



Tasmanian Field Naturalists Club Inc.

BULLETIN

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Quarterly Bulletin

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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 <http://www.tasfieldnats.org.au/>; email info@tasfieldnats.org.au; write to GPO Box 68, Hobart, 7001; or phone our secretary on mobile 0418 942 781.

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Program

General Meetings start at **7.15pm** for 7.30pm on the first Thursday of the month, in the Life Science Building at the University of Tasmania.

Excursions are usually held the following Saturday or Sunday, meeting at 9.00am 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 as late changes are sometimes made.

Thurs 7 Oct	Meeting at 7.15pm in Life Sciences building, University of Tas. Our guest speaker will be Kris Carlyon discussing <i>Koala: an icon with issues</i> .
Sat 9 or Sun 10 Oct	Excursion to <i>Cape Surville</i> on Forestier Peninsula. There is a variety of habitats from heathland to fern-gullies, and grand scenery with fascinating geology. The choice of day for the excursion will be based on the weather outlook and decided upon at the Thursday meeting. Check the website for an update. We will initially be walking on a level 4WD track, then on a moderate bushwalking track which is well defined but steep in parts. Bring good boots, wet-weather gear and lunch. Itinerary: <ul style="list-style-type: none">• 9.00am meet outside the Museum in Macquarie St, Hobart• 10.00am rendezvous at Murdunna (carpark & toilet, also a shop)• proceed in convoy along Hylands Rd to Richardsons Rd• park cars, then walk (or possibly shuttle in 4WDs)

	<ul style="list-style-type: none"> • 2 or 3km along to the park entrance gate • bush-walk 2km • lunch at Cape Surville • retrace route • possible side-trip to look at <i>Cyathea cunninghamii</i> • 4.30pm deadline back at park gate.
16-17 Oct	Federation weekend on King Island. More details soon. Check website for an update.
From 22 Oct	Pelagic bird observing boat-trip(s) to <i>Pedra Branca</i>. Club member Bill Wakefield will be guiding these commercial trips.
Thurs 4 Nov	Meeting 7.15pm in Life Sciences building, University of Tasmania. Our guest speaker will be Karen Gowlett-Holmes , a renowned marine biologist, underwater photographer and author. She will expound <i>The marine life of the Bathurst Channel—a truly unique environment.</i>
Sat 6 or Sun 7 Nov	Excursion to Sentinels Range via Strathgordon Rd in Tasmania's South-west. The day will be decided at the previous meeting, based on the weather forecast. Check website for update.
Sat 27 Nov	Pelagic bird observing boat-trip from Eaglehawk Neck. Privately organised by Bill Wakefield. See website program for booking details.

Welcome to the Marine Naturalists!

Michael Driessen

Late last year the Tasmanian Marine Naturalist Association contacted the TFNC committee to advise that they were planning to dissolve their association and, in line with their constitution, to offer to transfer their assets and membership to the TFNC.

The committee has accepted this offer and provided a year's membership to the remaining marine naturalists.

On behalf of the TFNC I welcome our new members to the club and look forward to your involvement in club activities particularly our marine-focused excursions—already a popular activity of the TFNC.

The marine naturalists have recently revised and reprinted their book *Between Tasmanian Tides* and this book will ultimately be distributed and sold along with existing TFNC books.

Visit to the Herbarium 3 July 2010

Kevin Bonham

Thirteen Field Nats attended the tour of the Herbarium, hosted by Lyn and Eleanor Cave.

The Herbarium is part of the Tasmanian Museum and Art Gallery but is situated in a grass-covered building built into a hillside on the University campus. It is located there for historical reasons, dating from the career of Winifred Curtis, and includes over 250,000 plant and fungus specimens. The vascular plants are all data-based but it will be many years before this is true for the non-vascular.

Folders for easy identification are being prepared and we were shown several of these for the orchids. The collection also includes a reference collection of weeds that may be encountered in the state, and specimens are continually exchanged with other herbaria around the world.

