

# Tasmanian Field Naturalists Club Inc. BULLETIN

#### Editor: Beth Heap bul.editor@tasfieldnats.org.au

# **Quarterly Bulletin**

No 346

The Tasmanian Field Naturalists Club encourages the study of natural history and supports conservation. People of any age and background are welcome as members.

For more information, visit website <u>http://www.tasfieldnats.org.au/</u>; email <u>info@tasfieldnats.org.au</u>; write to GPO Box 68, Hobart, 7001; or phone our secretary on (03)62278638.

We welcome articles and interesting photos for the Bulletin. If you would like to contribute to the next edition, please email the editor with your article or photos by 15 June.

Program1	Peter Murrell Reserves March 20126
Subs due now1	Fly From Hell7
From the President2	Spider Hunter8
Jewel Beetle Trip Central Plateau 29 January 3	Tasmanian Fungi Festival April 20128
Marion Bay Excursion February 20124	Bruny Island Environment Network Fungi Foray8
Life history notes on the large green sawfly <i>Perga affinis</i> (Hymenoptera)5	

# Program

**General Meetings** start at **7.15 pm** for 7.30 pm on the first Thursday of the month and feature a guest speaker on natural history (no meetings or excursions in January). Meetings are held in the Life Science Building at the University of Tasmania.

**Excursions** are usually held the following Saturday or Sunday, meeting at 9.00 am outside the Museum in Macquarie St, Hobart. Bring lunch and all-weather outdoor gear. If you are planning to attend an outing, but have not been to the prior meeting, please confirm the details on the club website as late changes are sometimes made.

Thurs 5 Apr	Guest speaker: James Wood, New Zealand Plants.
Fri-Sun 6-8 Apr	Easter Camp: at Strathgordon in South West Tasmania
26-30 Apr	Tasmanian Fungi Festival 2012 This festival is supported by <i>Fungimap</i> and <i>NRM South</i> and is aimed at all levels of interest.
Thurs 3 May	Guest Speaker: Professor Mark Hindell, Shearwaters.
5 or 6 May	Excursion to be announced
Thurs 7 June	Guest Speaker: Erica Shankly, Tasman Island.
Sun 10 June	Excursion: Tasman Peninsula, details and location TBC
For details of talks and excursions beyond this date, please check the website at <u>http://www.tasfieldnats.org.au/</u>	

## Subs due now

A reminder that 2012 subs are due from 1 January - please keep your Treasurer happy by paying now! Subs can be paid by cheque to the Club address, by Paypal (follow the links on our website www.tasfieldnats.org.au) or by EFT to the Club account BSB 067 102 A/c 2800 0476.

Please identify your payment with your name and initial.

Family \$35Single \$30Single Junior or Concession \$25

# From the President Michael Driessen

At the last AGM held on the 1<sup>st</sup> March, a new TFNC committee was elected. Four new members were elected representing the largest single change in committee members for some years. The new committee members are Genevieve Gates (Secretary), Beth Heap (Bulletin Editor), Simon Grove (General Committee and



responsible for the club website) and Tony Bill (General Committee). Thanks to these new committee members for volunteering their time. Both Genevieve and Simon have previously held committee positions (President and Tas. Naturalist Editor respectively). Four members have decided to step down from the committee this year. Neil Klaer has been a committee member since 2006 and helped develop our online payment system for subscriptions and purchase of books. Geoff Fenton has been a committee member since 2007 and has held the position of Bulletin Editor for much of this time. Geoff was instrumental in overhauling our club website and has maintained the website throughout this time; regularly updating the club program, putting up excursion reports and photos. Geoff has put a lot of work into the website and it has been very much appreciated by the club. Annie Rushton and David O'Brien both joined the committee 2009. David has been club Secretary during his time on the committee and Annie took over as Bulletin Editor from Geoff last year. I have greatly appreciated their contributions. On behalf of the club I thank all four committee members for their contribution to the club as well as committee members who are continuing on in 2012.

