is so prominent when people start getting hay fever.

It has a bad brand by association. The pollen of wattle is quite heavy, so it falls quickly to the ground. It doesn't float in the air.

A lot of the pollen that's causing allergies are actually grass pollen, which is a much finer pollen and floats around a lot. People don't see the grass in flower, so they blame the next best thing – the poor wattle!”

New Acacia Publication

David Richardson (Centre for Invasion Biology, Dept of Botany & Zoology, Stellenbosch University, South Africa) advises that a special issue of the journal, *Diversity and Distributions*, has been published on the subject of Australian Acacias as introduced species. This special issue contains 21 papers.

All of these papers can be downloaded free of charge from the following:

<http://onlinelibrary.wiley.com/doi/10.1111/ddi.2011.17.issue-5/issuetoc>

Note: I know that not all Study Group members have internet access, and made enquiries as to the availability of this special issue in hard copy form, but was advised that it is not available for sale as a single issue.

Acacia cognata 'Mini Cog' (or Cousin Itt)

Peter Goldup has for several decades run a native wholesale Nursery with his wife, and is a breeder of new forms of native plants. Many years ago he released *A. cognata* 'Lime Magik', and more recently he has released *A. cognata* 'Mini Cog' and *A. cognata* 'Emeraldcurl'.

As a fan of *The Addams Family*, I was interested to learn that in the US, Mini Cog is sold as Cousin Itt.

Peter advises that this plant appears to hold up well through winter, but is very drought tolerant. Although he does not talk much about the flowers, it can flower after six or seven years – as his will this year – quite profusely.



Acacia cognata 'Mini Cog'

Photo: Peter Goldup

National Food Plan

by **Bill Aitchison**

Matthew Alexandra (Bacchus Marsh, Vic) recently alerted me to the fact that the Australian Government was seeking submissions to assist it in its development of a National Food Plan (following a commitment at the 2010 election). Matthew suggested that our Study Group may wish to make a submission, making particular reference to the value of wattle seed as a food source.

In following up Matthew's suggestion, I had a discussion with him. I also sought input from **Tony Rinaudo** – Tony made some very helpful observations, provided some references and reviewed a draft of the submission that I lodged.

A copy of the submission is included on page 10 of this Newsletter. Hopefully, the submission may alert a few people to the potential food value of wattle seed. My thanks to Matthew and Tony for their assistance with the submission.

Note that the closing date for submissions was 2 September 2011. Most submissions that were lodged will be able to be read on the National Food Plan web site (www.daff.gov.au/agriculture-food/food/national-food-plan).

'Wattle we eat for dinner'

Workshop

by Esther Brueggemeier

This was the fabulous title of the workshop that looked at Australian Acacias for food security and reigniting research and community support.

The workshop began with a tantalizing welcome dinner featuring many bush products and of course wattle seed was used extensively. During this time **Tony Rinaudo** gave the keynote address 'Wattle we eat for dinner?' and this set the scene for a vibrant, motivating conference ahead. Tony explained why we were having this workshop and what stood out was the looming famine in Africa and the untapped potential of Acacias for food security which gave way to a solemn call for action.

Conference goals were defined early in the session and they were divided into the following topics:

To address issues of poverty, food security, environmental degradation and adaptation to climate change through the development of appropriate **edible Acacia production**, processing and marketing systems.

To create **awareness and support** for the current state of knowledge on edible acacias, identify gaps and kick start **increased research and development action**.

Bring people together who are working on the **related Acacia fields** (food, marketing, taxonomy/silviculture) to **share their knowledge** and get to know what each other is doing.

To **activate people and financial resources** for the development of edible seeded Acacias.

There are too many details that can be mentioned in this short article so I will just randomly mention some of the interesting points, quotes and facts that stood out to me . . .

. . . "Great progress has been made in the fields of species selection and understanding the safety and nutritional value of the Acacias . . . If you were a modern plant breeder with all the gene technology you needed in one hand and a jar full of genes in another, you would be hard pressed to design a plant with a more desirable combination of traits for Niger's condition in one plant –

- drought tolerance - does not need watering if planted after good rain
- thrives in high temperatures
- good seed production (0.5 - 6 kgs seed/tree in second year) and ease of harvest

- nutritious seed (40%CHO, 25% protein, 6% fats)
- long storage life of seed
- seed is very tasty and flexible in terms of recipes it can be used in
- high biomass production (rapid growth) i.e. firewood and leaf litter for mulch and organic matter
- nitrogen fixing
- good wind break features
- withstands heavy pruning
- leaves not attractive to goats / livestock

. . . "Studies show that Acacia is a good source of vegetable oil. Investigation on physiochemical properties of Acacia seed oils reveal Acacia oils to be better than groundnut oil in almost all the nutritional parameters."

