



Toodyay Naturalists' Club Inc.

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Presidents Report

by Brian Foley

The year has started in a flurry of work for all of the Committee and the year has been very good in the meetings and excursions and I thank everybody.

Our meetings started with member Sharon showing highlights of when she was a professional dive instructor at Exmouth, and swimming with the whale sharks. Club member Sue was so excited that she booked a swim with Sharon's company that she had worked for and I look forward to hearing of Sue's experience.

Member Terry High delighted all in showing his Wedge-tailed eagle; a Julimar roadside cleanup; and one of the best excursions with the "Bugman" Paul van Heurck through Wallaby Reserve, where we had about fifty people enjoy a walk through this Morangup reserve.

The Easter weekend was free and some of us planned a trip to the Helena and Aurora Ranges but we only got to Elachbutting Rock. But it is a special place and we enjoyed the weekend.

The work by Wayne on the website has made it easier to use and I encourage all to use our website by lodging reports of sightings and what is happening by the members.

Drummond House is proving useful and even last weekend we had a new member sign up, so I encourage all members to come in and enjoy some fellowship on a Saturday morning while they are in town.

Best wishes to all and I will see you at one of our events.

*Cover Photo: Carpet python
in Dawn Atwell Reserve
Photo by Lou Kidd*



2018 Serventy Memorial Lecture - Dr Noel Nannup *'Walking together - belonging to Country'*

THE 2018 Serventy Memorial Lecture was presented by Dr Noel Nannup, Elder-in-Residence of Edith Cowan University, to a packed theatre at the University of Western Australia (UWA).

The lecture series began in 1989 to commemorate the significant contribution made to natural science by the Serventy Family of Dom, Vincent, Lucy, Carol and John. Since 2002 annual prizes have been awarded to four Western Australian university students.

Dr Nannup was introduced by Professor Lyn Beasley and she included that Noel was the recipient of the 2017 NADOC Perth Award.

Following an emotive 'cleansing of this space' Noel stated that the ground on which UWA stands was gifted, by the occupants of the land, to Captain Stirling on his arrival in this southern continent - a gesture that has never been repeated.

Noel's mother was very, very important in his upbringing and he said, "My mother introduced me to public speaking saying that 'words are *so* special - live in harmony with everything - never put yourself first."

As a nine year old growing up in Geraldton two special people arrived at his school, Dom Serventy and Harry Butler. They left a lasting impression of 'Caring for Country' on the young lad that includes his great love for the night skies; he regularly leads groups at the Gingin Observatory.

It was a wonderful evening listening to this learned, but humble, gentleman.

Bug walk with Paul van Heurck in Wallaby Reserve by Sharon Richards

ON A BALMY Sunday afternoon more than 45 people from at least 3 generations and, including some local St John Ambulance volunteers, gathered at the Community Centre in Morangup ready to explore the delightful Wallaby Reserve that covers approximately 43 ha; it is accessible by parking at the Morangup Community Centre off McKnoe Drive or Louisa Circle. We were planning a circular walk of approximately 2.5km to take in the various ecological environments.

Following a short history lesson from our local Reserves Management Officer Greg Warburton, our entomological expert, Paul van Heurck, gave hints and tips on finding our prey, reminding us to turn rocks away from ourselves to avoid being surprised by a scorpion or two and, of course, returning them to their original position to reduce the impact of our foraging; armed with collection pots, we set off on our safari.

The path follows a fire access track and initially we were surrounded by large Marri (*Corymbia calophylla*); there was evidence of the previous burns and fires in the reserve by the blackened barks. Paul captivated his audience with stories of pyrolytic insects which require fire to breed and indeed can detect the nature of a fire, what tree or plant is burning and in what direction - up to 40kms away!

Strongly adhered to the rock formations a praying mantis egg shell was revealed. As Paul explained, the young emerge fully formed just a much smaller version of those beneficial visitors we often see in our garden.

To add a touch of colour, we encountered much Parrot Bush, *Banksia sessilis*, and some beautiful red flowering *Calothamnus* sp. dotted alongside the track. A little further along the purple of a delightful *Hemiandra* sp. delicately poised at the side of the track.

Meandering along, a number of different ant species were identified including an impressively-sized female meat ant. As with many successful societies the females in the ant world are dominant to organise and rule their communities. A number of millipedes and centipedes were captured and released after careful scrutiny.