I thank all of last year's committee for their work managing the club matters. In addition to running the club, dealing with finances, correspondence in and out, organising walks and talks, we were successful in completing a number of important matters. In particular:

- We now have an online payment system for subscription fees and purchase of club books – thanks to Geoff Fenton, Neil Klaer and Anna McEldowney for their work on bringing this to fruition.
- In collaboration with Simon Grove, we funded the publication of the *The Seashells of*

*Tasmania: a Comprehensive Guide* and we had a successful book launch at Fullers Book Shop with Peter Gee as guest speaker. I thank Fullers for hosting this event.

- A list of all articles published in the Tasmanian Naturalist since 1904 is now available on the club website. All articles from 1986 to 1993 are available as PDFs online and the remaining articles will be progressively added. We owe our thanks to Mark Wapstra who voluntarily took on this role of scanning previous editions of the Tasmanian Naturalist and Geoff Fenton who has been responsible for putting this on our website. This has made the Tasmanian Naturalist more accessible to local researchers as well as anyone around the world who is interested in Tasmanian Natural History. I encourage members peruse the list of titles on the website; there are many interesting articles.
- The TFNC hosted the Federation Weekend at Murrayfield Station on Bruny Island. Thirty eight field nats attended with good representation from the Launceston and NE clubs.
- The committee agreed to pay for Kelsey Aves slide collection to be digitised and archived. Kelsey's daughter, Liz Turner, gave a presentation of a selection of these images at a club meeting last October.
- Nell Hilliard has taken on the role of entering club observations onto the Natural Values Atlas and many records have been added.
- Mark Wapstra continues to do an excellent job as editor of the Tasmanian Naturalist producing another quality edition and long may this continue.
- We have organised the Easter Camp 2012 to be held at Strathgordon.

A big thank you to Betty and Adrian Bettingham-Moore for taking responsibility for managing arrangements for supper for all our meetings. This is very much appreciated by all of us. I also wish to thank those people who volunteered to write up field outings.

Lastly, this is your club, please feel free to talk to me or other committee members about what works and what could be improved. We always welcome suggestions for talks and excursions.

# Jewel Beetle Trip Central Plateau 29 January

#### **Kevin Bonham**

n March 2008, James Wood created much excitement by finding a dead Miena Jewel Beetle (*Castiarina insculpta*) on a Federation trip to Lake Augusta. This find, one of only about seven reliable records of the species, has sparked a lot of Field Nat interest in looking for the species. This year's second attempt to repeat the feat was very well organised at short notice by Don Hird, and attracted a turnout of 11 keen beetle-hunters.

We started our search at a site near the Liawenee police station and canal, where beetles (scarabs and soldier beetles mostly) and butterflies were abundant but there was no sign of jewel beetles. After a similar experience along the Lake Augusta road, it was on to Lake Ada.



Field Nats enjoying lunch at Lake Ada. Photo Beth Heap

Here, beetles (mostly chrysomelids) were washing up on the shore in some numbers and there was also a live adult water penny beetle (*Sclerocyphon*), usually seen in their distinctive round larval form.

Just as we were about to leave the lake, I saw a fairly large (c. 2 cm) jewel beetle that, while not what we were after, was spectacular in its own right.



Male C. rudis Photo: Abbey Throssell

On to Lake Augusta where there was still no sign of our target, but beetles were washing ashore on the beaches in very large numbers, including many species of chrysomelid. A smaller dead jewel beetle (the common *Castiarina thomsoni*) was among these, and shortly after

I noticed a large mostly orange jewel beetle clinging to a rock just above the waterline.



Female C. rudis Photo: Kevin Bonham



Abbey searching for beetles. Photo Beth Heap

Identifying the two large jewel beetles from photos was quite a puzzle as the second matched the photo of *Castiarina rudis* (Carter, 1934) in Cowie's book, where nothing like the first was to be seen. In Shelley Barker's monograph the story was the other way around! After carefully reading the descriptions of *C. rudis* (a process capped when Abbey found a misplaced comma that altered the meaning in one) it turned out that our suspects were the strikingly different male and female of that species.

*C. rudis* is endemic to Tasmanian alpine regions (hence the woolly pronotum) with previous records from Great Lake, Lake Dobson, Lake St Clair (and a dead beachwashed specimen that strayed all the way to Wineglass Bay). It was common back in 1934 as noted by original collector Critchley Parker: "This beetle provides a lot of food for the trout." However, in 2003 Cowie noted that the species "is very rare and difficult to capture" and said he knew of just three specimens and a possible sighting. He also wrote "It is believed to occur in low density in heathlands, flying only on very hot days in late summer", and hit the nail on the head in terms of the conditions and timing of our visit.