. . . "Multi-purpose edible Australian Acacias (*Acacia colei*, *Acacia torulosa*, *Acacia tumida*, *Acacia elacantha*) thrive under Africa's semi-arid conditions. Domestication and evaluation programs over the last 20 years have led to a good range of types with wide adaptability (350-550 mm rainfall), high growth rates, seed and wood yield, nutritional value and long term seed storage capacity."

. . . "Acacia Honey in Tigray, Ethiopia is unique and expensive. It would be very important to capitalize this opportunity through organizing and strengthening honey producing farmer groups where Acacia trees have been planted."

. . . "Studies and tests are in progress for incorporating Acacia powder in ready to use foods for management of acute malnutrition"

. . . "A reforestation technique is used, that of pruning the regenerating stems of trees from underground stumps and allowing a limited number to grow into multi-stemmed trees. . . In just over 20 years of using this technique 50% of Niger's once treeless farmland has experienced reforestation rates unprecedented elsewhere in Africa directly leading to increased food security, income generation, biodiversity, environmental restoration, enhanced soil fertility and combating soil erosion".

. . . "There is overwhelming evidence from more than two decades of research and development that edible, multi-purpose Australian Acacias are ready to become a significant new food crop to combat child malnutrition, improve food security, build farm resilience and support adaptation to climate change"

. . . "When I tell people the story of edible Acacia seed - people are interested because it is Australian, but look at me like I'm from Mars. They just don't get it. But after a while, when I tell them about how it fits in with a broader agricultural movement aimed at eliminating famine and

helping people make an income large enough to send their kids to school, how it can be used as a porridge for starving babies, fodder for animals, timber for cooking and building, and how it's environmentally beneficial by 'gluing' the soil together and adding precious organic matter - people's eyes light up. Then, before they ask, I tell them it doesn't cost much, and they're even more impressed."

... "so it seems there's a bigger story than wattle seeds, with wattle seeds playing an invaluable role. It's part of a story of sustainable agriculture and economic sustainability in the developing world, which is undergoing severe pressure on agricultural productivity caused by unsustainable farming practices and subsequent environmental degradation, global warming (which is changing seasons and disease vectors, etc.) and population growth."

... "We need to engage across the community - get people talking about Australian Acacias and the role they can play in helping to fight poverty. The internet and social media can be a big player in this."

Finally, on the last day of the conference we were divided into three **Focus groups**:

- A. Agronomy
- B. Nutrition
- C. Marketing & Communication

Each group discussed in great detail what the issues were for each section, ie.

- What remains to be done
- How will it be done, by whom, when and where
- How will it be funded

By the afternoon plans were put into place for various individuals and organisations for the coming months and years ahead. We all enjoyed this part of the conference immensely and discussions were lively, stimulating and very promising. There was an overall feel of 'this is really going somewhere', which resulted in the forging of new friendships and journeys.

Overall, the Wattle Workshop was a success and enjoyable for all. We also made some strategic alliances with which we will continue our discussions and work long after the workshop.

For more information check out the following links:

http://210.247.227.129/Libraries/AnnualProgramReview09_CaseStudies/Wattle_We_Eat_for_Dinner.sflb.ashx

<http://www.youtube.com/watch?v=QEhEh06lZSU>

<http://www.worldwidewattle.com/infogallery/utilisation/sehel.php>

Wattle Seeds in Bird Pellets

In an article in the Ballarat Courier (10 June 2011), in his column Nature Notes, Roger Thomas included an interesting observation regarding a bird pellet containing wattle seeds. His report stated:

"A pellet I came across a month ago contained numerous wattle seeds. This pellet was probably produced by a currawong. I was rather intrigued at the number of apparently sound seeds that the bird had regurgitated. Why were they eaten if they were not going to be digested?"

Perhaps the answer is that the currawong chose only seeds from blackwoods. These have a red "funicle" around the outside of the seed, and this would have some food value for the bird.

The pellets are regurgitated through the bird's mouth, not through the rear end.

Although they look rather like droppings, they are usually identifiable by their consistency and the presence of fur and bones, or sometimes seeds and insect parts.

They are almost odourless as well."

Seed Bank

An updated list of species held in our Study Group's Seed Bank is included in this Newsletter. Requests for seed should be directed to Esther.

18 packets maximum in each order (negotiable). Limit of 3 orders per member per year. Please include \$2 in stamps to cover the cost of a padded post bag and postage.

Esther is always very appreciative of any donations of seed to the Seed Bank – she would love to hear from you if you have any spare seed.

