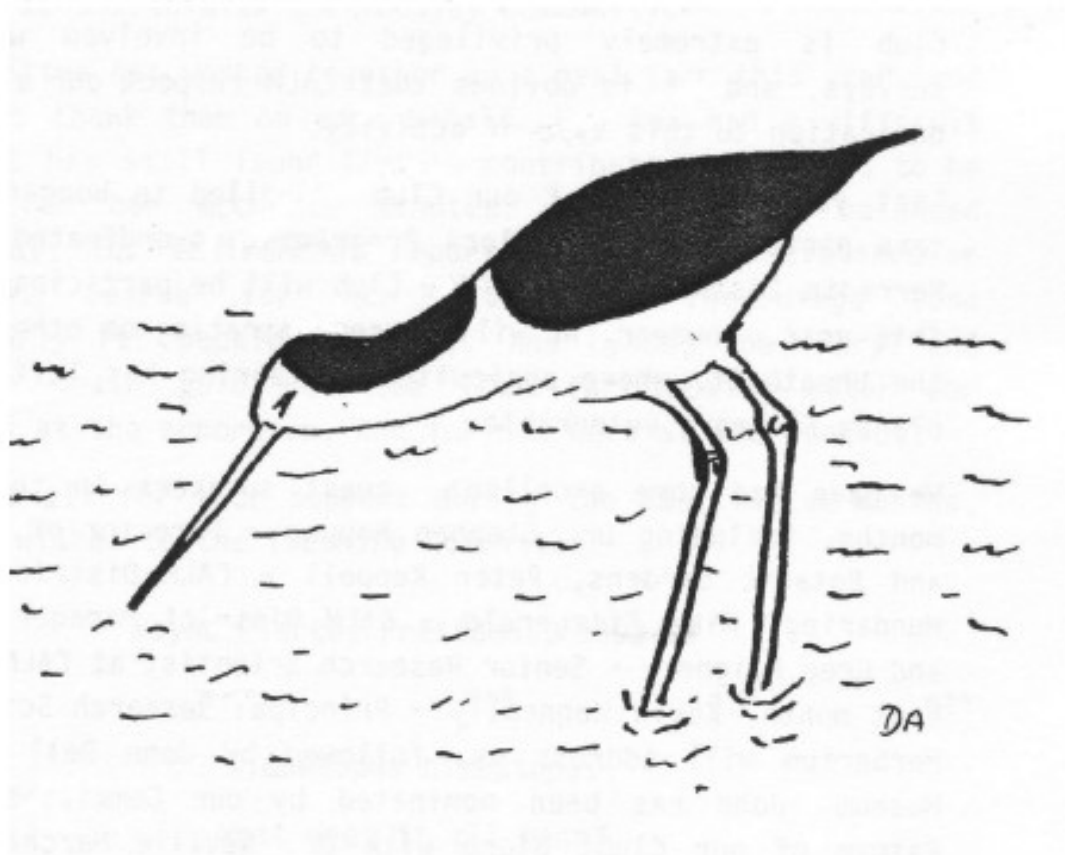




*The Toodyay
Naturalists' Club
Inc.*

Number 1

May 2010



This delightful cover, featuring the Pied Stilt, was drawn by Dawn Atwell, one of the four founding members of the Toodyay Naturalists' Club in 1968. With her idea of recording observations, Dawn was the original 'Keeper of the Club's Records'; she saw observations and these records as one of the Club's most important aspects of its *'Aims and Objectives'*.

PRESIDENTS REPORT *by Lee Francis*

The year started off with the bushfire which to some extent influenced our programme of activities for 2010. A planning meeting was held and after a few changes and refinements, has been sent to all members.

Our first Club meeting for the year had a packed programme and was a fairly late night, but it was worth it! We had a very good attendance of over thirty people, and were very pleased to meet some new faces, who will I'm sure become good friends. We were lucky to have a presentation from Liz Manning about the latest research on Wandoo Crown Decline and associated matters. Then our creative and adventurous Vice President presented an incredibly detailed history of the early settlement at Augusta, and the work of Georgiana Molloy and others in the collection and naming of Western Australian plants.