Looking for one rare jewel beetle without success, we had instead found another. I welcome any other records or reports that might add to our knowledge of *C. rudis*.

# Marion Bay Excursion February 2012 Jenny Warren

On a gorgeous sunny Saturday, 29 of us met at Marion Bay.



Field Nats at Marion Bay. Photo: Amanda Thomson

We were puzzled by the fish in the lagoon we encountered first – were they bream, whiting, mullet? They were certainly reaching some good sizes. The kids in our group, including Sam, Harry, Henry, Fletcher, Lily, Tilly and Theo, found plenty of shells to test Michael's ID skills. Amongst them were (excuse the lack of scientific names from this report) Hedley's shelf-limpet, common mud oyster, southern razor shell, wedding-cake Venus, banded kelp shells in groups of varying patterns, brown cowrie, blue-tinged dossinia, Hedley's cuttlefish, giant cuttlefish, wavy volute, thin-ribbed cockle, common dog cockle, Tasmanian margin shell, conical moon snail and the New Zealand screw shell.



Michael identifying shells. Photo: Amanda Thomson

There were various dead creatures to inspect on the sand – cow fish, some ornate cow fish, a short-tailed shearwater, a porcupine fish and a headless fairy prion with a wolf spider living on it and not willing to relinquish its spot.

Henry and Greg found a couple of different beetles – a scarab beetle and a tenebrionid beetle.

As we proceeded down Marion Bay we started to see wonderful seabirds and shorebirds: Pacific gulls and pied oystercatchers trotting around a nest which Fletcher spotted and 6 adult hooded plovers with 8 juveniles.



Lunch time. Photo: Beth Heap



Sand wasp dragging it's spider prey. Photo: Amanda Thomson But it was when Elizabeth suggested turning the corner into Blackman Bay that we really saw a feast of birds and I think it made the day. Amongst the thousands of soldier crabs, moving like a carpet on rollers, were lots of crested terns, pelicans, sooty oystercatchers, redcapped plovers, black-faced cormorants, white-faced herons, black swans, and on the shore were whitefronted chats. Even the ugly tyre-marks illegally made by four wheel drives and bikes cutting up the shore could not spoil the vision of 35 pelicans together, along with 18 plovers, both hooded and red-capped. Some field nats commented that they had never seen such large groupings of water-birds. Janet found some wombat poo and tracks, and then it was time to go. Thanks Michael for leading a lovely walk.



Hooded plovers and soldier crabs. Photo: Beth Heap



Pelicans in flight. Photo: Beth Heap

# Life history notes on the large green sawfly Perga affinis (Hymenoptera)

#### Simon Fearn

Periodically the larvae of this impressive insect appear in spectacular numbers in parks and gardens in the Launceston district of Tasmania. This winter and spring has been one of those years and recently I was fortunate enough to photograph some extensive larval congregations on eucalypts of various species in the Tail Race Park at Riverside. The rather poorly named sawfly is in fact a large wasp, so named because of its saw like ovipositor which it uses to cut slits into eucalypt leaves where it lays its eggs.

The larvae hatch in winter and grow rather slowly through the first few instars during cold weather but develop rapidly with the onset of milder spring temperatures. By October the larvae are fully mature and 60-70mm long. While they are impressive as individuals they congregate during the day in large clumps, up to 1.5m long, that may contain hundreds of individuals. During the day the larvae are relatively dormant but at dusk they radiate through the foliage of the host tree to feed on leaves.

Not surprisingly, with so many voracious mouths to feed, host trees can be partially or completely defoliated. If the larvae occur on a relatively small tree and consume all its leaves before they have attained maximal size, the whole group will move *en masse* across the ground to a neighbouring tree and will travel up to 30m in their search for a new host.



A female *P. affinis*. At around 30mm long they are arguably Tasmania's largest wasp.

