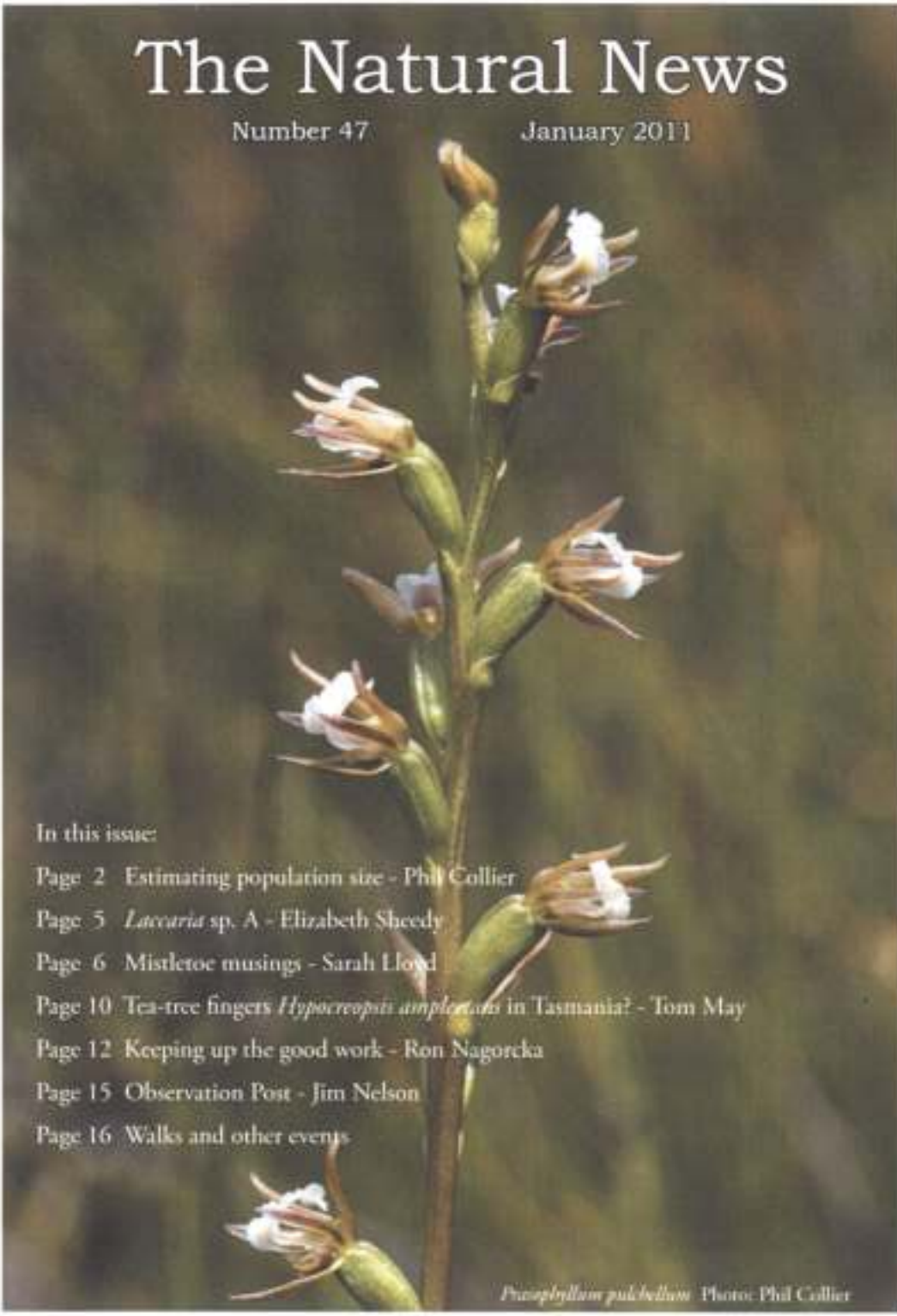
The Natural News

Number 47 January 2011



In this issue:

Prasophyllum pulchellum Photo: Phil Collier

Estimating population size - Phil Collier, Rubicon Sanctuary

CNFN members who visited Rubicon Sanctuary in October will know that we sometimes attempt to estimate population size. We will discuss reasons why this is important later and some of our initial observations. But we will start with a description of the October case study that will illustrate one method and its limitations.