We started out in the preparation room where Lyn showed us how specimens are prepared. A small proportion is preserved in fluid, but most are dried. They are pressed using weights and glued on to paper using Aquadhere; some older specimens were sewn.

Packets attached to sheets are used for parts of a specimen (seed pods and so on) that fall off and become loose. Material arriving from overseas is frozen for eight days to kill potential pests. Special techniques are used for laying seaweeds onto paper, while mosses are dried and put into packets.

We were shown a number of interesting specimens, among them *Eucalyptus nebulosa* A. M. Gray (Tasmania's most recently described eucalypt species—2008 (of which I was unaware) and *Entoloma kermantii* G. Gates and *Noordel* (a fungus described by former club President, Genevieve Gates).

After we had finished looking at the preparation room, Eleanor showed us a number of historical highlights of the collection. These included its oldest specimen (a 1769 fern from New Zealand), a *Banksia* collected by Cook's botanist David Nelson in 1777, type material of *Astelia alpina* from 1804, and material which Gunn worked on (thus illustrating her excellent talk to the club a few days earlier).

Other material included the Herbarium's first Tasmanian collection of a weed (dated 1832) and

material by convict collectors like George Moran and James Lee, and by one of the earliest prominent female collectors, Charlotte Smith.

Eleanor also discussed the obstacles to the early naming of some species, for instance, Huon Pine was not described until 1845 because of difficulties in obtaining fertile specimens.

Also of interest were the notes (or in some cases monologues) accompanying some of the early material and giving an insight into collecting at the time and the sorts of people the collectors were. As anyone else who has worked with nineteenth century material will know, a lot of the fun is not only seeing what kinds of stuff the early collectors were getting and from where, but also coming across semi-decipherable scrawlings that say far more than just the specimens.

This report has been written from my own semi-decipherable scrawlings so apologies if there are any errors in the above!

Anyway I would like to very much thank Lyn and Eleanor, not just for giving up their time to take us on a tour, but also making the tour especially interesting by picking out some choice exhibits in advance. Kevin Bonham.

Fox Eradication Program Update

Dave Sayers , Community Liaison Officer, DPIPW

During the past year, the Fox Eradication Program (FEP) has commenced Stage 2 operations with the implementation of a state-wide strategic fox baiting program that targets areas of identified 'core fox habitat'.

Development of the baiting strategy was informed by recommendations from two recent independent reviews of the program and consultation with experts in the field. Delivery of a strategic baiting program has been recommended as the best chance of achieving fox eradication.

While the specifics of the Tasmanian fox population remain an unknown (including the number of individuals, the age structure and the sex ratio), implementation of such a baiting strategy will provide the best chance of placing all foxes at risk. This is necessary to achieve eradication. The strategic baiting program has commenced in the south of the State and will soon begin in the north-west (late October).

'Core fox habitat' is habitat that is highly suitable for foxes and is predominantly made up of



agricultural areas and bushland. The decision to target core fox habitat is supported by the physical evidence collected to date which has only been found in identified core fox habitat. This evidence includes four carcasses, one skull, one blood sample, two footprints

and 56 fox positive scats.

The extent of the physical evidence has been expanded by the recent completion of the Carnivore Scat Collection Survey which was conducted across the State from 2008 to 2010. Phases 1 and 2 yielded 18 fox DNA positive scats from over 5000 collected carnivore scats. The scats collected during Phase 3 are still being analysed.

The fox baiting program has been designed to maximise the risk to foxes while minimising the risk to native wildlife. The main way this is

achieved is through the use of 1080 (sodium monofluoroacetate) poison.

The use of 1080 is prejudiced by its historical context where broad-scale baiting programs were employed in the control of native herbivores. However, the acute sensitivity of foxes to 1080, in combination with the natural tolerance of many of our native wildlife, enables the use of extremely low doses of 1080 (3mg per bait) to ensure species selectivity.