Specimen courtesy of Craig Reid, Queen Victoria Museum and Art Gallery. Photo: Simon Fearn



Final instar P. affinus larvae. Photo: Simon Fearn



A large clump of mature *P. affinus* larvae resting on a eucalypt trunk during the day. Photo: Simon Fearn



Group of mature P. affinis larvae moving to a new host tree. Photo: Simon Fearn

When fully mature the larvae finally leave their host tree and head to the ground where they seek soil of a suitable friability to tunnel into. For some reason this activity always takes place diurnally. The whole group burrow into the ground where they form a large communal cocoon of individual cells, rather like a giant piece of honey comb. Generally the following autumn the adults hatch to continue the cycle. This species is largely parthenogenic with males being rarely collected in the wild. However if one rears adults from larvae, reasonably large numbers of males can be obtained. In the mid-1970's as a bug mad child, I used to collect big clumps of mature larvae as they descended to the ground to pupate and place them in bins with 20cm of loose soil in them. The larvae seemed to really enjoy such loose soil and quickly pupated within it. The big, iridescent and noisily buzzy adults were eagerly anticipated as they emerged a year later.

The larvae have a number of peculiar habits apart from clumping together. They can brazenly disport themselves in broad daylight because at the slightest disturbance they throw their heads back and expel a large globul of greasy eucalyptus oil that apart from smelling rather badly, also has the tenacity of a poor relation. It is little wonder therefore that they don't appear to have any chordate predators. They maintain contact with each other by constantly tapping the hardened, yellow hammer like terminal portion of their body on the tree stems and thus stay together by sensing the vibrations from this activity. When they grow large, they arrange themselves in such a way that all the individuals in the group can maintain contact with each other's terminal portion.

While host trees can look a little untidy after *P. affinis* has finished with them, they soon recover. In any case, it is a small price to pay for having such interesting things occurring in our parks and gardens.



Typical crown defoliation of a young *Eucalyptus viminalis* by *P. affinis*. Photo: Simon Fearn

## Peter Murrell Reserves March 2012

#### **Michael Driessen**

Twenty members had an enjoyable outing to the Peter Murrell reserves on a fine but overcast day - excellent conditions for survey work. This is the third year in a row we have surveyed the reserve. Our aim was to survey the plants and animals of four fire management blocks; one was burnt in autumn 2010 and the other three were long unburnt. A keen group of bird observers joined Fiona Hume on bird surveys around the management blocks. They were the first to arrive at 8.30am and the last to leave at around 2pm. They recorded 21 bird species; the migratory birds such as cuckoos appear to have migrated. The highlight of the day was observing a blue-wing parrot which was wellspotted by Fletcher McCormack. There are plans afoot to repeat the surveys in spring during the breeding season and when migratory birds are present.

The main group of field nats arrived at 9.30am and divided into groups. One group, led by Penny Driessen and Anna McEldowney, headed off with a tape measure, clip board and plant guide book to record plants in 5 by 5 metre plots in the management blocks.



Drosera pygmae Photo: Genevieve Gates

Another group, led by Clive Strauss and myself, were armed with carry buckets, sample jars and labels to clear the pitfall traps that had been set the week before. Scorpions were the dominant invertebrate observed in the pitfall traps; other invertebrates included tiger slugs, beetles, springtails, ants and spiders.



Clive checking a pitfall trap. Photo: Amanda Thomson

A proper examination of invertebrates collected in the pitfall traps will take some time. A final group, comprising Genevieve Gates, David Ratkowski and Peter Jarman, were armed with baskets and searched for fungi. Peter found an unusual *Hymenogaster* that got Genevieve very excited and may be a new species.



Amanita sp. Photo: Genevieve Gates

Unfortunately due to my work commitments the mammals could not be surveyed as part of the excursion but were surveyed during the following week by Peter Jarman and myself. Only four species of mammal were caught this year - a little down on last year. Interestingly

we caught no house mice this year which were common the previous two years. A total of forty-five individual mammals were caught with long-nosed potoroos and swamp rats the most common. Potoroos appear to have returned in good numbers to the block that was burnt two years previously but swamp rats remain absent.