. In October, CNFN members helped us to estimate the number of *Glossodia major* (waxlip orchid) plants at Rubicon Sanctuary. Given that these plants occupy about half of our property, it was not feasible to count them all. The method we adopted was to sample the population and extrapolate using various assumptions. Let's summarise the process:

1. Choose a sample area that is "representative" of the population.

2. Count the plants in the sample area.

3. Work out the density of the plants in the sample area (number of plants counted divided by the sample area).

Glossodia major waxlip orchid

4. Extrapolate to the total area of the population.

Let's see how this method was applied by the CNFN members:

1. Owners Phil and Robin selected the sample area, an area of woodland that was burnt 18 months previously.

2. Twelve people formed a line, each at arm's length from each other, along the edge of the sample area. As the line advanced each person was asked to count the number of orchid plants that fell under their outstretched arms (i.e. a personal transect through the sample area). The count stopped at the opposite edge of the sample area. A practice run was required to ensure that people walked in a straight line! People were able to negotiate about orchid plants that fell on the boundary of their outstretched arms.

3. Each person related their total count for their transect through the sample area. These counts were 4, 8, 1, 21, 15, 24, 21, 16, 20, 7, 17, 18, giving a total of 172 plants. The sample area was measured as 20 m x 30 m, that is a total area of 600 sq. m., giving a density of 0.28667 plants per sq. m.

4. The total area of the population at Rubicon Sanctuary is assumed to be ten ha or 100 000 sq. m., being the area of the drier sandy woodland. The total population at Rubicon Sanctuary is therefore 0.28667 (density) x 100 000 (area) = 28 667 plants.

The final population estimate was met with some mirth, with comments like "you can prove anything with statistics". Fair comment: let's try to draw out some of the assumptions:

1. Is the sample area representative? To be truthful, it was selected because it seemed to have a large population that was readily accessible to our visitors. Because of the recent burn, plants were also easy to see. However, given that very little of our sandy woodland

has been burnt recently, the representativeness of this area for *Glossodia major* plants is quite uncertain. This may bias the overall count to be an overestimate. Note that the density of plants varies significantly in the sample area, with individual people's counts ranging from 1 to 24. This reflects similar variation in the overall population as seen by casual observation.

2. The count was reasonably thorough and people seemed to be motivated to count correctly. However, only flowering plants are easily seen, with leaves being very difficult to see from the standing position. A recent frost had killed many of the flowers in the lower section of the sample area; but some of these were probably seen. The flowering season extends over a month or more, so almost certainly some buds were very small and missed. The proportion of the total population of plants that successfully flower each season is unknown (grazing, dormancy etc), but it may be less than 50%. These factors will all bias the overall count to be an underestimate.

3. This step is straightforward arithmetic.

4. Given the assumption that the sample area is representative, the last assumption is to delineate what overall area it represents. A little more arithmetic gives us value for the total population.

A conservative conclusion from this exercise is that the population of *Glossodia major* is more likely to be closer to 10 000 than 1 000. What is beyond doubt is that the woodland at Rubicon Sanctuary lights up with many of these little gems throughout October. If they were less common, we would be searching far and wide for them. Which brings us to the situation where species are threatened or poorly known, information about population size then becomes much more important.

For threatened or poorly known species, population size can be used to determine the status of threatened species (for example population thresholds of 2 500 and 10 000 mature individuals are used in part to delineate several of the categories.), while change in population size is important information when it comes to any attempts to manage such species. We have attempted to estimate population for most of our threatened and poorly known orchids by tagging individual

Thelymitra polychroma
(rainbow sun orchid)

plants for future monitoring. For example, our known population of *Prasophyllum pulchellum* (pretty leek-orchid - see photo front cover) is about 65 plants, with only two new specimens found this year so far. In contrast, our known population of *Thelymitra polychroma* (rainbow sun orchid) in 2009 was 160 plants. However, this year, using a method similar to that used for *Glossodia major*, we have estimated a

population of about 450 plants in a wetland that was burnt in 2009, and where we saw no evidence of plants previously. We have also seen a good many new plants in previously known populations. Of course this explosion in numbers raises some questions that need answering: are they seedling stock that might vanish just as quickly, or perennial plants that responded well to our management. Further monitoring is required!

Engaeus granulatus
central north burrowing crayfish

Life gets tougher with animals that are not nailed down like plants. We have a large population of threatened *Engaeus granulatus*, the central north burrowing crayfish. Or more precisely we have a large population of crayfish holes (entrances to their burrows). This is what we can count easily, especially after their wetland home has been burnt. In 2007, we estimated 8 908 holes in the four wetlands that we burnt, assuming their density in these wetlands was reflected in two 1m-wide transects that we walked over each wetland. Unfortunately, we don't know the density of animals for each hole, and we haven't started digging yet. Also, we have not tried to scale this up to a total population at Rubicon Sanctuary as the distribution of holes is very patchy and totally unclear in unburnt wetlands.