Speakers at our March meeting were Renee D'Herville and Rob Koch, members who undertook an extremely strenuous trek in Tasmania late last year. Rob and Renee presented a great show of photos and maps and a day by day record of their walk. Beautiful scenery and fascinating tales of the weather and the sheer effort involved had the audience riveted.

Our April meeting was low on numbers, due to many people taking the opportunity for a rest and a bit of globe-trotting, but the lucky people who were there experienced a very interesting presentation by Nathan Heal, who is Project Officer for the Wheatbelt NRM. Part of his current position is to engage with Indigenous people and work on environmental remediation projects in the Wheatbelt. But we also heard about making water sources for elephant in Africa, and many other challenging adventures.

The Club provided support to help with the preparation and running of the Heavenly Hectares Fire Recovery Workshop in April, which was initiated and organized by former Landcare Officer, Shire Councillor and TNC member Bethan Lloyd. Much positive feedback was provided, so we were proud to have been involved.

Coming up in the next few months, we also expect to be engaged in some revegetation work if we ever get enough rain! Various members are monitoring the return of life to a range of soil and vegetation types in some of the burnt areas, and the Club has an agreement with DEC to assist with a longer term project in the Mavis Jeffreys Reserve on Sandplain Road.

Two bits of great news are, firstly, that we are commencing discussion with the Acting Shire CEO regarding road verge clearing, clearing permits, scheduled works, vegetation surveys and offset plantings. Secondly, thanks to the effort of our Secretary, and the generosity of Lotterywest, we now have our own digital projector and laptop, which we will share with Toodyay Friends of the River and will no doubt hire out to other groups by arrangement.

So, the first half of the year has seen some challenges for many Toodyayites, including several of our members. The Club wishes to offer whatever support possible to anyone we can assist. For the rest of the year there is an interesting and, we hope, enjoyable programme of activities to look forward to and with which to become involved.

NATURALISTS' NOTES
CODE OF THE
BUSH

Nature reserves are special places. They contain plants, animals or artefacts that must be preserved because of their uniqueness and beauty. They are 'islands' of our original Australia.

Nature reserves are used for scientific study, cannot be exploited, and prohibit recreation which is damaging or disturbing to their well-being. But you are free to visit them for bush walks or nature study. To enjoy Nature Reserves to their fullest and to allow others to do the same, please carry out the following code:

1. Do not leave any rubbish — take it home.
2. Keep to defined tracks or fire breaks.
3. Always take care not to trample delicate areas such as moss covered rocks, steep slopes or leaf litter.
4. Respect the quiet of the bush. Noise disturbs birds and animals—remember it's their home.
5. Don't damage trees and vegetation.
6. Picking wildflowers is illegal—you are robbing other walkers of the delight of seeing them.
7. Firearms are prohibited.
8. Pets are prohibited in Nature Reserves—they disturb the wild life.
9. Dead wood and rocks are habitat. They are home to insects and lizards, so don't destroy or remove them.
10. Fire regulations must be strictly obeyed.
11. Remember:
 - Take only photographs;
 - Leave only footprints.
12. Be a person who cares—and respect the right of nature to exist.

Ray Paynter, Toodyay Naturalists' Club. *Naturalists' Notes* article by Ray Paynter on *Code of the Bush*. [Toodyay Herald, May 1989.]

BATTLEFIELDS to FLORABUNDA by Greg Warburton

There is an unlikely link between the Napoleonic Wars and the study of W.A. botany. This connection, among others, really began with that remarkable scientific voyage of Nicholas Baudin in 1800-04. These intrepid navigators chartered two thirds of the Australian coast line and bestowed dozens of coastal features with French names. The contingent of scientists on board collected over 200,000 specimens. It was the expedition botanist, Francois Peron who observed how remarkable the plants of our SW were able to bring forth such colourful blooms while growing in such impoverished soils.

When the expedition returned to France Napoleon had just crowned himself Emperor and war would rage across Europe as he built his Empire. Until of course he met his "Waterloo" on the 15th of June 1815 and was defeated by a coalition force under the command of the Duke of Wellington.

