Central North Field Naturalists

CNFN

the

Natural News

March - April 2000

Patron - Dennis Morris

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Walks

Sunday May 7, Mt. Careless
Meet at Frankford store at 9:30
Geoff Dean will lead a walk up Mt. Careless with some steep climbing to be expected.

Sunday June 4, Cataract Gorge
Due to a number of people being away, we suggest people looking for an outing should organise a walk in the Gorge amongst themselves. There is a liklihood that we will be involved in an audit of this area in the near future.

Sunday July 2, Weegena Hall 10am - Jim's o.s. trip, plus outdoor events if weather is suitable.

Events

Tuesday May 2, Skemp Memorial Lecture
Prof Andrew Osborne, at Launceston Field Naturalists General Meeting at Scotch-Oakburn College. Contact Jeff Campbell on 6361 7269, or e-mail lfhc@hotmail.com for more details.

Friday May 19, Somerset Memorial Lecture
7:30pm TAFE Lecture Theatre, Burnie campus Mooreville Rd., Burnie "Investing in Wildlife" by Dr John Wamsley. His controversial approach to "practical conservation" maddens his critics with its success. Come hear the man himself explain his ideas and answer your questions.

The Marine & Coastal Community Network's

Bass Strait Forum

2000

Launceston Tasmania

30-11-2000 – 2-12-2000

For the first time people of many different backgrounds have the opportunity to come together and discuss the future of Bass Strait and its islands.

The Forum is intended to be a celebration of the rich cultural history and natural values of the Bass Strait region.

It is a chance for communities to discuss the planning and management possibilities of the region, and share in an understanding of the Strait's cultural and biological significance. There will be much to explore.

For additional information contact:

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CNFN's NHT LEAPFROG PROJECT

By Karen Wilson, Coordinator

The Leapfrog Project, Rehabilitation of Wetlands has been a fantastic initiative of the Tasmanian Department of Education and the Central North Field Naturalists. Funded through NHT (well that is a story worth telling in itself) and in spite of this the project had a very dynamic first year.

Sites have been established and work is underway at Jericho, Don College grounds, Mary St. East Devonport, Scottsdale, Hagley and Cressy. To date this has involved 9 schools directly involved with the project and in Hagley's case, all grades from Prep to Year 6 plus all schools visiting the Environment Centre.

An Education kit has been produced which incorporates curriculum information, practical information for onground rehabilitation and the process for establishing a management plan. Other community groups such as local Landcare groups have also been encouraged to participate.

A significant amount of additional funds and in-kind support have been sourced. Major financial contributors have been Comalco, $2200 and Australian Geographic, $1000. A broad range of publicity and community events have also been organised. Some of the highlights were information sessions in the Elizabeth St Mall, a field day at the Syke's property at Scottsdale, where nearly 50 people were prepared to get water down their necks! Bruce Worth stole the show by encouraging a burrowing freshwater crayfish, *Engaeus mariner*, to dangle off the peak of his cap. Some people will do anything when they get a little damp! Frog Week was celebrated at Prospect House at Richmond which was very well attended and the school's competition which was run in conjunction with this was supported by over 200 students. Displays were held at the Tasmanian Museum and Art Gallery and the Minister for Education, Ms Paula Wreidt launched the project at Outlands.

The sites to date cover the whole spectrum of urban and rural locations. The range is determined by current and historical sitings of the Green and Gold Frog *Litoria raniformis*. Many of these sites have high public accessibility in the hope that they will become focal points in their respective communities as examples of how and why to go about restoring wetlands.

If anyone should like more detail, reports on the project are held by CNFN.

EDITOR'S NOTE: NHT Funding for this worthwhile project has finally been approved by Senator Hill for this year after an appeal against his suggested changes that we run LEAPFROG without a coordinator!? Karen Wilson has been invaluable.

DISGRACEFUL Worms in water

headline, Western Herald 3 December 1999

Queenstown, on the West Coast, is one of many small Tasmanian towns with an inadequately clean water supply and insufficient funds to clean up the water. The local Council investigated various water treatment options in 1996. In 1997/98 it began work on a relatively inexpensive treatment method: chlorination by direct injection into the water mains.

Throughout that year, the West Coast Council took regular water samples and sent them away for bacteriological analysis, as did all Tasmanian water suppliers. A summary for Tasmania was prepared by the State Director of Public Health and released on 16 September 1999. This Annual Water Report said that in 1997/98 the West Coast Council had provided clean water to Tullah, Strahan and Zeehan, but that supplies to Rosebery and parts of Queenstown had been so polluted that residents should have been advised to boil water before using it.

