In his talk last month Professor David Cantrill spoke about the renaming of acacias. That reminded me of an article that Jackie Tims wrote for the Naturalist in July 2012 on that very topic. So here it is again!

HOORAY FOR *ACACIA*

Some time ago Bon Thompson told the Botany Group that there were moves afoot to divide the wattles into three separate genera. According to the 1997 Flora of Victoria Volume 3, most of Australia's 950 acacias (now thought to be more than 1000 out of the world's 1250) and all of the Victorian species, would be placed into a new genus, *Racosperma*. However name changes take a long time to work through the system of committees who decide these matters. In the 1700s Carolus Linnaeus popularised the binomial system of naming species of organisms (and minerals) so that any scholar who understood Latin, which was the universal language much as English is today, knew what was being described. A system grew up so that the first person to make a description of a plant or animal had the privilege of naming the species 'in ordinary circumstances' (see note).

The committees who decide such matter of great importance generally meet once every six years and in July last year in Melbourne, the Nomenclature Section during which decision are made on the naming of plants, was held in the week before the XV111 International Botanical Congress. At the University of Melbourne 200 experts in this area of botany debated over 5 days the rules governing how plants are to be named. Quite significant changes were made including for the first time, electronic publication of new plants is allowed rather than a hard copy and plant descriptions can be written in English, not just Latin. The following is a report of the other change.

"It has long been recognised, now with strong scientific evidence, that 'acacias' or 'wattles' include a number of separate evolutionary groups. Splitting a genus to name each different group separately is not hugely problematic, but the case of splitting Acacia resulted in passionate international debate. The issue has been: which group should retain the name *Acacia*? In Vienna in 2005, a decision was taken to conserve the name *Acacia* for the largest group, the Australian group. This was done by making the type species for the genus and Australian species, *A. penninervis*, instead of the original type of 1754, *A. scorpioides* (now *A. nilotica*), a species from Africa, Given the symbolism of acacias in Australia and Africa, this retypification was hotly contested both in public and botanical arenas, with the processes at the Vienna meeting challenged. The IBC meeting in Melbourne ratified the Vienna Code, and after further debate, a clear majority vote (including card votes from herbaria around the world) was for *Acacia* to be retained for the large Australian group. Although not everyone was happy, the consensus was that the processes taken were in order. The Melbourne meeting will go down in history!"(1)

I believe common sense prevailed. Hooray for an Australian *Acacia* I say – and rack off *Racosperma*!

Note. A highly entertaining chapter written by Stephen Jay Gould's book entitled 'Bully for Brontosaurus' concerns a similar type of discussion about *Brontosaurus* really being *Apatosaurus*. The name 'Brontosaurus' as Gould points out is used in museums around the world, in popular dinosaur books and films and is known by that name by millions of children and adults throughout the world as the largest dinosaur which existed. I have a copy of this book if anyone is interested.

1. Reprinted with permission from the School of Botany Annual Report 2011. The University of Melbourne

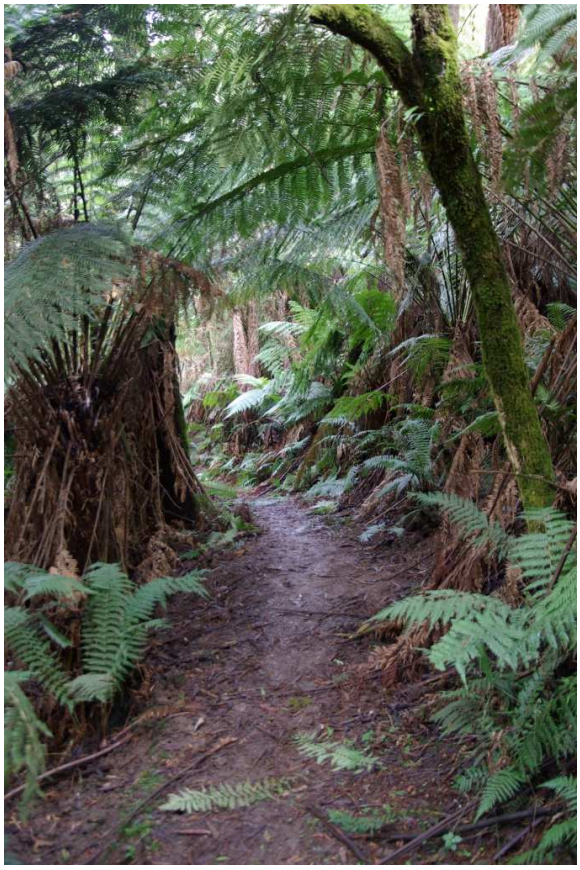
Jackie Tims

MT WORTH STATE PARK

This article was begun following the club's excursion to Mt Worth State Park in 2013 but was left unfinished due to changes in family circumstances. E.A.