Lastly, we have recently observed seven medium-sized *Litoria raniformis*, the threatened green and gold frog, at various locations in our wetlands. We suspect breeding in the neighbour's farm dam, where we have heard them calling. They are presumably feeding up in our wetlands. How do we estimate our population size, or more importantly, given we have no breeding sites, our contribution to a greater population? It is likely that walking transects will turn up zero or very few animals, so the basis for extrapolating is very questionable.

Estimating population size is generally quite difficult, even when you live on site. It's a skill that we would like to develop further, amongst many other things that keep us busy!

Litoria raniformis green & gold frog

Laccaria sp. A – Elizabeth Sheedy

Laccaria is a mushroom genus of ectomycorrhizal, or symbiotic, fungi with eight native species as well as three exotic species recognised in Australia. The majority of these species are widely distributed but two species, *L. masoniae* and *Laccaria* sp. A, are restricted to the cool temperate rainforests of Tasmania and Victoria where their host tree myrtle beech (*Nothofagus cunninghamii*) occurs.

Laccaria sp. A is the focus of research for a PhD project that is investigating whether populations from fragmented habitats are genetically connected or are isolated, and what the associated conservation implications of this would be. The knowledge gained from this research will hopefully form a foundation for further research into conservation of rare and threatened species of Australian macrofungi. Tasmanian collections that have been made so far are from Philosopher Falls in the Tarkine and from around the Blue Tier in the northeast of Tasmania, as well as a few sparse collections scattered across the state.

If you spend time in *Nothofagus* forests searching for fungi, you may be able to help fill in some of these collection gaps. A single mushroom with specific location information (latitude/longitude) that has been photographed in the field and then collected and dried is all that is needed. Identifying *Laccaria* sp. A is relatively straightforward as it has very distinctive field characters compared to other *Laccaria* species (see figure). The mushrooms are very large, fleshy and robust for *Laccaria* although the gills are typically '*Laccaria*-like' - i.e. widely spaced, pink and with a white spore print. Colour is generally pink to pink/orange on the cap and stipe and there are sometimes white longitudinal fibrils on the stipe.

If you think you can help or would like more details on how to help, please contact Elizabeth Sheedy.

esheedy@pgrad.unimelb.edu.au

Please be aware that collecting in National and State Parks requires a permit. Do not collect any *Laccaria* sp. A from these areas without first having contracted Elizabeth for permit details.

Mistletoe musings by Sarah Lloyd

Mistletoes are absent from Tasmania but they are a highly visible element of the flora of the Australian mainland. In temperate Victoria and New South Wales many of the roadside eucalypts and isolated paddock trees are festooned with large clumps of pendulous foliage, giving their host trees a decidedly sickly appearance. In the semi arid regions acacias, casuarinas, eucalypts and other plants have mistletoes, most of which are less conspicuous than their temperate zone counterparts. A month spent camping in the semi arid area where these plants thrive gave me the opportunity to observe the bird species that use the flowers, fruits and foliage for food, shelter and nesting. But I had to refer to an article that I had read in Wingspan in 2001 to be reminded of just how important this often maligned plant is to many faunal species. In fact, mistletoes are seen as so significant that they are considered to be ecological keystone species. This left me wondering about the reasons for (and impact of) their absence from Tasmania.

'Mistletoe' is a term applied to members of five separate families in the order Santales that have evolved parasitic lifestyles on four or five different occasions. In other words, mistletoes don't share a common ancestry, but are functionally similar. They are known as hemi-parasites because they contain chlorophyll and therefore photosynthesize but all their water and minerals (and sometimes up to 60% of carbohydrates) are obtained from their hosts through a connection called a haustorium. This haustorium not only attaches the mistletoe to its host, it also diverts water and minerals from the host to the mistletoe. This enables the mistletoe to withstand drought and other adverse conditions such as nutrient deficiencies.