Continued Page 10

DEALING WITH ANTS

by Robyn Taylor

This article started with a complaint, or was it an observation, from members of the public about meat ants on a particular section of the Bilya Walk Track. There were so many they had to leave the track and return to where it was ant-free. The problem was discussed by the committee and it was agreed we didn't want to use insecticides. So how to get around the issue of ants building their nests where people want to walk.

Paul van Heurck, an entomologist, provided his experience of the nesting habits of meat ants.

*From my observations of meat ants (*Iridomyrmex purpurea*) on our farm and in the adjacent jarrah forest I have never seen a nest in the shade or covered with leaf litter. A possible long term solution would be to plant a jam wattle thicket on either side of the bare track. In the mean time and until winter rains, the nest could be covered with dead branches and leaf litter periodically. This could be a long term ecological solution and avoid introducing insecticide. Alternatively contact ant specialists at Ag Dept Perth.*

As often happens, doing nothing can be a useful strategy. The ants have either gone elsewhere or subsequent walkers haven't found them a problem.

Ants are fascinating creatures. I admire their industry, resilience and resourcefulness. And therein lies a tale - my encounter with bull ants. While on my knees removing dead grass around a native shrub, I felt several stinging bites under my shirt. Grabbing the material around whatever it was, I fled to the bathroom. A bull ant (Genus *Myrmecia*) dropped onto the floor. It ran towards me with intent and I instinctively stamped on it, several times. The sole of my hiking boot was not adequate for the job and the ant remained alive and kicking. Now I had to put it out of its misery. It actually took a couple of hits with a meat mallet.

Back to the bathroom to put the shirt on - but there was another one lurking in the folds. I shook it into the wash basin, plugged it, and turned the tap on. But bull ants are true survivors. This one was determined. It used its front legs to draw down an air bubble over its head, then swam around looking for a way out. I helped by releasing the push down plug. Down it went...but when the water drained away there it was under the plug, front feelers moving about considering what to do next. I knew it was watching me. Admiring its tenacity, I left it to work out its own solution.

The Tom Oliver Award 2017

The Tom Oliver Award is a Special *BirdLife* Photography Award established in 2014, in honour of a dedicated *BirdLife* Photography member, Tom Oliver, whose passion for bird photography and in-depth knowledge of the technical aspects of this photographic genre were enthusiastically shared with anyone who sought his company. Sadly, Tom is no longer with us, but his zeal for educating others lives on through the Tom Oliver Award. This perpetual award has been made possible by a generous bequest to *BirdLife* Photography from Tom's wife, Di Oliver. *BirdLife* Photography extends its gratitude to Di Oliver for her generosity.

The Tom Oliver Award is currently offered bi-annually; the inaugural Award was made in 2015. It seeks to entice photographers and/or photography-educators to **create an original and inspiring educational resource** enabling bird photographers to advance their photographic knowledge-base and technical competencies. This definition is deliberately broad to encourage lateral thinking and innovation by award entrants. These resources should promote best practice in photographic techniques and could include aspects such as:

- photographing small birds
- photographing birds in flight
- capturing interesting behaviours
- compositional elements
- post-production techniques and workflows
- ethics in bird photography

The [2017 Tom Oliver Award](#), for the creation of educational resources specifically targeting bird photography, was won by Georgina Steytler - Wild and Endangered - who submitted an e-book "[The Art of Bird Photography](#)". The sub-title tells what it's about - *10 inspirational ideas to help you turn common birds into Art.*"



2017 Tom Oliver Award Recipient's Entry - An Overview

by Desrae Clarke

GEORGINA Steytler, member, photographer extraordinaire, wildlife carer and winner of the prestigious 2017 Tom Oliver Award, a Special Birdlife Photography Award commenced 2015, has produced an amazing publication – ‘The Art of Bird Photography’!