Tucked away amidst the rolling hills of central Gippsland, Mt Worth State Park is worth a visit whatever the weather, even though the narrow road to it winds around the steep sides of many of those hills. We have seen it in hail, rain, bright sunshine and with snow lying on the ground, while cold,

overcast, sombre days like the one for our June excursion have been common over the years. It is this type of weather, though, that keeps the rainforest so green and, amongst the greens, there were myriads of treasures just waiting for observant eyes to discover them.



Track in Mt Worth SP Photo: P Rayment

Occasional splashes of other colours stood out from the sombre browns and greens of the forest and the first of these we saw were the little blue umbrellas of a clump of the fungus *Mycena interrupta*, beginning to turn up along their edges to reveal the paler spines (or gills) beneath. Scattered along the log were tiny blobs of blue, most no larger than a pin head, so the whole log would soon be decorated with these fungi.

The path follows Larkin Creek, which flows at the bottom of a fairly steep bank, but that didn't prevent enthusiasts plunging down it to identify plants. The much smaller tributary, Clark Creek, was barely visible beneath the overhanging vegetation when we crossed the bridge not far from the car park. Throughout the park, among the tall trees which form the background are the stately Mountain Ash (*Eucalyptus regnans*), Silver Wattle (*Acacia dealbata*), the Sweet Pittosporum (*Pittosporum undulatum), Pittosporum bicolor* and Blackwood (*Acacia melanoxylon*).

Another tree was *Pittosporum undulatum var. emmettii.* The name *Pittosporum* comes from the Greek *pitch-seed*, referring to the resinous coating on the seed, while *undulatum* is from the Latin *unda*, a wave or surge, and refers to the wavy edges of the leaves. Ken Harris explained that this third species is an uncommon hybrid between *P. undulatum and P. bicolor.* It appears that it is now more correctly called *Pittosporum bicolor x Pittosporum undulatum*. The leaves are narrower than those of *P. undulatum* and without the obvious wavy edges, but are still far larger than the very slender leaves of *P. bicolor.*

Amongst the smaller trees (or tall shrubs) was *Pomaderris aspera* with its furry undersides of the leaves, made so by stalked stellate hairs (star-shaped) and a tall Forest Lomatia (*Lomatia fraseri*) which also has silvery hairs growing beneath its 'toothed' leaves. The Greek word *loma* = border, and refers to the winged edge of the seeds. Further up the track the greenish-grey trunk of a Southern Sassafras (*Atherosperma moschatum)* was growing out of a sturdy Soft Tree-fern (*Dicksonia antarctica).* The Greek botanical name *Atherosperma* refers to the hairs on the fruit—*ather* = awn and *sperma* = seed, while *moschatus* is a Latin adjective meaning musk-scented. The smooth-barked Sassafras does not shed its bark annually and is a rich host for lichen species. Later in the day we were able to pull towards each other the fronds of both the Soft Tree-fern and the Rough Tree-fern (*Cyathea australis)* and compare the growth habit of their spores, tucked up safely in their sporangia and encrusted on the undersides of the fronds. Those of *Dicksonia antarctica* had formed along the outer edges of the pinnae (the smallest segments of each frond) usually at the end of a vein, while on *Cyathea australis* they were clustered on either side of the central vein of the pinnae.

On the day we didn't see any real kangaroos but we did see the Kangaroo Apple,

Solanum aviculare, and Kangaroo Fern, *Microsorum diversifolium*, both of which plants have parts similar to the shape of the kangaroo's foot, the first in its leaves and the latter in its fronds.