There are approximately 1300 species of mistletoe worldwide and they occur on all continents (except Antarctica) and many islands including, amongst others, New Zealand, the Hawaiian Islands, Galapagos and Fijian Islands, Madagascar, Lord Howe and Norfolk Island and New Caledonia. They grow on a range of plants, particularly trees and shrubs in forests and woodlands, but also on cacti, grasses, annual herbs, orchids and ferns.

haustorium

Many types of mistletoe have prolonged flowering times that in some species continues throughout the year. In some regions, including in Australia, there is always at least one species that has flowers or fruits. This ensures a reliable food source for numerous invertebrate, bird and mammal species, especially during those seasons when little else is productive.

Some mistletoe families have inconspicuous wind pollinated flowers while others have large colourful blooms that are particularly attractive to birds. During our short stay in southwest Queensland I observed several nectar feeders including Singing and Spiny-cheeked Honeyeaters visiting the flowers. Other birds that have been observed feeding on the nectar include shrike-thrushes, cockatoos, ravens, cuckoo-shrikes and woodswallows.

Lysiana exocarpi

Lysiana exocarpi

The fruits of many species are large, fleshy and highly nutritious, with (depending on the family) a variety of nutrients. They can contain soluble carbohydrates, lipids, proteins, all ten essential amino acids, minerals and other nutrients. Like the flowers, the fruits provide a year-round resource for a range of species. In Australia mistletoe fruit specialists such as Mistletoebirds, Painted and Spiny-cheeked Honeyeaters play a crucial role in dispersing the seeds; other fruit-eating birds including bowerbirds, cockatoos, cuckoos, cassowaries and emus also disperse seeds but are considered fruit predators rather than specialists.

Many types of mistletoe have evolved to mimic the foliage of their hosts, a disguise that may have eventuated because herbivorous browsers (e.g. deer, gorillas, rhinoceroses and possums) prefer the nutritious foliage of mistletoe to the toxin-laden foliage of the host trees. The mistletoes' disguise tricks potential browsers who leave their foliage uneaten. Unfortunately this strategy seems to have failed in New Zealand, where the introduced brush tailed possum has been implicated in the decline of the endemic mistletoe; the decline of seed vectors, i.e. the native birds, may also be a factor.

male mistletoebird with fruit

Over 57 bird species have been recorded sheltering or nesting in the dense evergreen foliage of mistletoes. Of these, the Tasmanian species include White-faced Heron, Brown and Grey Goshawk, Collared Sparrowhawk, Common Bronzewing, Little Wattlebird, Noisy Miner, Dusky Woodswallow and Grey Butcherbird. Birds often use the foliage to line their nests; it may have antibacterial properties and could stimulate the immune systems of nestling birds.

Mistletoes have been implicated in the important task of hollow formation. A mistletoe plant will take water and minerals and prevent them from reaching the leafy end of the branch on which it grows, causing the branch to die and eventually fall. A hollow that forms where the limb breaks may provide a suitable cavity for hollow nesting species. Furthermore, once on the ground, fallen branches provide important foraging, sheltering and nesting sites for invertebrates, frogs, birds and mammals and substrates for mosses, lichens, liverworts, fungi and maybe even slime moulds!

White-faced Heron

Spiny-cheecked Honeyeater

Mistletoes provide resources for many more species than those outlined above. For example, over 200 species of insect have been documented pollinating a single mistletoe species and they are particularly important for many butterfly species.

In the cloud forests of the southern Andes mistletoe fruits are not dispersed by birds. Instead there is a mutualistic seed dispersal relationship between a Loranthacous mistletoe and *Dromiciops australis* ('little mountain monkey') a small antechinus-like animal that is the only living member of an ancient marsupial order, the Microbiotheria. The coevolution of these species is believed to have begun 60-70 million years ago when the southern continents were connected in the supercontinent, Gondwana. The large Loranthaceae mistletoe family, known from fossils from the Cretaceous period, also has relictual genera in Australia and New Zealand.

Tasmania's fossil pollen record shows that mistletoe was present from the Early Eocene to 120,000 years ago. It is likely that they were eliminated during the last Ice Age, and they have not recolonized Tasmania since it was isolated from mainland Australia by the most recent formation of Bass Strait that occurred approximately 15,000 years ago.

It is virtually impossible to assess the impact of the absence of a group of plants. However, given that mistletoes are so important that they are considered keystone species, perhaps their absence here may be a factor in Tasmania's depauperate bird fauna.

References:

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Spotted Bowerbird

Tea-tree fingers - *Hypocreopsis amplectens* in Tasmania?