She states, as she talks to *you*,

“I hate to admit it but there is nothing new in what I will say in this booklet. Even the title has been used before. Over 10 years ago, Arthur Morris published his book ‘The Art of Bird Photography’ and started a blog called ‘Birds as Art’. But, as his was a ‘Complete Guide to Professional Field Techniques’ mine is anything *but!*”

Furthermore,

*You don't have to be creative to
be creative. Creativity is
imagination and imagination is
for everyone.*

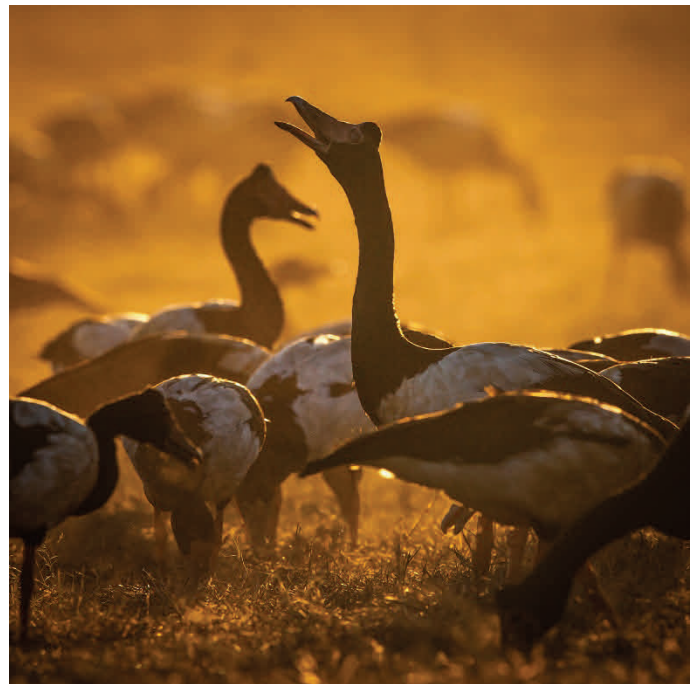
Paul Arden

“Rather, my aim in producing this booklet is to inspire bird photographers to be creative. As the quote suggests, you do not need to be creative to be creative. You just need to be willing to break a few rules. In this book I hope to show you how to create beautiful bird images from birds on your doorstep.”

Georgina has 10 inspirational ideas to help you turn common birds into Art plus amazing bird art creations taken in all weathers, situations with my favourite the saturated and sad-looking Raven. Read, enjoy and become inspired!!

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Left: A (wet) Australian Raven

Lofty Ambitions - the Peregrine Falcon

Part One

by Michael Colvin

[A breeding pair of Peregrine Falcons, with three young, was sighted in 2011 within the Toodyay townsite. It was therefore very exciting to recently have two visits of a single bird, giving plaintive calls resembling those of a young bird pleading for food, sitting high on a dead tree on a Majestic Heights property.

The following is a most informative contribution to the Western Wildlife, the Land for Wildlife Newsletter, December 2017 Issue 21, by Michael Calvin. Reproduced with generous permission from Michael Colvin]

‘This article is an introduction to the work of the Raptor Rehabilitation Association of Western Australian Inc (RRAWA), and the use and refinement of free exercise techniques by skilled and experienced members for the meaningful rehabilitation of raptors that may benefit from them.

At the outset, it is important to be clear that the vast majority of raptors that come into care throughout WA are unsuitable for a course of free exercise flying prior to final release back to the wild. Most, unfortunately, sustain injuries or other debilitations which are simply not consistent with release regardless of veterinary treatment and expert care. There is another sizeable proportion of birds taken into care that can be successfully rehabilitated and given the best chance through ‘conventional’ aviary-based rehabilitation methods.

For example, an adult brown goshawk that suffered a car or window strike which resulted in mild concussion but has recovered within a few days, (provided that it doesn’t meet with any further damage in care, such as broken flight and tail feathers which are vitally important), could be released as soon as it appears to have fully recovered and the rehabilitator may reasonably expect a very good outcome. These are the simplest and by far the most effective cases of rehabilitation - the injury or illness is limited to only a few days, and further physical or psychological damage to the bird whilst in care is kept to an absolute minimum.

At the other end of the spectrum would be a 5 or 6 week old orphaned peregrine falcon which, although it may have no physical injuries, may well become psychologically damaged if handled with anything but the most expert care by people who understand the complexities of how these birds develop throughout their ‘critical Michael Colvin development does not occur throughout the critical development stage, this is perhaps as debilitating as physical injury as far as going back to the wild and contributing to the wild gene pool through successful breeding is concerned. Food association with humans is particularly critical and should be avoided at all costs. Appropriately screened off ‘seclusion’ aviaries which shield the developing youngsters view of approaching humans with food, and the use of food drawers or chutes to facilitate nothing more than the sudden appearance of food to the youngster, and perhaps mirrors within the aviary so the bird develops the appropriate body image (rather than a human for example) can be beneficial in most cases throughout these first few weeks. All these things should be a primary consideration for any raptor rehabilitator and very specialist knowledge should be sought.