Among the multitude of other ferns which had grabbed a foothold at various places along the path were Mother Spleenwort, (*Asplenium bulbiferum*), one epiphytic on a tree-fern and with bulbils developing towards the tip of mature fronds; the Ray Water-fern (*Blechnum fluviatile*); the Strap Water-fern (*Blechnum patersonii*), which is not as common as some of the other water-ferns and actually has strap-like fronds; the Hard water-fern (*Blechnum watsii*); and the Soft Water-fern (*Blechnum minus*), on which the blades of the fronds are often "crinkled".*Blechnum* comes from the Greek *blekhnon* = the name of a fern. Each of the water-ferns are dimorphic, that is, having two forms of fronds with the fertile fronds generally much narrower and more erect than the infertile fronds. The Leathery Shield-fern (*Rumohra adiantiformis*) has glossy, leathery leaves and long rhizomes which were creeping over the surface of the ground. The main rib of each frond has a groove down each side. Rumohr was a German botanist while its common name refers to the raised area which protects the sori (containing spores).

Massed and hanging like a curtain on the trunks of tree ferns were delicate, pale green Shiny Filmy Ferns, *Hymenophyllum flabellatum*. When held up to the light they are almost transparent and the botanical name reflects that: it comes from the Greek *hymen* = a membrane and *phullon* = a leaf. Its sori are like little lumps on the tips of the fronds. Another epiphyte was the Veined Bristle-fern, *Crepidomanes venosum*, formerly *Polyphlebium venosum*. The sporangia develop on the bristle growth then break off leaving the bristle behind. Studies have shown that the spores of the Veined Bristle-fern have a preference for the trunks of *Dicksonia antarctica*. Its common name refers to the prominent veins in its fronds. A Necklace Fern, *Asplenium flabellifolium*, with its fan-shaped pinnae, also grew there as an epiphyte.

With the increase in members' knowledge of the tiny plants of the rainforest much more attention was paid to these on this excursion, though when we turned off the Gardiners No2 Mill Track to follow Giants Circuit I did peer sideways to look for the "Standing Giant" after which the track was named, but the prolific growth of other plants had hidden it. When I first saw it, on a cold winter's day before all the tracks were in place, we were dressed in raincoats and gumboots as Jack Brookes led us on a bush-bash to stand and look up with awe at the magnificent Mountain Ash towering above us. With a girth of seven metres, it is about 90 metres tall and hundreds of years old. The forest had its revenge on the boardwalk constructed around it, continually attacking the wooden structure with fallen branches and trees until the humans gave up the fight to keep it there. It had been Jack who led the fight to have the Park preserved as he had explored the area on his bike when a teenager.

A Bracket Fungus at Mt Worth SP Photo: P Rayment

In the deep shade as we followed the track upwards, white coral fungi (*Clavicorona piperata*) grew in abundance on the trunks of the trees. The decaying fronds of tree-ferns were dotted with numerous *Mycena albidocapillaris*, tiny white fungi with caps about 5mm across and thread-like almost translucent stalks a few centimetres high. Elsewhere, mycelium as fine as cotton thread rambled alongside the track, tangling up amongst the undergrowth. Earlier we had seen the much larger leathery shelf fungus, *Trametes versicolor*, with rings in shades of cream and brown. Puff Balls, probably *Lycoperdon pyriforme*, clustered in a more open area, but their age made it difficult to

be sure. With obvious peaks on their caps (umbo), several *Galerina unicolor* grew on dead wood; as their species name suggests, they are almost a uniform orangey-tan colour.

One of the tiny plants was club moss (*Lycopodium sp*). Although club mosses resemble moss, they have vascular tissue which transports fluid and nutrients internally while a "true" moss absorbs water and nutrients through their leaves. The yellowish powdery spores of some club mosses are used in explosives and as a covering for some pills. Extensive claims are made by homeopathic practitioners about their use as a cure for a wide range of ailments, though warnings are given that the raw product might be harmful.

Adding, of course, to the wealth of green were the patches of moss. Some were smooth like fluffy green mats, damp and shiny, but some had longer branches with shades of reddish brown as if the damp was discolouring them with rust. One of the taller ones seemed to be having a bad hair day, tousled and faded to beige and, during the afternoon walk along the Moonlight Creek Track, there was a delightful moss that looked like a miniature palm tree just a few centimetres tall.