Tom May (Fungimap / Royal Botanic Gardens Melbourne)

Tea-tree fingers (*Hypocreopsis amplectens*) is a rare fungus known from just a few sites in Victoria and one locality in New Zealand (May 2008). It is rare enough in Victoria to be the only fungus formally listed under the Victorian *Flora and Fauna Guarantee Act*. It was only recently given the formal name *amplectens* (from the clasping habit), having been known for a decade as *Hypocreopsis* sp. 'Nyora', in reference to the first known population at Nyora in South Gippsland, Victoria.

H. amplectens produces a lobed, firm, crust-like fruit-body that wraps around small branches, usually of teatree (*Leptospermum* spp.). The surface is brown, paler at the tips of the lobes, and with very small, darker raised dots. The fruit-body is up to 6 cm long, along a branch; several fruit-bodies can occur near each other, with interwined lobes.

In Victoria *H. amplectens* is known from only three near-coastal, lowland sites within a 75 km radius in southern Victoria. Very surprisingly, a collection on *Nothofagus* bark from the South Island of New Zealand (made in 1983) in the PDD Herbarium at Landcare Research in Auckland turned out to be the same species (Johnston *et al.* 2007). The New Zealand collection has the same microscopic features as material from Australia, including the presence of four (rather than the normal eight) spores per ascus and a warted surface to the spores, which often have cross walls.

On close inspection *H. amplectens* can often be seen to be growing on another fungus, a species of *Hymenochaete* that forms a brown crust on wood that is very thin and not lobed. Other species of *Hypocreopsis* in the Northern Hemisphere also grow on *Hymenochaete*.

In Victoria, *H. amplectens* seems to be limited to long-unburnt stands of teatree, often growing on standing or recently fallen dead branches. Despite the occurrence with *Nothofagus* in New Zealand, *H. amplectens* has never been seen in cool temperate Rainforest with *Nothofagus* in Australia.

Tea-tree fingers (*Hypocreopsis amplectens*) at Nyora, Victoria

Hypocreopsis amplectens is a Fungimap target species and a description and illustrations are included in the guide to the target species, *Fungi Down Under* (Grey and Grey 2005). For most of the 110 or so target species there are numerous records, often several hundred. However, there are only a handful of records of *H. amplectens*, all from the three known Victorian sites with one exception - a tantalising report from Tasmania.

H. amplectens was reported from Tasmania in January 2006, at Cloister Lagoon in the Walls of Jerusalem National Park by Lisa Clarkson. The fungus was growing at an altitude of 1040 m on live wood of *Leptospermum scoparium* in an old growth sub-alpine teatree forest which was unburnt (having missed the 1982 wildfires). Unfortunately, the recorder was 'lost' at the time on an un-marked track (with a party of children) and was not able to get a photograph of the fungus. However, an accurate GPS reading of the location was obtained: 55G E431200 N5362450 (43°53'12"S 146°10'15"E).

For the moment, this record is flagged as needing confirmation because the species is otherwise unknown from Tasmania despite the numerous surveys for macrofungi that have been undertaken in the last couple of decades by mycologists such as Genevieve Gates, David Ratkowsky and Sapphire McMullan-Fisher. However, given the surprise range-extension to New Zealand, it would not be so unexpected to find *H. amplectens* in Tasmania.

If you do happen to locate *H. amplectens*, please submit your sighting to Fungimap (fungimap@rbg.vic.gov.au), with a photograph and detailed locality and habitat information. Further information on Fungimap can be found on the Fungimap website (http://www.rbg.vic.gov.au/fungimap/home).

References

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Johnston, P.R., May, T.W., Park, D. & Horak, E. (2007). *Hypocreopsis amplectens sp. nov.*, a rare fungus from New Zealand and Australia. *New Zealand Journal of Botany* 45: 715-719.

May, T. (2008) A name and a novel distribution for *Hypocreopsis* sp. 'Nyora', *Fungimap Newsletter* 34: 9.

Close up of fruit-body of *Hypocreopsis amplectens* showing raised dots on the surface

Keeping up the good work: CNFN contributions as "Citizen Scientists"
- Ron Nagorcka

The natural world has inevitably been of interest to human beings ever since they gained the ability of conjecture; there have been "amateur naturalists" since the dawn of time as it was obviously necessary for hunter-gatherers to have a thorough understanding of the animals and plants on which they relied. But until the European Enlightenment, the assumptions made about the natural world were often severely wide of the mark. Since that time, science has become more and more specialised and reliant on the expertise of trained professionals; nonetheless – especially in the field of natural history - the role of the amateur remains important and quite often crucial in the advancement of knowledge.