Raptors can rarely rely only upon the instinct that they hatched with, and to simply release the bird when it gets to natural fledging age would in most cases amount to nothing more than a death sentence, no matter how nicely it flew off into the sunset. Even extensive exercise within a huge circular aviary (who of us can afford those?) cannot possibly prepare an orphaned peregrine falcon for release to the wild for it MUST develop the appropriate prey image and the skills to catch them.

After reaching fledging age at about 42 days, wild young peregrines spend up to the next three months within the family cohort building flying fitness, dexterity, manoeuvrability and most critically, the ability to successfully and consistently hunt their natural quarry in their own environment. The learning to hunt part of their development is much more detailed and extensive than many would first imagine. Adult peregrines actively teach their young to hunt by showing them over and over how it’s done. They capture fast flying birds such as parrots, pigeons and ducks as well as a myriad of other available species and they release them sometimes alive, high in the air for the young to catch. This cannot in any way be considered to be ‘cruel’ and is an entirely natural part of the life journey of each and every wild-born peregrine falcon.

Even then, once they go their own way at dispersal, as many as 50-60% will not see out their first winter and perhaps only 20% reach breeding age. Only half of those go on to successfully breed and fledge their own young. That’s right - perhaps as few as one in ten go on to successfully breed. It’s tough out there!

Continued Page 7

Lofty Ambitions (continued)

An orphaned peregrine falcon is an example of when the specialist knowledge and skill of some members of RRAWA can pay dividends because arguably the surest way of giving it the best chance of wild survival is to free exercise fly it for extensive daily periods to build elite fitness levels, and then to allow the bird the opportunity to hunt by being released daily where it's natural quarry are abundant. This all takes specialist knowledge and resources, including suitable housing, equipment, food, availability of sophisticated GPS or radio-telemetry tracking equipment, time and of course access to suitable land. (Could this include your property? Please contact me if you're interested!)

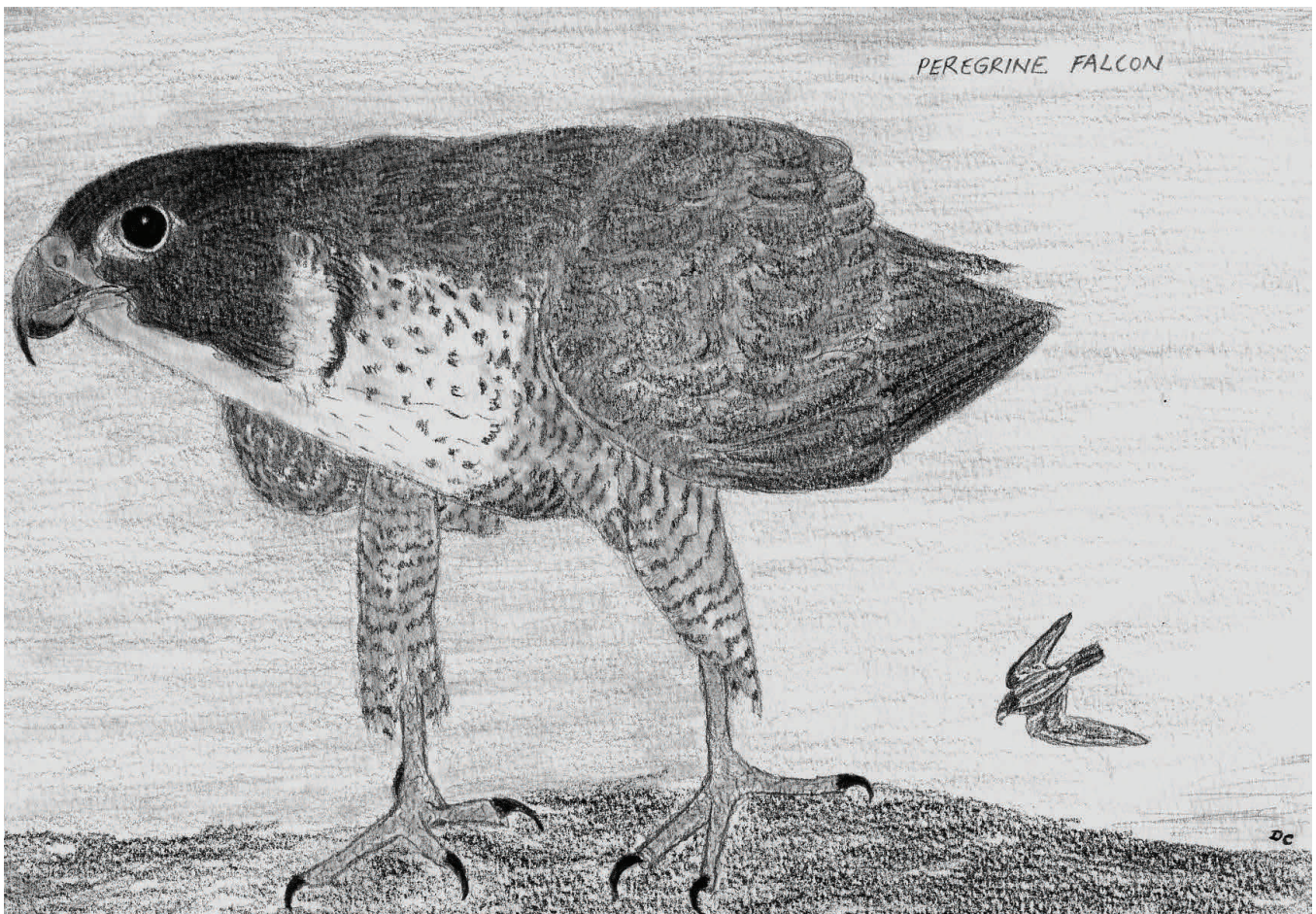
As part of the training process, the bird being rehabilitated is encouraged to fly for its supper by use of a drone carrying a food prize. As the raptor builds strength, speed and endurance the drone is flown progressively higher and faster for the raptor to chase down for their food reward.'