To further protect native wildlife, baits are meat based (less herbivore uptake), buried (5-10 cm) to reduce exposure to wildlife and are widely separated (approximately 200 m) to reduce multiple bait takes by any one animal. As a final measure, uneaten baits are removed after 14-28 days.

Following baiting in an area, post-baiting monitoring will be carried out by the FEP to identify foxes that may have survived baiting.

Survivors will then be targeted with detection and removal operations. A key component of these operations will be the use of fox tracking dogs, which are currently in training. The dog teams have been undergoing training in Tasmania to ensure their efficiency in locating foxes while avoiding non-target scents within the Tasmanian landscape. We hope that the dogs will be ready for operations by the end of the year.

Eradication is the goal. The integration of strategies, tools and programs recommended by expert advice will improve the likelihood of achieving this goal. However, without community support, success is not likely to be achieved.

How can you help?

Landowners can contribute by providing access to property for fox baiting, monitoring and investigation activities. Property access will be vital for the effectiveness of the strategic baiting program.

All landowners in areas of recognised fox core habitat will, at some point in the coming years, be contacted requesting access permission. We encourage all members of the community to participate in this important program.

We also need a community that is vigilant and reports any fox sightings or possible fox activity through the 24 hour hotline 1300 369 688 (1300 FOX OUT). All reports are confidential and your information may be vital to the fox eradication effort.

Should eradication not be achieved the result would be catastrophic for Tasmania. Only through a cooperative community effort will Tasmania again be fox free.

Further information can be obtained through the FEP website; www.dpipwe.tas.gov.au/fox or by contacting Dave Sayers, Community Liaison Officer, on (03) 6233 8483 or email David.Sayers@dpipwe.tas.gov.au.

Peter Murrell Reserve Pitfalls—Primary Sorting Finished!

Kevin Bonham

In the July bulletin, Abbey reported on the sorting of 16 of the 42 invertebrate samples from Peter Murrell Reserve during our sorting day at the Uni in June.



Recently I finished sorting and tallying the other 26 (and also checking and where necessary, finishing those done in June). Abbey and I were going to share this task, but I owed her lots of

work-time because she had done more than half of another shared project, so I did it.

The average specimen total for the 42 pitfalls was 114, but some pitfalls had only a few dozen specimens while one pitfall had 600!

The 4804 specimens collected were dominated by springtails (*collembola*) of which 2180 were sorted. Other common groups were ants (854), mites (527—and that's excluding super-tiny ones and ones attached to other invertebrates), beetles (327 adult 34 larvae), flies (309 adults 5 larvae), spiders (175) and wasps (133).

Scorpions were present in a lot of traps but in low numbers (68 specimens total), likewise for *orthoptera* (crickets and grasshoppers—37) and other groups seen now and then included bugs (58 scale insects, 22 true bugs and two hoppers) and moths (10 adults and 22 caterpillars).

As usual with these samples, there was a "long tail" of uncommon groups producing a handful of specimens each, in this case amphipods (10), millipedes (7), harvestmen (6), thrips (6), *psocoptera* (barklice—2), fleas (2), pseudoscorpions (1), and yes, even one solitary snail (it was *Paralaoma servilis*, an introduced New Zealand species).

Our anti-vertebrate protective measures worked very well, with only two skinks and a frog coming to grief in this year's survey.

We haven't done the stats yet, but there appear to be big differences between the burnt sites and the unburnt sites for some groups. Adult beetles, for instance, were seven times more common in the unburnt sites. Mites, spiders, wasps and caterpillars also tended to give the burnt habitats a wide berth, but ants were much more common at the burnt sites (except for the one unburnt site which must have been near an ant's nest as it had over 300 of them!)

For the commonest group, *collembola*, there was not much difference in total numbers between the burnt and unburnt sites, but the *collembola* collected include both native and introduced species, and if they were looked at by species, it's likely that some patterns would emerge. We'll be sorting some groups to try to take them to a finer level of sorting and look for further patterns.