Note: If any Study Group member has an outstanding seed bank request (other than a very recent one), could you advise Esther (preferably by email or phone) to check that the order was received. It appears that there has been some confusion between Esther's postal address and another similar address in the same suburb – and we suspect that some mail addressed to Esther may have gone missing.

Study Group Membership

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

Acacia Study Group membership for 2011/12 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

NOTE: Annual membership fees for 2011/12 are now due, we would very much appreciate it if you could attend to this (or advise us if you do not wish to renew your membership).

| ANPSA ACACIA STUDY GROUP FINANCIAL BALANCE SHEET 2010-11 | | | |
|---|---|-----------------|-------------|
| INCOME | Balance at 1.7.10 | | \$320.51 |
| | Members' subs and donations | \$1,227.00 | |
| | Other Income | <u>\$26.75</u> | |
| | Total Income | \$1,253.75 | \$1,253.75 |
| EXPENSES | Stationery | \$12.80 | |
| | Printing | \$360.00 | |
| | Photocopying | \$162.00 | |
| | Postage | \$259.70 | |
| | Purchase Australian Plants Acacia Issue | \$110.00 | |
| | Alice Springs Workshop | <u>\$200.00</u> | |
| | Total Expenses | \$1,104.50 | -\$1,104.50 |
| BALANCE | Balance at 30.6.11 | | \$469.76 |

Submission by ANPSA Acacia Study Group to National Food Plan (submission lodged 1 September 2011)

The Acacia Study Group is a section of the Australian Native Plants Society (Australia) Inc, with members in all states of Australia and overseas. Our members have a wide range of interests and backgrounds, some with a professional involvement with acacias and others purely an amateur interest.

In this submission, we wish to draw attention to the value of Wattleseed as a food source. In Australia, there are over 1,000 species of Acacia, and a significant proportion of these have edible seeds – the seeds are generally roasted and ground, resulting in a product that is versatile and highly nutritious, and that can be used in a wide range of food products. It is described as having a spicy, aromatic nutty flavour, and simply delicious by some of its regular consumers.

Our responses to specific questions are set out below.

Q3. Major risks to Australia's food supply – The impact of climate change will result in increases in temperature, reduced rainfall and greater rainfall variability. As a result, it will be more and more difficult to obtain satisfactory yields from annual crops, and marginal farmland may become unsuitable for annual crops. Increases in water tables and salinity of soils, particularly in wheat belt areas, will create challenges.

Q7. Major opportunities – The bush food industry in Australia is currently very small. A 2005 assessment (Morse) estimated that the industry was worth around \$15 million in retail value in Australia, and was growing steadily (wattleseed is one of the main components of this industry). There is considerable scope to significantly increase the consumption of wattleseed in Australia from what is currently a very small base – and we believe this diversification and innovation in the food chain should be encouraged. However, our view is that without some support by the Government, this is unlikely to become a commercial reality.

We believe that an expanded wattleseed industry would cope well with the effects of climate change, as noted above. It would also assist in climate change mitigation through carbon sequestration and bio-char production.

Australia therefore has the opportunity to show itself as a world leader in innovative agriculture and adaptation to climate change.

Q17. Population Health and Nutrition Outcomes - There is a role for the food industry in supporting population health and nutrition outcomes. In this regard, wattleseed has not only good nutritional value but its health benefits also include a low GI, thereby being good for diabetics (particularly important at a time when globally there is a diabetes crisis occurring).

In relation to nutritional value, Yates (2010) noted that “seed characteristics vary between species, but protein levels are generally around 20 percent, and carbohydrate 50-60 percent. The amino acid balance is similar to other legumes such as lentils, and as such Acacia is an excellent complement to staple grains ...”.

References:

Morse, J. 2005, *Bush Resources: Opportunities for Aboriginal Enterprise in Central Australia*, Desert Knowledge Cooperative Research Centre Report, Alice Springs, Australia

Yates, P. 2010, *Australian Acacias*, Charles Darwin University (research project in partnership with World Vision Australia)