Over 40,000 men died in that famous battle but amongst the survivors, although badly wounded, was one Capt. John Molloy. He would later wed a woman some 20 years his junior by the name of Georgiana Kennedy a refined, religious upper middle class lady. When her new husband decided to emigrate to the Swan River Colony in 1829 she dutifully joined him on the hazardous, 10 month sailing ship journey. The ship was over-loaded with cargo which included farm animals and pianos! The Captain of the ship was a drunkard who had jettisoned provisions in order to load more rum!

Meanwhile, a cast of other characters that were all veterans of the Napoleonic Wars would play vital roles in the development of the colony, certainly none more than James Stirling and William Bunbury. However, it was navy man, Capt. James Mangles, a keen amateur horticulturalist and cousin of Lady Stirling that that would be pivotal in this botanical story.

Georgiana and John Molloy along with group of other settlers were to endure years of hardship, starvation and tragedy as they tried to establish a settlement at Augusta. Georgiana's first born would die and her only son would drown down a well.

During that time Georgiana received an unlikely request from James Mangles to collect botanical specimens from the district and send them back to England. Despite the conditions and constant poor health she agreed. She had no previous botanical experience but this work would soon become for her an "all consuming passion". She worked indefatigably collecting then meticulously packing the seeds and pressed specimens for the long sea journey.

Eventually, the Augusta settlement was all but abandoned and the Molloy's moved to the Vasse district to establish a farm they called Fairlawn. Georgi-

ana continued the botanical collecting there while engaging in extensive and often very personal correspondence with James Mangles, although she would have to wait 18 months or more for a reply to her letters.

Mangles made a special request for the seeds of the spectacular *Nuytsia floribunda*, the Christmas tree. This was to be a challenge for Georgiana as the fine, papery seeds spring from their capsules on one day of the year only. She diligently monitored the trees but could only collect a "small harvest" for Mangles.

Georgiana's pregnancies were becoming increasingly complicated. Three months after the birth of her eighth child, a daughter, Flora in 1843 she died at Fairlawn on April 7th aged 37.

During the 12 years she was in the colony Georgiana documented hundreds of botanical specimens spending untold hours collecting and preparing specimens. Botanists such as Lindley, Preisse, Drummond and indeed Mangles drew on her work when publishing their books and papers. Their reputations grew but they never once acknowledged her contribution. Georgiana received no payment or reward and had to teach her self botany and collecting techniques. She has only one plant named after her, *Boronia molloyii*.

It would be years before the horticulturalists of England understood why they had so little success propagating *Nuytsia florabunda*. As we now know it must parasitize other plants in order to survive and support its flamboyant blooms. It is symbolic perhaps of European settlement, much needs to be taken from the natural environment in order to flourish.

Unlike so many other settlers of her time Georgiana saw the bush as a place of beauty and solace and not an untamed wilderness to be subdued.

Inspired by her story I set out to journey into Georgiana's botanical world. During October 2009 I kayaked for 170kms down her "magnificent, peaceful Blackwood River" camping on the forested, secluded river banks. Around Augusta I sought out historical sites and found "Granite Landing" a favourite collecting place of Georgiana's. I imagined her there with her children gathering the seeds that would bloom in the hot houses of Europe. I then walked the 140 km "Cape to Cape Track" exploring more Georgiana locations around Cape Naturalist and Busselton. At that time wildflowers were in profusion a constant reminder of the unique plant life that an extraordinary woman introduced to the world.

A WALK IN THE PARK

Melaleuca to Cackle Creek

by Renee D'Hervile

For years we had our hearts set on hiking one of the most beautifully wild and remote natural areas in Tasmania, the South Coast Track. After an amazing hike on the Cradle Mountain Overland Track in 2005, our ambition was to seek out somewhere even more isolated and challenging to explore. The South Coast Track which lies within the Tasmanian Wilderness World Heritage Area and is part of the Southwest National Park, was the perfect candidate.

So when an opportunity surprisingly arose to hike with five friends for nine days in November 2009, Rob and I didn't require any thinking time. Before we could say "we're so unfit" we had five flights and a charter bus booked. We had grand plans to undertake several training hikes, but due to hectic work schedules we only managed to squeeze in a single five hour hike with our full hike packs in the Avon Valley National Park.