On 30 September 1999, West Coast Council advised Queenstown and Rosebery residents to boil their water for at least the next six months.

On 1 December, Council was handed a worm by a Queenstown resident who found the living animal in a dog's water bowl. Council immediately sent the worm to the Government Analyst, who identified it as a harmless nematomorph (horsehair worm or Gordian worm; see below). Two more worms were reported, one from another pet bowl. The third find was first reported on ABC radio. A Queenstown mother was running a bath for her two-year-old daughter when she noticed a worm '7 to 8 inches long' swimming freely in the water.

What happened next was remarkable. After years of quietly putting up with water that can actually make people sick, West Coast residents were up in arms about worms that everyone accepted were harmless. "This may not be a health problem," said Premier Jim Bacon, "but no one should expect to encounter worms in their drinking water."

The editor of the local weekly, the Western Herald, was outraged. "The health situation on the West Coast has indeed become acute with the latest discovery of horsehair worms entering people's homes through their tap water."

Council's General Manager responded quickly by ordering the Queenstown water mains to be scoured. Council officers suspected the South Queenstown supply dam to be the source of the worms. The dam was emptied and cleaned out, an operation that required construction of a new access track.

At the end of December another worm was found in a

dog's bowl, this time in Strahan, and a frog was found in the Gormanston supply. By this time Council had learned enough about nematomorphs to suspect that worms in dog bowls might not necessarily be coming from the water tap (see below). One frog was enough for Gormanston, however. The Gormanston supply dam will be emptied and cleaned later this year.

What happened during the West Coast 'worm crisis' hints at a folk belief: What you can't see isn't as bad as what you can. Bacterial pollution is apparently tolerable, but worm pollution isn't.

To the credit of all concerned, there was widespread and accurate reporting of nematomorph biology during the 'crisis'. What people noticed were the long, thin, adult worms, which mate in water or very wet soil in spring and early summer. Females lay numerous eggs in gelatinous strings in the water, then die. The eggs hatch after a few weeks or months, releasing a short lived larval stage which encysts on vegetation at or near the water's edge.

Terrestrial nematomorphs are parasitic in insects and apparently not host-specific. When a cyst is eaten by a plant-eating grasshopper, cricket, beetle, etc., the larval nematomorph escapes from the cyst and bores into the host's body cavity. Here it digests and absorbs the surrounding tissues, growing into a long, tightly curled and leathery-bodied adult. In Tasmania, nematomorphs seem to overwinter with their hosts.

The adult worm bores out of its weakened host (and kills it) when the insect is in wet conditions or near a body of water. Some people suspect that emergence-ready worms can 'drive their hosts to drink'. In any case, nematomorph adults turn up regularly in Tasmanian fishponds, swimming pools and - occasionally - pet water bowls.

Nematomorph taxonomy is difficult and it's not clear how many species are in Tasmania. Their life cycles also need further study. If you find a nematomorph, particularly one associated with its dead insect host, please send it and the suspected host to a museum, not the local Council or the Government Analyst.

Reprinted from the March 2000 issue of Invertebrata. Invertebrata is produced by the Queen Victoria Museum and Art Gallery and comes out three times a year. For more information about Tasmania's best source of news, views and who's doing what regarding invertebrates, contact the editor:

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'Hot Spots' Could Stem Extinction

by Paul Brown - reprinted from **The Guardian Weekly** 2-8 March 2000

Huge numbers of species threatened with extinction could be saved if 25 carefully selected "hot spots" covering just 1.4% of the Earth's surface were preserved, say researchers from Oxford and Washington.

Writing in the scientific journal **Nature**, the researchers say that the number of species facing extinction far outstrips the resources needed to preserve them, and the situation is likely to become rapidly worse. By looking after the "hot spots" 44% of the world's plants and 35% of animal species would be protected, giving the greatest possible return on investment in conservation. Norman Myers, of Green College, Oxford, describes this as a "silver bullet" strategy.

On present estimates between one-third and two-thirds of the world's plants and animals will disappear in the foreseeable future. For $480m a year, twice the cost of a mission to Mars to search for extraterrestrial life, mankind could avoid a huge impoverishment of the Earth that would take millions of years to rectify. That is a longer period than *Homo sapiens has* been on the planet, the paper says.