(Ed: For social media users, some footage of this process can be seen on the Facebook page called Aggie's Journey, maintained by a RRAWA member).

'For more information about the work of RRAWA or if you would like to join or support us, find us at www.rrawa.com and feel free to get in touch. If you have land that may be made available for any of our members to occasionally free exercise the birds we work with, or your local primary school or country show is interested in us attending with a few of our display birds, you now know where to find us. Thanks for reading!'

[Michael Colvin is a falconer with many years experience, and is a founding member of RRAWA. He may be contacted on 0434 495 620.

The second part of this article will be found in the August 2018 edition of the TNC Newsletter.]



Above: Sketch of a Peregrine Falcon illustrating its dark hood, and its wing-formation in a dive.

by Desraé Clarke

Rodborough Common - an oasis for humankind and all creatures

by Rev. Peggy and Rev. Brian Ludlow

Rodborough Common is a sanctuary in the midst of a busy part of Gloucestershire. Land which for over 1,000 years has been a place where local people have had the right to roam and for those with properties surrounding the manor house, the right to graze their stock too; cattle, horses and donkeys. Farming practices have allowed the local fauna and flora to flourish without too much disturbance, and there are many rare orchids to be found - if you know where to look. The markings of former stone quarries pit the ground and local cottages have the tale tell colour of the local limestone.

The astute can see the countryside's story told in rolling hills at the edge of the Cotswold escarpment; the hillsides still marked by the vineyards that the Romans built about 60 CE. Before them, prehistoric peoples wandered the land and created communities. Their burial sites around - mounds, passages and stones are still present as well as the markings from field systems across the slopes.

The common is still advertised as a place where people have the right to roam for 'air and exercise'. From May until October about 500 cattle wander free as well, together with a few horses and donkeys. But only a few hardy types stay out through the winter months when the muddy soils are bad for the feet! Most UK cattle are in barns over the winter if they're not in the freezer! I once rang the Ranger about cow number 148 who was stumbling a bit with a sore leg, and he told me he was very cross as this cow was too old, at 28 years, to be loose on the hills. Dogs get used to the giant creatures wandering round their favourite walk, and mostly ignore them, although some humans are afraid.