#### Fungi List

Pycnoporus coccineus Amanita 'brown with warts' Lactarius clarkeae Russula compacta Boletellus ananiceps/emodensis Hymenogaster sp. (hypogean fungus found by Peter Jarman) Stereum illudens

Mammal List (number of individuals caught in brackets) Brown bandicoot (3) Long-nosed potoroo (27) Swamp rat (14) Cat (1)

#### **Bird List**

Black faced cuckoo shrike Black headed honeyeater Blue wing parrot Brown thornbill Dusky robin Eastern spinebill Golden whistler Green rosella Grey butcherbird Grey fantail Little wattlebird New Holland honeyeater Raven Scarlet robin Silvereye Spotted pardalote Striated pardalote Superb fairy wren Swamp harrier Tas scrubwren Yellow throated honeyeater

# Fly From Hell

#### Simon Fearn

Robber flys would have to be, pound for pound, among the most voracious predators in the insect world. A range of species live in Tasmania but the largest at nearly 30mm in body length (*Zolsteria* sp.) is common in warmer coastal districts, particularly the north east.



While they can be commonly observed with impressive prey items, a specimen I recently photographed on

Phillip Island, Victoria had truly outdone itself by capturing a relatively enormous dragonfly.

For the purists among you, outraged that a Victorian insect should grace these pages, I consider Phillip Island to be just an extremely northern Bass Strait island with an insect fauna very similar to coastal Tasmania.



## **Spider Hunter**

#### Simon Fearn

recently had a rare treat in my Riverside, Launceston garden by encountering Tasmania's largest spider hunting wasp (*Cryptocheilus* sp.) with its latest victim, an adult female wolf spider (*Lycosa tasmanica*) with a body length of 23mm. These large wasps enter the wolf spiders burrows, grapple with them, sting them and then drag their very much alive, but completely paralysed bodies away to their own burrows. Once safely ensconced in the wasps burrow, she lays an egg on the defenceless spider and her resultant larvae consume it alive. These wasps can attain a very large size and I have caught specimens on the north coast 30mm long. This particular specimen had fallen into a drain while dragging her spider and was exhausted and wet when I rescued her. She took some time to recover and clean herself allowing me to take a series of photographs.



#### **Tasmanian Fungi Festival April 2012**

Hundreds of fungi enthusiasts will descend on Hobart in April for *Tasmanian Fungi Festival*. The festival, presented by Fungimap and NRM South, will be held at the Old Woolstore Apartment Hotel from the 26-29 April and will cover the latest fungal science and celebrate the joys fungi bring humans both on the plate and in our forests

The four day festival includes:

- Symposium Conservation and Management of Fungi (26-27 April): The symposium brings together national and international experts in the fields of fungal ecology, fungal conservation, and the role of fungi in land management and restoration.
- Fungi forays and workshops (28-29 April): The forests of Mt Wellington and the Peter Murrell Reserve near Blackmans Bay will play host to a range of events including 'funky' fungal forays for children, illustration and photography workshops, as well as field and lab-based activities.
- Eating Wild Fungi: Fun or Foolhardy? (27 April) Every year people are poisoned after eating wild fungi, but there is also increasing interest in using fungi as food, both cultivated species such as truffles but also wild-collected fungi. Is eating wild fungi fun or foolhardy? To debate the question will be Matthew Evans, star of the TV show Gourmet Farmer, food writer Graeme Phillips, poisons experts Dr Tom May and Dr Teresa Lebel, mycologist Dr Genevieve Gates and fungi photographer and educator Alison Pouliot.

A full program and registration form for the Tasmanian Fungi Festival with Symposium abstracts is available from the Fungimap website.

http://www.rbg.vic.gov.au/fungimap/tasmanian-fungi-festival-2012

## **Bruny Island Environment Network Fungi Foray**

The Bruny Island Environment Network will be holding a fungi foray to Mt Mangana with Genevieve Gates on Tuesday April 17<sup>th</sup> at 9:00am. The event is free and a mushroom themed lunch will be provided afterwards at a cost of \$8. Meet at the Adventure Bay Hall at 9:00am (you will need to catch the 7:45am ferry).

Bring along your findings from home for identification. Wear sturdy walking boots, bring drinking water, wet weather gear, camera, fungi books and hand lens if you have them.

To Book, phone 62930234 or email <u>bien.network@gmail.com</u>.

www.bien.org.au