Most of the hot spots are in the tropics, five in Mediterranean-type zones, and nine are made up of islands. They are already threatened with environmental destruction, since 88% of their original vegetation has been destroyed. The Caribbean retains only 11.3% of its primary vegetation, Madagascar 9.9% and Brazil's Atlantic forest 7.5%. Eleven of the areas proposed for protection have lost 90% of their primary cover, and three have lost 95%. One of the richest areas is the tropical Andes where there were once 1.2m square kilometres of primary vegetation, but only 25% remains. In this area there are 1,666 bird species, 414 mammals, 479 reptiles and 830 amphibians. Nearly half of these species appear nowhere else on the planet and would become extinct unless the Andes hot spot was saved.

To qualify as a hot spot an area must contain at least 0.5% or 1,500 of the world's 300,000 plant species as native to that area. Of the areas identified 15 contain 2,500 endemic plants and 10 of them at least 5,000. The hot spots contain 133,149 species of plants and 9,645 of vertebrates. The report says that 800,767 square kilometres of the hot spots (about 38%) are already protected in parks and reserves.

Bird Study Group Excursion to Claude Road

by Ron Nagorcka

A small group of enthusiastic field nats birders met at Jim and Mariamtna Hunter's place on a beautifully still and sunny autumn day for the first excursion by the "Bird Study Group". The Hunters house and garden are set in the shadow of the dramatic cliffs of Mt Roland.

While the area seems well populated, there are still a wide variety of habitats nearby, and as soon as we emerged from the car, we started noticing the number and variety of birds in the vicinity. **Eastern Spinebills** were feeding on the fuschias in the garden. Both **Spotted and Striated Pardalotes** could be heard (if not seen) moving through the canopy of the wonderful old *Eucalyptus amygdalina* trees around the house - many of which have developed nesting hollows.

Sarah alerted us to the trilling contact call of the Striated as they moved through the canopy. The plaintive call of the Tasmanian endemic **Dusky Robin** alerted us to their presence - and we saw many of them during the day. **Black headed Honeyeaters** (also endemic) were making full use of a bathtub full of

Black-headed Honeyeater

water in the garden, and a discussion ensued as to the bathing habits of various birds. While many like the usual shallow birdbath, Eastern Spinebills for instance like to dive repeatedly into deeper water from a low branch and Dusky Robins had been observed sitting in water.

There were also plenty of **Superb Fairy-wrens** and the familiar call of the **Grey Shrike-thrush** often rang through the air. Jim Hunter commented on the number of **Yellow Wattle-birds** (another endemic) that were around, and all in all it seemed hardly necessary to move from the garden to study birds.However Jim had different plans for us, and we walked slowly through the bush towards Mt Roland to see what else might be around.

Flocks of **Strong-billed Honeyeaters** (yet another endemic!) kept moving through the trees above eating

Strong-billed Honeyeater

invertebrates - these birds must be crucial in maintaining the health of these trees. **Thornbills** were soon noticed and determinations made as to which species they were. 3 Thornbills occur in Tasmania - the Brown, Tasmanian (endemic), and Yellow-rumped. The first two of these are particularly difficult to tell apart - for me anyway. I noticed that Sarah and Jim agreed pretty quickly on which they were looking at. Both were around, as they often are. Jim noted the chestnut feathers on the wings of the Tasmanian, and for the record Pizzey says that the Tasmanian Thornbill has "bill shorter [than the Brown Thornbill], forehead pale tan; wing feathers edged orange chestnut; breast greyer, less streaked; underparts whiter; tail longer. Habits like Brown Thornbill, but habitats denser, wetter."(Pizzey and Knight 1997) Our observations confirmed most of this - including the habitat preferred by the Tasmanian, such as the spectacular wet gully of giant old *Dicksonia Antarctica* and *Melaleuca squarrosa* where our snail pace came to a complete halt for a while.The comparative songs of the two Thornbills were also discussed.

When recording birds, I cannot simultaneously use binoculars, so it's usually difficult to know which Thornbill I have on my recordings - unless they are from somewhere that Sarah has assured me has only one species present. The songs are very similar - and attractive! Jim and Sarah reckoned they could usually tell the difference - in particular a "burbly/warbly sort of sound" made by the Tasmanian - but what if they're imitating each other? Confirmation with binoculars seems necessary in the end.

As we walked on, Sarah - whose birding ears are definitely as sharp as her eyes - detected **Dusky Woodswallows** high in the sky by hearing their high contact calls. Even with binoculars they were hard to see, but once you "tuned in", they were quite audible. Along with the **Black faced Cuckoo-Shrikes** (the "Summer-bird" with its soft distinctive call) and the Striated Pardalotes moving through the trees, they would be migrating north at this time of the year.