ACACIA STUDY GROUP SEED LIST SEPTEMBER 2011

| | | | | | |
|-----------------------|-----------------------|----------------------|--------------------|------------------------|-------------------------|
| acanthoclada * | bidentata | coriacea | enterocarpa | hamersleyensis | var bracteolata |
| acinacea | aff bidentata | var sericophylla | ephedroides | hamiltoniana | var sedifolia |
| acradenia | bidwillii | covenyi | eremaea | hammondii | lateritcola |
| acuaria | biflora | cowleana | eremophila | handonis | latescens |
| aculeatissima | binata | craspedocarpa | var variabilis | harpophylla | latipes |
| acuminata | binervata | crassa | ericifolia | harveyi | latisejala |
| acuminata (narrow) | binervia | crassicarpa * | aff ericifolia | hastulata | lauta |
| adenophora | bivenosa | crassiuscula | erinacea | havilandiorum | lazaridis |
| adsurgens | blakei | cultriformis | eriopoda | helicophylla | legnota |
| adunca | blakelyi | cupularis | estropiolata | hemignosta | leichardtii |
| aemula ssp aemula | boormanii | curranii | euthycarpa | hemiteles (Goldfields) | leiocalyx |
| aestivalis | brachybotrya | curvata | everistii | hemiteles (Wheatbelt) | leioderma |
| alata | brachyclada | curvinervia | excelsa | hemsleyi | leiophylla |
| alcockii | brachystachya | cuthbertsonii | exilis | heterochroa | leprosa |
| alleniana | brassii | cyclops | exocarpoides | ssp heterochroa | leptalea |
| amblygona | browniana | cyperophylla | extensa | heteroclita | leptocarpa |
| amoena | var browniana | dawsonii | falcata | heteroneura | leptocarpa |
| ampliceps | var intermedia | dealbata | falciformis | hexaneura | leptoloba |
| anatriceps | brownii | deanei | farinosa | hilliana | leptoneura |
| anceps | brumalis | ssp deanei | farnesiana | holosericea | leptopetala |
| ancistrocarpa | brunioides | ssp paucijuga | fasciculifera | holotricha | leptospermoides |
| andrewsii | burkittii | debilis | faunteroyi | horridula | var leptospermoides |
| aneura | burrowii | declinata prostrate | filicifolia | howittii | leptostachya |
| var macrocarpa | buxifolia | decurrans | filifolia | hubbardiana | leuoclada |
| angusta | bynoeana | deficiens * | fimbriata | huegelii | ssp argentifolia |
| anthochaeta | caerulescens | delphina | flagelliformis | hyaloneura | ligulata |
| aphylla | caesiella | demissa | flavescens | hystrix | ligulata (narrow leaf) |
| aprepta | calamifolia | dempsteri | flexifolia | idiomorpha | ligulata prostrate |
| argyraea | calantha | denticulosa | flocktoniae | imbricata | ligustrina |
| argyrophylla | calyculata | dentifera | floribunda | implexa | limbata |
| arida | cambagei | dictyoneura | fragilis | inaequilatera | limbata prostrate |
| arrecta | camptoclada | dictyophleba | frigescens | inaequiloba | linearifolia |
| ashbyae | cana | dielsii | gemina | incurva | lineata |
| aspera | cardiophylla | dietrichiana | genistifolia | inophloia | lineolata ssp lineolata |
| assimilis | caroleae | difficilis | georginae | intricata | linifolia |
| atkinsiana | celastrifolia | difformis | gilbertii | irrorata | linophylla |
| attenuata | chamaeleon | dimidiata | gillii | iteaphylla | littorea |
| aulacocarpa * | cheelii | diphylla | gittinsii | ixiophylla | loderi |
| aulacophylla | chinchillensis | disparrima | gladiiformis | ixodes | longifolia |
| auriculiformis | chisholmii | divergens | glaucescens | jamesiana | longiphylloidea |
| ausfeldii | chrysella | dodonaefolia | glaucissima | jennerae | longispicata |
| axillaris | chrysocephala | donaldsonii | glaucoarpa | jensenii | longissima |
| baeuerlenii | cincinnati | doratoxylon | glaucoptera | jibberdingensis | longispinea |
| baileyana | citrinoviridis | drepanocarpa | gnidium | johnsonii | loroloba |
| baileyana aurea | clunes-rossei | drewiana | gonocarpa | jonesii | loxophylla |
| baileyana prostrate | cochlearis | drummondii | gonoclada | jucunda | luteola |
| baileyana purpurea | cognata | ssp affinis | gonophylla | julifera | lysiphloia |
| bakeri | colei | ssp candolleana | gracilifolia | juncifolia | mabellae |
| bancroftii | collettioides | ssp drummondii | gracillima | kempeana | macdonelliensis |
| bancroftiorum | cometes | ssp elegans (yellow) | grandifolia | kettlewelliae | macradenia |
| barattensis | complanata | ssp elegans (lemon) | granitica | kybeanensis | maidenii |
| barringtonensis * | concurrans | ssp grossus | grasbyi | laccata | maitlandii |
| baueriana | conferta | dunnii | gregorii | lanigera | mangium |
| baxteri | consobrina | elata | guinetii | lanuginosa | maranoensis * |
| beauverdiana | continua | elongata | gunnii | larasina var larasina | marramamba |
| aff beauverdiana | coolgardiensis | empelioclada | hadrophylla | lasiocalyx | maslinii |
| beckleri | sp aff coolgardiensis | enervia | hakeoides | lasiocarpa | mearnsii |
| betchei | ssp effusa | ssp explicata | halliana | var lasiocarpa | megacephala |