Here we drive with care to avoid 'roos; at Rodborough in Summer cars need to go slowly to mind for cattle, which of course love the warm road to sit on at night. Sadly, several cows are killed each year where drivers fail to brake in time. The police must get fed up with hearing tales about cows that run at over 40mph (65kph) into the path of oncoming traffic. I was once delayed by half an hour driving across the Common at 6.30 am as no one was willing to get out of their car to 'persuade' the herd to get off the road. Thankfully bus drivers aren't so reticent, so the paradox in Rodborough is if you are in a hurry, follow the bus. There is one busy crossroads where cattle and cars mix freely. Its quite a sight!

The grasses are kept short and the most extraordinary collection of cowslips and orchids abound. This is a place where once common species find a home, especially the butterflies. The large and elegant 'Duke of Burgundy', with its pattern of browns and the beautiful Adonis blue. Glow worms shine during the night and horseshoe bats tear about as evening descends - both bringing life to the dark. The seasons too bring huge changes and the birds that migrate to the area create the pattern of the year. The first Chiff-Chaff and the Cuckoo herald the warmer days on their return from south of the Sahara. Other visitors, like the Ring Ouzel (a blackbird with a white collar), are merely passing by but stop for a rest on their way to the Welsh hills.

Snakes begin to move but are rarely seen unless you go very quietly. Large grass snakes and slow worms are common, and Adders may be found in healthy numbers lying on the warm edges of the paths. None as venomous as the snakes in WA, but the Adder can give a small dog a nasty bite requiring a rush to the vet for anti-venom; about six dogs a year are treated for a snake bite but only the very elderly ones could die.

If left un-grazed, the land would revert to scrub and woodland. Little trees need to be removed each year by the volunteer groups to let the grasslands hold sway. Hence this gentle 'land management' using the methods of previous centuries, is a vital way to preserve the Common for all. Its worth it as the views are incredible across the Severn to the Welsh borders.

Below: Overlooking the City of Stroud



Below : Cattle on the Rodborough Common.

Photos by Rev. Peggy & Rev. Brian Ludlow



THE EASTER ROCK TREK with Finn, Michalie and Sacha Ruoss

Easter long weekend took us out camping at Elachbutting Rock, about 70 km past Mukinbudin. We set up on Good Friday - just in time for a wild thunderstorm to come in. Sacha had to hold onto the gazebo to stop it flying away. Saturday we explored the rock and the many puddles and waterholes left by the previous night's rain. We walked through Monty's Pass which is a corridor created by a slab of the rock breaking off one side.

After the Easter Egg hunt Sunday morning we went out exploring the tracks behind the rock. We drove through beautiful Eucalyptus woodland as well as thick scrubland. It was amazing to see how the vegetation kept changing so rapidly as we were driving. We found ourselves out on the Mt Jackson road and decided to head to Baladjie Rock for lunch which we had previously visited the year before. The rock is adjacent to a nice salt lake. Here we spotted a Peregrine Falcon flying over the rock. We made our way back to Elachbutting via a stop at Chiddarcooping Nature Reserve where we had a nice walk through the breakaways at the side of the road. Finn was fascinated by some kangaroo bones we found.



Monday was our final day exploring. We decided to try and find Walyahmoning Rock which the Nats club had unsuccessfully tried to find a few years prior on a visit out this way. We headed again out the back of the rock and finally found it - just had to go a bit further down the track. We had a great view over to Elachbutting and beyond. After a harrowing drive down a very narrow track we were rewarded with a sighting of a Malleefowl. Back on the main road and headed to Beringbooding Rock which is across the road from Watson's Way B&B where the Nats stayed a few years ago. This time we found the cave with the Aboriginal rock painting, which was good as we had to shelter from a storm.

On our arrival back to camp we found that everyone else had packed up and gone home and we had the rock to ourselves.

On the drive home on the Tuesday we saw the damage of the thunder storm with many large trees knocked over especially through Trayning. It was a great trip and overall, we saw 41 bird species.

*Above: Finn exploring the breakaways,
Chiddarcooping Nature Reserve*



*Right: Finn introducing the rocks and
scenery at Elachbutting Rock
Photographs by The Ruoss Family*

Member's Photographs



Above: Paul van Heurck talks to members and visitors at Wallaby Reserve

Photo: Beth Frayne



Top: Orb-weaving Spider (*Eriophora* sp.),

Photo: Sharon Richards

Above right: Spider (*Nephila* sp.).