The South Coast Track is more difficult than many other Tasmanian walks. It is normal to have wet feet every day and there is mud at least knee deep on in many places. Often hikers are at the mercy of tides and weather. It may be necessary to wait for hours if not days, for water levels and tides to recede when crossing creeks, rivers and beaches. There are no roads, no power lines and no huts. Some designated campsites have a drop toilet, usually comprising of a wooden seat flush (excuse the pun) with the ground, along with a stick to flick the seat up or down.

To access the starting point of the track, Melaleuca, we chartered a small nine-seater twin-engine plane from Hobart. This was an instant highlight to our journey, as we flew to Melaleuca via the coastal route due to fog inland, where we saw the rugged track, creeks and rivers we were about to trek for nine days.

One of the most appealing aspects of the South Coast Track is the variety of vegetation types. We hiked through coastal heathland, buttongrass moorland, alpine heath, rainforest, wet eucalypt forest and dry eucalypt forest. The day we spent crossing the Ironbound Range we walked through all but one (coastal heath) of these vegetation types.

The subsequent diversity of plant and animal species is astounding. On our journey we saw several snakes, sunning themselves on the tracks and on the boulder beaches. Birdlife included orange-bellied Parrots, pink robins, scrub-wrens, oystercatchers and plovers, just to name the minimum. Although most mammals are nocturnal, we were delighted to see a paddymelon, with a joey!

One of the hardest, yet rewarding parts of the South Coast Track is the ascent and descent of the 900m Ironbound Range. Even after a long steep climb to the top, there is an equally exhausting and long descent through dense rainforest, slowly stepping down over slippery buttressing tree roots, often landing in knee deep mud! On this 13km long day, we averaged a kilometre an hour. To add to our Ironbound experience we had gale force winds crossing the top, blowing us off the track up to 10m. We all fell several times and Rob even had his leg impaled by a snow pole (star picket) which became mobile! Another highlight of this hike is the crossing at New River Lagoon, which requires the use of boats. Two dinghies are provided at either side of the river and must be left that way after all hike members have crossed. The boats take no more than three people with gear, so several crossings need to be made for larger groups.

In several places the track crosses rivers and creeks, which are subject to sudden high water levels and fast flow rates. There is usually rope to help guide and prevent hikers being swept downstream. There are also places you need to ford creek and river mouths, or walk around rocky headlands and over boulder strewn beaches. Careful observation is vital to determine the sets of large waves which alternate with a series of smaller ones. People have been known to drown in these situations.

The track finally comes to an end at Cockle Creek, where a charter bus can take you back to Hobart.

The South Coast Track was by far the hardest and most exhausting hike we've encountered to date. However, this hasn't stopped us as we still have our eyes on the Port Davey Track (Scotts Peak to Melaleuca - the northern part of the South Coast Track). But before that endeavour, I think some warmer and drier destinations are called for, perhaps with less leaches!

We have walked to the southern extremity of an island at what early explorers referred to as the world's end. This is

Publications of Interest to Naturalists

'THE AVON VALLEY; THE NATURALISTS' VIEW'. For purchase from the Toodyay Naturalists' Club.

'BUILDING FROG FRIENDLY GARDENS'. For purchase from the Western Australian Museum at a cost of \$10.95 plus P & P.

'BLUE WREN' by Belinda Brooker and published by Cygnet Books, University of Western Australia Press. A delightfully written and illustrated children's' book telling of the life of a Blue Wren family.



Above left: Paddymelon wallaby with young in pouch. Centre: The track conditions. Above right: This was tiger country... Including the reptilian type. Photographs by Renee and Rob on their 'Walk in the Park' - the South-west National Park of Tasmania.

Right: Greg's red kayak travelling 170kms downriver. Georgiana Molloy described this beautiful waterway as her "magnificent, peaceful Blackwood River".

Photographs right, and below left, by Greg Warburton.



Left: A glorious show of the golden blossoms of the *Nuytsia floribunda*. The early English horticulturists had little success with propagation of this plant until it was discovered that it parasitizes with other plants in order to survive.

TO GO OR NOT TO GO FOR LOGO by Greg Warburton

At the last committee meeting there was considerable support for the Club re-designing its logo. The current one featuring a sprig of *Acacia acuminata* was adopted some 26 years ago. Although it has served the club in various forms for all that time I feel it has some limitations.