In the USA the term "citizen scientists" is gaining currency. In a 2008 paper by Jeffrey P. Cohn from Maryland USA – see http://caliber.ucpress.net/doi/full/10.1641/B580303 -

"citizen scientists" are defined as "volunteers who participate as field assistants in scientific studies". The term seems to have originated at Cornell University in the 1990s. Cornell has been using such volunteers since the 1960s and declares that many of the advances they have made - for instance in completing accurate maps of the breeding ranges of every North American bird – would have been quite impossible without the contributions of an army of volunteers. They have also established that the data collected this way is very scientifically accurate. In one study which necessitated the accurate identification of crabs, third graders were right 80% of the time!

CNFN has a proud record of contributions by citizen scientists. The Deloraine Field Naturalists (later to become CNFN) was originally formed in 1989 partly because of the concerns of a small group of people about ongoing forestry operations on the Gog range – and in particular the effects this was having on species such as the Wedge-tailed Eagle and the giant freshwater crayfish (Astacopsis gouldi). After many years of dedicated work by Jim Nelson, Bill Thomas and others not only collecting data and studying this species, but negotiating with governments and bureaucracies, A. gouldi was finally listed as an endangered species in 1994. This was one of the first invertebrates to make the list, but it still took CNFN's threat of legal action in the Supreme Court to convince the government to make it illegal to capture and eat this amazing creature. Despite the strenuous efforts by Bill Thomas in the ensuing years, the current "recovery plan" still does not properly protect the stream habitat of A. gouldi from forestry clear-felling. (see Jim's article in "The Natural News" number 45.) The task of the amateur naturalist in this case (as in many others where the professional scientist can be thoroughly inhibited) includes ongoing political pressure and action.

Not long after moving to Black Sugarloaf, Sarah and I were aware of the burrowing crayfish (Engaeus species) that inhabited our swamp. On an early excursion of the Deloraine Field Naturalists Jim Nelson captured one of these for identification, and discovered it to be E. disjunctus – a species which up till then was known from only 3 other locations in northwest Tasmania. Jim has since then found it in several other locations. His work in mapping the distribution of Northern Tasmania's many Engaeus species and the discovery of at least one new species has been extremely important to the understanding of these unique invertebrates.

Soon after the establishment of the Deloraine Field Naturalists, concern was raised about the fungal lesions affecting the populations of platypus in Tasmania. A dedicated group of volunteers assisted scientists to monitor the

platypus population of Brumbys creek. Since then this disease has spread widely and is still little understood.

More recently there has been considerable activity by various CNFN members:

In late 2004 the survey work of the CNFN amphibian group confirmed the presence and prevalence of the chytrid fungus (Batrachochytrium dendrobaditis) in Tasmanian frogs. Subsequent work by Lisa Clarkson has provided valuable data about the extent and significance of this threat to our frog populations (see "The Natural News" Winter 2008)

Numerous records have been contributed by some dedicated CNFN members to the nationwide Fungimap project which is run from the botanical gardens in Melbourne. This project uses volunteers to map the distribution of selected fungal species across Australia. CNFN subsidised a Fungimap conference in 2007, and earlier this year, we organised "Hidden Treasures – discovering the fungi of the Blue Tier" which allowed a team of mainland mycologists associated with Fungimap to study the fungi of the area and then to spend a weekend sharing their knowledge and results with Tasmanian field naturalists and interested local residents. All agreed that it was a highly successful scientific, educational and social event. And congratulations are in order to one of our most diligent "fungimappers", Patricia Harrisson from Stanley, who has recently collected *Ramaria watlingii* in Tasmania - a species previously known only from a single Victorian collection (Australasian Mycologist 2010 - Volume 29(1)).

Sarah Lloyd's ongoing "A Sound Idea" project monitors Tasmania's bush birds with the aid of digital audio recorders and an army of volunteers. Chirp4, included with the last "Natural News", describes this project and its progress. This is an intriguing example as it does not require the participants to have any ornithological knowledge as all the data is sent to Sarah who listens to and interprets it. On the other hand, a significant number of participants have become both more interested and more knowledgeable about the birds they are recording.

Collembola (*Ceratrimeria* sp.) feeding on *Elaeomyxa cerifera*

Sarah has also been collecting and identifying slime moulds (myxomycetes) at Black Sugarloaf, recently identifying the very rare *Elaeomyxa cerifera* – a first for Tasmania and only the third record in the southern hemisphere. She has also noted that there are often species of Collembola (springtails) feeding on myxomycetes. One of these has been identified by an expert as possibly a new genus. She has discovered that a French Collembola expert not only was unaware that they fed on myxomycetes – he had never heard of myxomycetes!