Smothering many of the logs were the liverworts, the sunlight gleaming on the water droplets clinging to them. The English word *wort* means *small plant* and on some liverworts the solid thallus or main body was thought to be shaped like the human liver, hence their common name. With many other liverworts, however, the main body of the plant is leafy. Rising above the mass of lacy green which formed the main body of each of these leafy liverworts, some of the colourless setae (stems) supported minute brown "windmills" or four-fingered stars—the opened spore capsules, though little dark blobs showed that some capsules remained unopened. The setae collapse and bend within a day of the opening of the capsule. A bright green leafy liverwort on a post was *Chiloscyphus semiteres.* As with mosses, liverworts are non-vascular. It is estimated that there are over 8,000 species in the world. A collective term for mosses, liverworts and hornworts is bryophyte, while the study of these plants is called bryology. Liverworts are classified in their own division or phyla as Marchantiophyta. If the spore capsules are present on mosses and leafy liverworts, it is simple to distinguish which is which. A bright contrast to the mosses and liverworts were the fungi growing amongst them, a pair of minute yellow caps, possibly *Rickenella fibulaI*, and a colony of much larger goblet-shaped fungi, a dark blue on the surface and with white pores on the underside.

Also in the park in great abundance were the lichens, the organisms I think of as the great pretenders, as many of their species look like, or "pretend" to be plants when they are not. Some also imitate moss and it is impossible for the untrained eye to tell which it is. Ken Harris identified for me *Parmotrema perlatum*, an attractive grey-green foliose or leafy lichen with a smooth flattish thallus that has wavy broken margins along which the soredia (reproductive cells) clustered like small powdery granules. With a smaller thallus was the foliose *Cladia schizopora* and *Peltigera dolichorhiza* had a larger grey wrinkled thallus. The fruticose *Usnea oncodeoides* is one of the "old man's beard" species, looking like a tangle of long frayed grey bits of string. A piece of rotting branch lying atop a very large log was well decorated with three species of lichen: *Pertusaria gibberosa* formed a white lumpy background to the black spots of *Megalaria grossa* and the bright orange splash made by *Ramboldia laeta. Gibberosa* means hump-backed. Two fruticose lichens grew beside the Moonlight Creek path: *Cladia aggregata* tough, wiry and with spiky points and, hanging down loosely was a curtain of *Coenogonium implexum* which has a byssoid thallus, meaning it is comprised of loosely interwoven threads that appear rather cottony.

Estelle Adams

(To be continued next edition)

NO DIG DINO

It's nearly obvious that the local Leongatha newspaper is called *The Great Southern Star*. In its August 12, 2014 issue, on an obscure high numbered page, appeared a

small article under the heading *No Koony Dig*.

The article refers to the proposed re-opening in 2015, of the Cretaceous fossil field near Koonwarra, about 10 km. south of Leongatha. However as sufficient funds had not been secured in time to allow for planning for the excavation, the 2015 dig will not occur. The next opportunity for another attempt will occur in 2017.

In 2016 key people will be involved in moving paleontological material from the Royal Exhibition Building basement to the Melbourne Museum.

Graeme Rowe

REPORT ON BUSINESS MEETING HELD 21.8.2014

General Meetings & Excursions

Friday 19 September: Two Weeks in the Kimberley – Phil Rayment

Saturday 20 September: Wonthaggi Heathlands. Meet 10am at Guide Park, western end of Graham St, Wonthaggi.

Friday 31 October: Desert Parks Botanical Travelogue – Harold Ross

Saturday 1 November: Morwell River Wetlands. Meet 10am at carpark off Strzelecki Hwy, on south side of Morwell.

Friday 28 November: Migratory Flyway Routes – Ken Gosbell.

Saturday 29 November: Heyfield Wetlands. Meet 10am at carpark.

Botany Group: Saturday 4 October: Traralgon South Reserves. Visit other areas such as those which have plant lists compiled by Bon and Ollie. Meet 10am Traralgon Sth Hall. Contact: Wendy Savage ☎ 5634 2246.

Botany Group: Saturday 8 November: State Forest at Neerim South with Jenny Rejske. For details contact Wendy Savage.

Bird Group: Tuesday 7 October: Australian Paper Ponds. Meet by **8.30am DST** at AP carpark; take first entry. Will car pool after induction. **Alix needs names beforehand**. Alix Williams ☎ 5127 3393, alixw@spin.net.au.

Bird Group: Tuesday **11** November: Bunyip State Park. For details contact Alix Williams.

Finance – Cash Mgt Trading A/c $4398.94. Term Deposit $14,248.46.