- It is not immediately recognizable to most people.
- It is very difficult to reproduce clearly especially on a badge or fabric.
- It has been mistaken for a “weed” and has been presented upside down in the past and no one seemed to notice!
- A “Naturalist” organisation’s logo could include other elements of natural history.

In this age we are bombarded constantly with images from various sources so a logo should strive to be eye catching and memorable. It is well known that featuring certain types of animals answer this call and are a favourite of advertisers. Look how many ads feature dogs! We are fortunate that we have a range of native fauna in our district that lend themselves to being logo material.

Suggested mammal species include **Black-gloved Wallaby, Quenda, Brush-tailed Possum, Echidna, Phascogale and Chuditch** . Reptiles such as **Barking Gecko, Varanus tristis, Carpet Python, Broad Banded Sand Swimmer** and of course the spectacular **Mountain Devil** - Toodyay is the most western part of its range!. Bird species like the **Splendid Wren and Red-capped Robin** have logo potential also. These are creatures familiar to Toodyay dwellers and all have form and/or markings that could be used to great effect.

The **Chuditch** or **Western Quoll** has strong connection with the TNC. Not only does it occur naturally in the Toodyay district but the Club has worked with DEC /CALM since 1990 with the re-introduction of this species into Julimar Conservation Park. The ongoing trapping and survey work has shown this program to have been highly successful. Along with its rich colour and distinctive markings the **Chuditch** portrays a “bright-eyed and bushy-tailed” appeal making it for me, a prime candidate.

Some have said that we should adopt a species that is **unique** to our part of the world but I cannot think of any species plant or animal that is confined **only** to our Shire. Our present logo is a plant species that is widespread throughout many Shires! Perth based W.A. “Nats” have a Numbat logo.

I believe we should still retain *Acacia acuminata* as our floral emblem on the logo but re-design it and augment the image with a faunal representation.

A logo is a wonderful form of free advertising, like a flag it says a lot about who we are. We have an obligation to promote our Club and we need a logo that will be appropriate and serve us well into the future.

I encourage those members who are conducive to a new TNC logo to put on their creative thinking caps and contribute ideas and designs. I encourage the new design to be ready for the June meeting to have a revised and up-dated version of the logo ready to be passed, and to ‘GO’ , by the July AGM!

ENVIRONMENTAL REPORT

by Desraé Clarke

The Shire of Toodyay has suffered two devastating fires in recent years, one mainly affecting forest and broad-acre farmland in February 2007, and the second starting December 29th 2009 affecting some farmland but mainly steep, forested terrain of Wandoo, Powder-bark, Acacia Jam and Sandplain/Banksia Woodlands and, revegetated areas of small acreage. Both incidents have had a devastating effect on the environment and the wildlife.

On both occasions small pockets of vegetation have survived that, hopefully, will allow some return of the flora and fauna. However, food sources for both the mammals and smaller birds are severely affected. With this in mind observation and recording of both species and numbers and, the return of plants, is imperative.

The Toodyay Naturalists' Club has great respect over a very wide area. This respect has been through the dedicated, long-standing efforts of one of the four founding members of the Club, Mrs Ray Paynter. Ray's historical natural history work is well-known plus the education she has given in such areas as the Shire of Toodyay and the Shire of Northam, her annual trips to the Mt Jackson/Windarling areas (east of Southern Cross!) and her constant encouragement for corporate groups to 'listen to nature'.

While in the Mt Jackson area Ray discovered a tiny, dainty *Tetratheca* that has been named *Tetratheca paynterae*. Through Ray's efforts the Toodyay Naturalists' Club has Club representation on the Community Reference Group for the management of the area that is now mined for iron ore. There are many conservation issues such as the need for dust control from both the mining areas and the haul roads, the type of water used in 'dust suppression', revegetation, protection of rare flora (three species), and protection of landscape.

The Club is also representative on the Avon Nature Conservation Advisory Committee with strong interaction with the Department of Conservation, Perth Hills Office, through the Conservation Officer. As a result of the conflagration of December 29th 2009 the Club is to work, with the Department, on the "A" Class Reserve of Mavis Jeffery situated in Sandplain Road, Toodyay.