Tom Thekathyl, with the aid of CNFN's microscopes, has been making important contributions to the understanding of Tasmanian bryophytes. Tom lives at Lottah on the Blue Tier and is well placed to research these understudied organisms which he has been

collecting for the herbarium in Hobart. His last communication was about finding *Calomnion complanatum*, a species of moss considered "very rare". This is only the third record for Tasmania and a first for the northeast.

Considering all these examples, the definition given above for the "citizen scientist" seems somewhat limited, as the contributions made go well beyond the collection of data. The lesson is that the more closely we observe nature, the more likely we are to make discoveries. In fact interested and observant amateur naturalists can make important discoveries about the connections between things as their interests may be broader than those of the scientific specialist.

Additionally, we amateurs need not feel inhibited when it becomes necessary to take political action, or to alert bureaucratic authorities about our concerns. When undertaking such exercises, it is preferable, and often essential to be armed with solid scientific knowledge and data. In this regard we have established a solid reputation, and continue to play an important role.

Some field naturalist groups are fortunate to have scientists as active members and/or to be based in university cities where access to expertise is reasonably easy. While CNFN does not have this advantage we have been assisted in our endeavours by many helpful scientists – either in person or increasingly through internet communication. Acknowledgement in particular should go to David Obendorf who is such a strong advocate for community involvement. There are many others far too numerous to mention here without missing somebody! We fervently thank you all.

Added to all the systematic studies mentioned above are the many ongoing observations made by our members about common and rare Tasmanian species alike (and I do apologise to anybody who feels they may have been overlooked.) I also should mention three young people - Micah Visoiu, Sarah Tassell and Andrew Hingston - who began their "scientific" careers as teenage members of CNFN and have gone on to make valuable contributions in their various areas of expertise.

An important part of all this work is letting people know about the results obtained. And this is where our newsletter has always played a valuable role. These days "The Natural News" is printed by Sarah Lloyd on her home office colour laser printer with the associated "consumables" (paper, ink and repairs) subsidised by CNFN. This not only enables the cheaper production of a very professional newsletter, but of Sarah's various books and pamphlets on natural history.

As a final comment I would observe that while some of us occasionally bemoan our lack of young recruits into the organisation (a phenomena with all community groups these days), this area of "citizen science" is one to which us more mature or retired citizens can make really valuable contributions.

Calomnion complanatum
T. Thekathyil

Observation Post – Jim Nelson (president CNFN)

The CNFN has a large and ever growing membership distributed so widely that the title of our website www.disjunctnaturalists.com is indeed very appropriate. There are many members who support our activities (for more details about these see Ron's article in this issue) but are unable to attend our monthly excursions and I have been wondering how this large national (& indeed international!) membership might be better served - an activity that could involve all members no matter where they live.

I have come up with the idea of an email forum, where members' questions, observations, opinions or whatever might be addressed in a relaxed fashion where any member might contribute an observation, a question, or an answer or even a philosophy if they like. The forum can provide contacts, advice, personal experiences and observations and other possibilities concerning the natural environment. Its main purpose will be twofold: first, to put people in contact with others who might inspire, inform, enlighten, challenge their knowledge or entertain them. And second, to help us all gain knowledge and a greater appreciation of the natural environment.

The Forum would achieve these aims by putting all of us in direct contact so that anyone involved might be able to answer or get answer on a given question, or provide an observation. I realise that such a forum could be setup on something like Facebook, but I would personally prefer to try an "in house" approach.

To start the ball rolling, I would like feedback from any members on the following:

Hey, do you listen to Dr Sally Bryant on ABC Talkback Radio talking about the natural world? Well, I catch it when I can, and over the past couple of programs people have rung in reporting seeing large flocks of black cockatoos. Sally impressed upon them how rare it is for there to be such big flocks (100+) and that they should be reported with location information to the authorities.

I do not think these are permanent flocks at all, but rather are gatherings of several flocks. I saw such gatherings of around 100 odd birds last autumn and again this spring here in Weegena. In fact, I see this most years. My intuition is that these are "corroborees" of black cockies with several flocks coming together at certain times of the year out of their breeding season. The rest of the year I see my local territorial flock of eleven birds.