Business Arising, Correspondence & General Business

Still pending: botany microscope; Phil Rayment to become replacement signatory; purchase of spare bulb for data projector; roving microphone for questions/responses.

Flora of Melbourne will be purchased at Herbarium; Jackie to be reimbursed $90.

Trust For Nature 'Spring into Nature' event on Saturday 11 October at Uralla Nature Reserve - John Hick has sent flyer and will keep in touch with updates. Hoping we can help out with walks and bird watching 11am to 1.30pm.

Red Gum Plains Project. Motion: That we accept the revised Contract. D Stickney/D Mules. David Akers has been in contact with David Mules re bird surveys to set dates and venues. Next meeting 11 Sept. Ask why club is required to provide insurance.

Guide to Lichens of Morwell National Park – the 10 ISBN numbers which the club has purchased have been located, and one assigned to the publication. At final draft stage.

Radios, GPS and First Aid Kit will reside in cupboard at Uniting Church.

Sale FNC 50th Anniversary dinner – David Stickney, Bruce & Estelle Adams attended.

Sale FNC have invited LVFNC people to join Cape Liptrap excursion with Geoff Pyke in mid-late November. Date yet to be set.

Subdivision near Edward Hunter HBR has been taken to VCAT by developers and LVFNC invited to put their case, but lodgement date Aug 15 already passed.

SEANA risk management – Clubs requested to consider Ballarat and Ringwood clubs' policies to aid with developing or updating their own. Phil will send electronic copy to committee.

Rachel Drew, Jindivick Landcare group requested speaker on local birds. Alix

organized club member Peter Ware, Drouin to do it.

DEPI – Fire Burn plans available for season. Jackie to view and comment if appropriate.

Naturalist survey responses – deferred to next meeting.

David Stickney will collect mail, and Phil & Gill will be backup.

Program Planning meeting – 5pm Wed 10 September at Alix's. Bring plate of food to share.

September BM changed to Friday 12 September, 3pm, at Uniting Church.

SEANA Camp at Portland 26-29 September – can download details from their website. Places still available.

Meredith Fletcher providing club with signed copy of Jean Galbraith book – being posted.

Vic Nature Photography Group camp at Munjara, Glenmaggie 3-6 October – club members can attend. Ken Harris and John Topp are assisting with program.

Don Auchterlonie has presented the club with a bound copy of the magazine *The Garden* from 1916, which belonged to Bob Auchterlonie, past club member.

Living with Bushfires – a community conference 3-5 October. Alix has details.

Jenine Plunkett has been accepted as a LVFNC representative on Australian Paper Maryvale Mill CCG.

Conservation Matters

Draft plan for Alpine NP supports reintroducing cattle. Phil will get a copy for club response.

GUEST SPEAKER FOR OCTOBER

Harold Ross, from Leongatha, is a member of the Friends groups for both the Great Victoria Desert and the Simpson Desert and has spent extended periods each winter travelling in both parks. During recent years, the Friends Group has spent two weeks each year assisting the Rangers with research work, and he has participated in a number of these activities. His talk will cover the plants, wildlife and topography of the Great Victoria Desert.

GUEST SPEAKER FOR NOVEMBER

Ken Gosbell is a member of the Victorian and Australasian Wader Study Groups, and has an interest in the migratory flyway routes and feeding and breeding locations of the migratory waders which come to Australia. He has visited Asian stopover locations such as the Yellow Sea and Korea, and has taken a pivotal role in obtaining information about migratory routes and timings of a number of these species from geo-locators.

FOR THE DIARY

DAYLIGHT SAVING STARTS

Sunday 5 October at 2am

ANN GET-TOGETHER HOBART

Saturday 18 to Sunday 26 October

BIRD CHALLENGE

Saturday 6 December. Alix has all details

CHRISTMAS PARTY

Saturday 13 December. Venue TBA

CLUB SUMMER CAMP

At Errinundra Plateau 16-19 January 2015 Details later

WELCOME TO NEW MEMBER

The club welcomes Jenine Plunkett from Yinnar - we wish you a long and happy association with us.

MESSAGE FROM THE EDITOR

Last year seems to have started a trend. This year I will be attending the ANN Get-Together in Hobart in October, plus a bit of extra touring beforehand, so will be away for about 2 weeks. Other considerations, including a total lack of material, have led to my decision to combine the October Naturalist with the November/December edition, as happened last year. The combined magazine should appear in November at the normal time.