A **White Goshawk** was seen briefly high overhead before it disappeared into a cloud.We had been hearing the "tick" and call of the **Pink Robin** before seeing it. This beautiful bird prefers wetter forest and gullies and this was the habitat we were now moving through.

Both **Golden and Olive Whistlers** were observed

Golden Whistler

during the day. The superficial similarity of the Golden Whistler to the Dusky Robin was discussed. If they vocalise they are easily told apart - if you feel really sorry for it it'll be a Dusky! Sarah pointed out that the genus name *Pachycephala* for Whistlers means "thick head" (Greek *pachys* - thick and *cephale* - head (Cayley 1931))and this was a good clue to visual identification.

As we emerged from the bush onto a back road opposite paddocks we saw a **Scarlet Robin** - a bird that seemed so common on fence posts around the countryside until quite recently. Farming practices have not been good for many birds. Jim told of consistent sightings of **Lewins Rail** in the vicinity until the recent clearing of its remaining local habitat. These local extinctions are very worrying - after all it is lots of local extinctions that add up to a universal one.Introduced birds included Kookaburras, Blackbirds and Starlings. I can't remember about Sparrows, but the area is generally dominated by native birds - many of which are endemic to Tasmania.

All in all, there was universal agreement that Bird Study excursions are a Good Thing where you learn

Lewin's Rail

heaps and have a good time. Our thanks to the Hunters for their hospitality. The scones and chocolate cake baked by ******* were magnificent!

References:

Pizzey G.and Knight F. Field Guide to the Birds of Australia (Sydney 1997)

Cayley N.W. What Bird is That (Sydney 1931)

Dusky Woodswallow

New to CNFN Library:

Tasmania's Threatened Fauna Handbook. What, Where and How to Protect Tasmania's Threatened Animals. by Jean Jackson & Sally Bryant 1999. Threatened Species Unit, Parks and Wildlife Service, Hobart.

This important resource contains site locations, maps, diagrams and information on habitat management and protection for every threatened animal in Tasmania. Available for $40 by mail order from:

MAILHOUSE
22Chesterman St
Moonah TAS 7009
ph 6272 5526
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Three Fungi

Amanita muscaria

Gaudy - top
Straight out of a child's picture-book.
Where's your fairy?
A pert, young troll's umbrella.
A parachute to altered states.

Psilocybe

Pale - stemmed, reticent, anaemic.
too thin to support yourself.
Almost.
Are you fair dinkum?
Or a leech with a hat on?

Ramaria

Orange - thins prosper
In the wet - gloom gullies
A nice confection

Peter Bamford

Book Review

by Jim Nelson

A Field Companion to Australian Fungi, by Bruce Fuhrer, 1993 revised edition published by The Field Naturalists Club of Victoria, Melbourne is a useful production with very good colour photos, brief descriptions and spore colours for 138 species of fungal fruiting bodies. It is also one of the standard works used for FUNGIMAP. What is FUNGIMAP? Keep reading if you are interested in fungi and would like to contribute to the body of knowledge for Australia.

FUNGIMAP

FUNGIMAP is a scheme to map the distribution of 100 species of Australian mushrooms, toadstools and other fungi, using the information sent in by a network of volunteer recorders across Australia. The project currently has about 400 volunteers and a database of more than 5000 records. Tasmania's regional co-ordinator is Dr David Ratkowsky. He was quoted in the SUNDAY TASMANIAN (Mar 19) as saying "Research, including conservation research, is hindered by lack of knowledge of the distribution of even the most well-known and easily recognisable species."

This is a project that welcomes amateurs, so here is a chance to get to know your fungi and contribute to the body of knowledge in the process.

Contact David on e-mail at: D.Ratkowsky@utas.edu.au or by post at 20 York St., Sandy Bay, 7005, for more details. He also may be able to supply Fuhrer's book to you.

Tasmania's Nature Conservation Strategy

An action plan to protect Tasmania's natural diversity and maintain ecological processes

Comment by Jim Nelson

Tasmania's Biodiversity Strategy has been renamed Tasmania's Nature Conservation Strategy (TNCS). This wonderfully innovative start was decided in order to (1) include geo-diversity and (2) avoid the term biodiversity. So, while we may have National and International Biodiversity Strategies, as well as a Biodiversity Unit in the DPIWE, along with a Biodiversity Committee, Tasmania once again has the vision to discard the new-fangled 'B' buzz word and deliver the truly prosaic with TNCS.

Apparently the good news is that the 'geodiversity' people are very happy to now feel "included", but we are left to wonder why they ever actually felt excluded by a term (biodiversity) that has come to symbolise our planet's richness. Can conservation of the planet's living matter really be separated from supporting and underpining structures?