I fear the local birds are no longer breeding. A number of years ago I watched parents feed a fledgling which seems to have been the last offspring of this flock as the numbers have remained the same for quite a while.

Does anyone have any further information or ideas? If Sally didn't know about this, I assume it isn't recorded in the bird books.

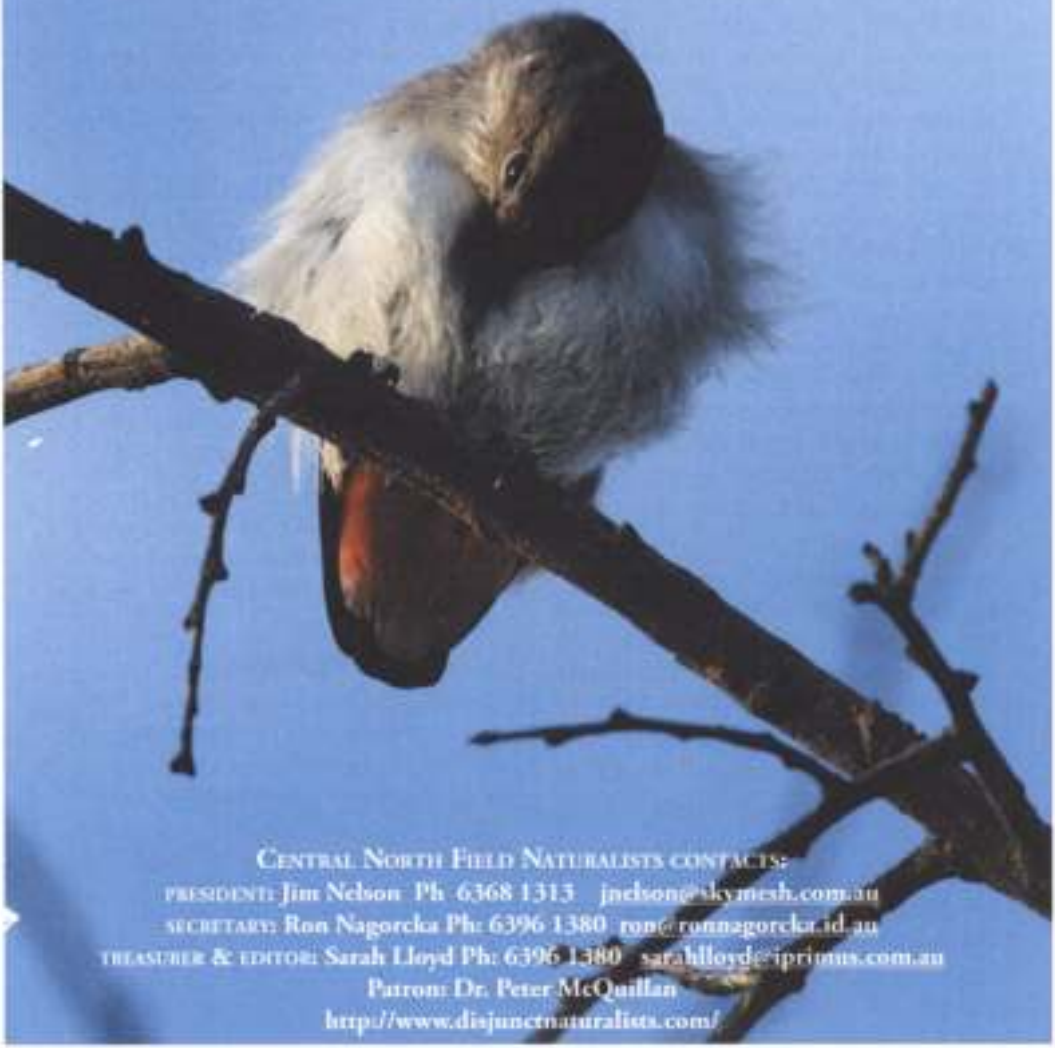
If you can contribute anything to this discussion, have a reference, or if you would just like to hear what others might know, then join the CNFN Email Forum by contacting me by email:

jnelson@skymesh.com.au

Simply title the subject of your email Observation Post, and I will set up a group email list. All correspondence will go through my email and into a separate folder. You are welcome to initiate a group correspondence with questions, answers, observations, etc. Please feel free to become involved, you are welcome to use a "pen name" if you prefer.

Walks and other events

January 2nd
Januray 21st- 23rd Federation hosted by the LFNC - see Sarah
February 6th
March 6th
April 3rd
May 8th



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