None of the patterns found prove that the groups concerned respond that way to fire in the area—it could in theory mean they're scarce in the burnt area for reasons not related to the fire.

What we can do now is see what happens in next year's sorting—in the parts that have since been burnt, will we see similar differences from last year to those we see between burnt and unburnt sites this year?

In the sites that were burnt before this year's survey, will the results become more similar to those from the unburnt areas as the sites regrow?



The June excursion to the botany lab.

Thanks to everyone who helped with the sorting.

[Ed's note: See the July issue of the *TFNC Bulletin* for Abbey Throssal's description of the great day had by all who attended the sorting in the botany lab.]

Our Potential to Spread Plant and Animal Disease—A Reminder to Field Nats

Michael Driessen

Field Nats like to get off the beaten track and explore the natural world. This puts us in a high risk category for the potential to spread diseases that could be carried in soil on our boots or other equipment. Two diseases of particular concern are 'root rot' and chytrid.

Root rot is caused by the plant pathogen *Phytophthora cinnamomi* and is known to affect about 120 native plants in Tasmania, particularly in moorland, heathland and dry forest.

Chytrid is a fungus, *Batrachochytrium dendrobatidis*, that has been linked with the extinctions of frog species around the world

including Australia, and several Tasmanian frog species are highly susceptible.

What to do

Before heading off on one of our field naturalist excursions, please remember to clean and dry your boots and other equipment. You don't need any fancy cleaning agent, detergent will do.

Please not that root rot can also affect garden plants such as azaleas and rhododendrons.

It is important to clean your boots when you return from a field trip as well and ensure that

you clean them in an area that drains to your septic or sewage system.

More information

Root rot

<http://www.dpiw.tas.gov.au/inter.nsf/ThemeNodes/EGIL-53Y2ZC?open>

Chytrid

<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/LJEM-673V89?open>

Photo Feature—Development of the Cup Moth

Robyn Gates

The following photos were sent in recently by Robyn Gates. They illustrate the development of the cup moth, identified by Dr Peter McQuillan as *Doratifera oxleyi*.



[Ed's note: A regular photo feature like this would be a great addition to our regular Bulletin. If you have any have interesting photos, please send them to the editor (email address above) with brief caption information such as identification, date and location. Please send photos as jpeg files, with caption information in the body of the email. I look forward to your contributions!]

Position Vacant

Your Committee is Seeking a Data Information Officer!

The TFNC collects some very important data on fauna and flora, including threatened species. The Committee would like to provide this information in a coordinated manner to relevant agencies such as the Threatened Species Section (DPIPWE), and perhaps groups such as Birds Tasmania, using the *Natural Values Atlas* database maintained by DPIPWE.

We are looking for someone who would be willing to collate sighting information from excursions, the observation book and other events (such as the Peter Murrell Reserve monitoring project)

into a standardised Excel form (this form already exists for batch input of data into the *Natural Values Atlas*). This may involve following up with observers to collect some additional data (e.g. precise dates and locations of sightings) but is not expected to be an onerous task once some protocols are established. Members of the Committee will be available to assist the Data Information Officer so you would not be going it alone. If anyone is interested, please contact Michael Driessen so that we can have a chat at the next meeting.

Subscriptions Reminder

Anna McEldowney (Treasurer)

Have you paid your 2010 subs yet? A reminder that membership subs are due on 1 Jan each year. Please send a cheque payable to Tasmanian Field Naturalists Club Inc, addressed to the Treasurer TFNC, GPO Box 68, Hobart, 7001; **or** pay by EFT to BSB 067102 Account number 28000476 in the name of Tasmanian Field Naturalists Club Inc. PLEASE put your surname AND initials in the transfer so I can identify the payments.

If you have joined since October last year your subs will carry over to 2010.

Membership rates are: Adult—\$30, Family—\$35, Concession—\$25.

Photo credits

Fox—extracted from DPIPWE Fox Eradication Program poster

Botany lab excursion—Abbey Throssal

Cop moth development—Robyn Gates