Photo: Jacquie Lucas

Both *Araneidae* Family, in Wallaby Reserve



Above Left: Melaleuca forest, Wallaby Reserve

Photos: Lyn Phillips



Above right: Black-stemmed mallee

Bug walk with Paul van Heurck in Wallaby Reserve (cont from Page 3)

A tiny but very active jumping spider was discovered, it's effervescent nature an inspiration to those of us unaccustomed to spending an active Saturday afternoon.

A large weaving orb was discovered alongside its web holding previously captured flies beautifully gift-wrapped ready for a future meal. The weaving orb is well known for setting its web for its prey which is most active at night, then taking shelter in nearby flora during the daylight hours to avoid becoming the lunch of a passing Willie Wagtail or Magpie. Along the track there were more courageous weaving orbs on their webs apparently conducting some much needed repairs. From Paul's account, given their conservative nature, a female spider may reach the ripe age of 20 years; just imagine the stories she might tell of the things she has seen and done in her bushland home.

The dry ground surrounding the fire break did not reveal a huge variety of insects but as we came to our turning point a long deceased young dugite was found closely followed by a sloping tunnel into the pathway, potentially belonging to a member of the reptile family, whilst scats were evident it appeared that the resident was either away from home or well underground avoiding the noisy human intruders.

Turning left and north towards the Swamp paperbark (*Melaleuca raphiophylla*) forest, the environment changed dramatically in only a few short metres. Frogs were captured, no more than 12mm in size, dappled grey in colour and apparently fairly slow moving. The ground become boggy and moist underfoot and we were surrounded by the silver grey peeling bark of the Melaleucas. Paul took the opportunity to examine the trunk more closely identifying potential borer insects. In the shade of the Melaleuca forest we discovered an assortment of small *Drosera* sp. with a number of brave crickets who were risking life and limb to imbibe on the nectar produced by the beautiful, but deadly, sticky fronds of the *Drosera* leaves.

Emerging from the Melaleuca forest and heading west again we followed the route of the old flowing spring, no longer flowing during summer months as a result of the reduced rain fall and subsequent lowering water table. The ground was very wet with large puddles evident in the ruts produced by a variety of 4-wheel-drive vehicles accessing the road. As we pick up the pace, our walk has been so absorbing we have already taken two, rather than the allocated one, hour. It is noted to our left there is a large area of cleared land bordering the track.

Heading down the path towards our destination, the Morangup Community Centre is in sight. Our final hurdle is the path that is covered in large Marri gum nuts that claimed at least one walker losing her footing as she attempted to cross, which was in fact, akin to walking on a bed of marbles. Fortunately, no harm was done.

At the Community Centre there were a few more treasures to be explained, the trap door of a local trap door spider, relatively innocuous in nature in comparison to its eastern states cousin, and more discussion about the beautiful Wallaby Reserve and the plans for its future development. All this combined with a sumptuous afternoon tea and the wonderful hospitality of the Morangup residents made for an incredibly interesting and pleasant afternoon.

DID YOU KNOW...



... the difference between paper and European wasp nests?

Sharon Richards queried with Paul van Heurck on the owner of this wasp nest.

Paul's answer -

“Sharon's critters are a beneficial species of *paper wasp* (and not a European wasp as first thought).

These *Polistes* sp. are probably native and are very useful predators in the vegetable garden as they feed on caterpillars and other pests. They make a paper nest exposed to the elements. The nasty European Wasps build a nest in a burrow or cavity like Honey Bees.”

Photo at left: Paper-wasp nest by Sharon Richards

ENVIRONMENT MATTERS

WHEN IS A WEED NOT A WEED?



This uninviting plant *photographed in the Goomalling area by Ardina van de Ven*, is an indigenous weed species of the wheatbelt and Goldfields. *Solanum hoplopetalum*, also known as Afghan Thistle, grows well on wasteland and graded areas and is often troublesome in pasture paddocks and crops.

The extremely prickly plant grows annually in spring and summer from underground stems to display white or pale bluish star-shaped flowers typical of the solanum species.

The name 'hoplopetalum' is from Greek 'hoplon' meaning 'weapon,' and 'petalon' refers to the prickles on the back of the petals.

This species can be confused with a similar plant, *Solanum hystrix*, native to South Australia and its off-shore islands; it has glaucous leaves whereas *S. hoplopetalum* has hairs.

Although the name Afghan Thistle could be related to the plant being brought to Australia by the Afghans this is not correct. However, camels enjoy a meal of this plant!

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