Okay, there was a suggestion that the word 'biodiversity' felt a little too new age and threatening to certain segments of the community. And of course the Biodiversity Committee wants to be inclusive, even to the point of disguising our strategy so that it sounds like something put into place in the 1950's. Well, after all, the 1950's were good times, right?

So, let's define our terms, i.e.: **quibble** –*n.* 1. a use of ambiguous, prevaricating, or irrelevant language or arguments to evade a point at issue. –*Syn.* 1. evasion, equivocation, sophism, shift, ambiguity.

The Committee has issued its Draft framework which contains the guiding principles along with a Key Issues Paper. The ten Key Issues identified are:

• *Loss of native vegetation and remnants*
The broadscale clearance of native vegetation needs to be addressed. Any clearance needs to be managed in an ecologically sustainable way to protect land, freshwater and marine ecosystems. Protection should be provided for remnant native vegetation, especially within heavily cleared areas.

• *Lack of knowledge*
We need to improve our understanding of certain groups, processes and other elements of natural diversity (including their inter-relationships and the effects of human activity). This information is vital for good environmental management.

• *Quarantine, weeds and pests*
The environmental threats posed by introduced weeds and pests need to be prevented, or at the very least minimised. The responsible management of native wildlife is also an important issue to consider.

• *Representative reservation*
While Tasmania has an excellent reserve system, there are certain elements of natural diversity that are not adequately reserved. For example, grasslands, grassy woodlands, some wetlands, marine and coastal regions, karst and other geodiversity features.

• *Deterioration of natural systems*
Environmental degradation usually relates to key nature conservation issues, including poor catchment management practices (e.g. degradation of rivers, estuaries and water supplies), soil loss, tree decline, salinity and acidification.

• *Overuse of resources*
We need to manage our use of natural resources (including forests, soils, water and fisheries) in more sustainable ways to avoid waste and short-term profiteering at the expense of future generations.

• *Threatened elements of natural diversity*
Elements of natural diversity that are under threat of extinction or loss need special and timely attention to recover and, where possible, to thrive. Many need special management in addition to protection.

• *Training and awareness*
Community understanding and awareness of the importance of natural diversity are crucial to the process. We need to improve the public understanding of, involvement in and contribution towards solving environmental and conservation problems.

• *Institutional arrangements*
With so much happening, it has become essential to provide overall direction and coordination between the many existing conservation mechanisms. This will allow us to identify gaps between them and suggest ways of improving the management and protection of natural diversity.

• *Who pays?*
The costs and benefits to conserve natural diversity need to be spread equitably across the community, including giving due consideration to issues such as landholder rights, duty-of-care, user-pays, community wishes, regulations and potential incentive schemes.

What Do You Think?

The Committee invites your feedback on the draft framework of the Strategy and proposed major issues. Do you consider that the list covers the major issues? Have any priorities been missed or overstated? Do you have any other comments or suggestions? The Biodiversity Unit is preparing more detailed Issues Papers to help focus debate on these issues and ideas. Please send your comments, name and contact details to the Biodiversity Unit by the end of June 2000. (GPO 44A, Hobart)

Big Game

by Jim Nelson

I am about to take a trip to the U.S. and have been contemplating what it will be like being back in a country where some of the wildlife can feel a bit more intimidating than our gentle marsupials.

For instance, I was reading that in Alaska the Grizzly Bears can present serious problems for the unwary. The wildlife people there have been attempting to educate fishers and hunters, who are often city dwellers, about the dangers of these unpredictable animals, and what precautions might be useful. Essentially they are trying to get people to be more aware and observant when they go bush.

The most important thing with bears is to not surprise them, and therefore it is important to be alert to the possibility of their presence. The wildlife people are recommending that when travelling in bear country, one should wear small bells on the clothing to make noise while walking along. They should also carry a non-lethal pepper spray with them as a last resort.

There are actually two species of bears to look our for: the black bears, and the grizzly bears. The black bears do not usually present the unpredictable danger that grizzlies are known for, so it is important to know the differences and to look for any indications of the more dangerous species.

When bears are around, there may be frequent signs of fresh bear dung. Black bears have smaller dung that will mostly be full of berries. Grizzly dung will be much larger and can contain many small bells and smell strongly of pepper.

Have you been wondering what some of the WE in PIWE is up to these days? Stop in at you r local P&W and ask for the latest publication of their Game Management Unit called **Game Tracks**.

Subscriptions are now due
$15 single, $20 family
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Your status is: financial unfinancial