The Club wishes to congratulate the recently appointed Acting-Chief Executive Officer, Simon Fraser. Members look forward to working with Simon especially in the area of the protection of the many Shire reserves and road reserves in and around Toodyay.

OBSERVATION RECORDS *by A. L. Milhinch*

Have you ever thought of the difference there is between observing something or just seeing it?

To me, observing often leads to questioning what is happening, why is it happening and is it influenced by other things which are also happening around it.

When observing nature and all the creatures and plants which go to make the ecology, I am often amazed with the dependency of one upon the other, or how the loss of one will affect the other.

The destruction of habitats is an obvious example as to why some creatures are on the decline. Yet we have to look further for a reason why some have declined in numbers, while others in the same family have increased.

For instance why has the Common Bronzewing Pigeon declined while the Crested Pigeon has increased and expanded its range?

I understand that the Common Bronzewing Pigeon feeds on the seeds of our native bushes, many of which have been removed, especially in the wheatbelt.

The Crested Pigeon also feeds on these seeds but it has been reported that, unlike the Common Bronzewing Pigeon, the Crested Pigeon has been able to adapt to feeding on the seeds of the introduced plant called Paterson's Curse., so the spread of this plant has helped this bird increase in numbers. Yet another small, seed-eating bird, the Zebra Finch, which was common in my area a few years ago, has now disappeared from here.

I have noticed in recent times that in my area, there has been a definite decrease in the number of small birds like the Yellow Rumped Thornbills and other warblers. The wrens disappeared some time ago after bushes and other undergrowth had been cleared by the owner of the land where the wrens had fed and roosted. Even some of the small birds that build open-cup shaped nests are not as plentiful as before. This last year it was remarked on how few Cuckoos were reported as having been seen or heard. Could it be that the absence of suitable nests deterred the Cuckoos?

The Bronze Cuckoos are well known for parasitising the nests of small insect-eating birds. Birds like the Yellow Rumped Thornbills which build a dome shaped nest and also Wrens which build a smaller nest with a side entrance as a rule, while the Pallid Cuckoo mostly lays it's eggs in open cup-shaped nests made by Willie Wagtails, Honeyeaters, Wood Swallows, etc. Is it just possible that with fewer such nests, the Cuckoos are not attracted to this area?

I have often wondered about some of the bush areas left on farms which are necessary for erosion control, windbreaks, and shelter for stock, etc, and it is often said that the large trees are left to encourage birds. This is all very well for some larger seed eating birds such as Galahs, Corellas, and Port Lincoln Parrots which can feed out on crops and pastures during the day and come to the trees to roost and nest, and also insect-

eating birds like the Tree Creepers and other birds that find their food on the limbs or the leaves of the trees.

However, where stock had continual access to the bush often the small bushes and undergrowth have been destroyed, so that the feeding areas of many small birds depending on the insects, small lizards, etc, found in the undergrowth and leaf litter on the ground, are no longer available to them so while this is changing type of habitat is suitable for some, it is unsuitable for others.

On a visit to the mining town of Goldsworthy some years ago, I was surprised to see some of the most beautiful birds I have ever seen. They were like Butcher Birds and were black and the most glorious shade of pink. I watched these birds for some time before being convinced that they were ordinary Pied Butcher Birds. Goldsworthy was noted for its peculiar shade of iron ore dust, and apparently this dust had shaded the white parts of the birds to give them this unusual colour. I remember almost being tricked in a similar way with Wood Swallows at the Wilgie Mia ochre mine with birds showing red ochre on their feathers.

We do need to be sure of what we are looking at, don't we?

* * * * *

Our flora and fauna observations are becoming more and more valuable. We need to build a story on what is happening around us. There are birds and animals that we see every day, but take for granted. We see certain plants appearing at the same time every year. How do we determine if their numbers are on the decrease? Do we wait until they disappear before we sound the alarm?

All Club members are involved in our recording programme. We ask your help to keep our recordings up to date. They include feral animals and weeds. All these things are important in building up a picture of our changing ecology.

An article written in three previous newsletters, 1973, 1986 and 1994 and with kind permission from the author, Lindsay Milhinch, it is again reproduced.

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