ACACIA STUDY GROUP SEED LIST SEPTEMBER 2011 (cont)

| | | | | | |
|---------------------------|------------------|------------------------|--------------------|------------------------|-----------------------|
| megalantha | nuperrima | pinguiculosa | retivenia | sphacelata | trigonophylla |
| meiosperma | var cassitera | pinguifolia | rhetinocarpa | var recurva | trinervata |
| meisneri | nyssophylla | platycarpa | rhigiophylla | var sphacelata | trineura |
| melanoxylon | oshanesii | plectocarpa | rhodophloia | spinosissima v robusta | triptera |
| melliodora | obliquinervia | plicata | receana | spinescens | triptycha |
| melvillei | obovata | podalyriifolia | rigens | spondylophylla | triquetra |
| menzeli | obtecta | polybotrya | rivalis | spongolitica | tropica |
| merinthophora | obtusata | polyfolia | rossei | squamata | trulliformis |
| merrallii | obtusifolia | polystachya | rostelifera | steadmanii | truncata * |
| microbotrya | oldfieldii | prainii | rotundifolia | stenophylla | tumida |
| microcarpa | olsenii | pravissima | rothii | stenoptera | tysonii |
| mimula | omalophylla | preissiana | rubida | stereophylla | ulicifolia |
| mitchellii | oncinocarpa | prominens | rupicola | stipuligera | ulicina |
| moirii | oncinophylla | pruinocarpa | ruppii | stowardii | umbellata |
| var dasycarpa | oraria | pruinosa | sabulosa | striatifolia | uncifera |
| mollifolia | orthocarpa | ptychoclada | saliciformis | stricta | uncinata |
| moontana * | oswaldii | ptychophylla | salicina | suaveolens | uncinella |
| monticola | oxycedrus | pubescens | saligna | subcaerulea | urophylla |
| mooreana | oswaldii | pubicosta | schinoides | subflexuosa | validinervia |
| mountfordiae | oxycedrus | pubifolia | scirpifolia | subglauca | varia v parviflora |
| mucronata | oxyclada | pulchella | sclerophylla | sublanata | venulosa |
| var longifolia | pachyacra | var glaberrima | var lissophylla | subulata | verniciflua |
| muelleriana | pachycarpa | var goadbyi | var teretiuscula | sulcata | verricula |
| multisiliqua | palustris | var pulchella | sclerosperma | var planoconvexa | verticillata |
| multispicata | papyrocarpa | 'Kamballup Dwarf' * | semilunata | var platyphylla | vestita |
| aff multispicata | paradoxa | pustula | semirigida | sutherlandii | victoriae |
| murrayana | paraneura | pycnantha | semitrullata | synchronicia | viscidula |
| myrtifolia (NSW) | parramattensis | pycnostachya | sessilis | tanumbirinensis | wanyu |
| myrtifolia (SA) | parvipinnula | pyrifolia | sessilispica | tenuissima | wardellii |
| myrtifolia (VIC) | pataczekii | quadrilateralis | shirleyi | teretifolia | wattsiana |
| myrtifolia (WA) | patagiata | quadrimarginea | sibina | terminalis | wichhamii |
| myrtifolia v angustifolia | pellita | quadrisulcata | siculiformis | tetragonocarpa | willdenowiana * |
| nematophylla | pendula | racospermoides | signata | tetragonophylla | wilhelmiana |
| neriifolia | penninervis | ramulosa | silvestris | tetraptera | williamsoni |
| nervosa | pentadenia | var linophylla | simsii | tindaleae | xanthina |
| neurophylla | perangusta | redolens | sophorae | torulosa | xanthocarpa |
| ssp erugata | peuce | redolens prostrata | sp 'Hollands Rock' | trachycarpa | aff xanthocarpa |
| nigricans | phlebocarpa | resinimarginea | sparsiflora | trachyphloia | xiphophylla |
| nitidula | phlebopetala | restiacea | spathulifolia | translucens | yorkrakinensis |
| notabilis | pilligaensis | retinodes | spectabilis | tratmaniana | ssp acrita |

Note: Those species marked with an asterisk (*) are currently out of stock within the Seed Bank. We are hoping to restock these species shortly, but if you wish to order any of these species, we suggest that you should check with Esther first as to whether we have stock.