



CNFN

the Natural News

March - April 2001

Patron - Dennis Morris

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Program & Events

March 4 A Field Day On Reptiles. Meet 9.30 at Spreyton Primary School opposite Spreyton Park Racecourse. From there we will travel to Keeloy Tiers. This is a combined Land for Wildlife & CNFN event, with snake handler Bill Flowers.

March 16,17,18 Federation Weekend. The Federation of Field Naturalists Clubs Tas. are gathering at Carnacoo on the West Tamar for the weekend. Take West Tamar Highway to Blackwall Rd (Sign to Blackwall, Gravelly Beach, Devist 5.8km down Blackwall Rd to Swan Point Rd (Sign to Paper Beach) where you turn right. Carnacoo is 1.3km on the left clearly signposted.

Booking: Sue Woinarski 8.30-6.30 weekdays on 63 272 466 by Friday March 9.

Accommodation: \$8.50 per person per night

Saturday evening meal: \$14 (vegetarian available)

Program: **Friday,** camp opens at 6 PM. Penguins at Low Head around 8 PM D.I.Y. for free, or Nocturnal Penguin Tours \$7.

Saturday: 9.30 Georgetown Wildlife Sanctuary for water birds and invertebrates. 5 PM Federation Meeting. 6.30 PM Dinner, & speaker.

Sunday: 9 AM Microscopy Session, 11 AM Visit to Marion & John Simmons' garden and herbarium.

March 31, 12 Noon on Parliament House

Lawn. A rally and March against the creation of the Southwood "Woodship Wonderland" at Electron. The Haas & Channell Community Association. Contacts on 6267 9887 or 6267 9333

April 1, A walk up Mother Cummings. Meet at Maander Shop at 9am. Fungi? hopefully will be out.

May 5 & 6, Mt. Cameron East. A weekend at the Scottsdale High School Study Center. Book with Jim.

Booklet Review - Protecting Our Forest
by Hun Wilson Tuckey, Ed, 14pp
Parliament House

by John Hayward

As the cover sheet states: "Is saving the trees destroying our forests?" (sic)

Do you consider the Nullarbor the quintessential Aussie forest? You could after reading this collection of articles compiled by one of the Government's boldest thinkers. Conventional notions of punctuation, syntax, and the relationship between language and reality also come in for a shake in the editor's introduction.

If so complex and subtle a thesis can be summarised, the Minister's argument is that forests ought to be logged for their own good. Controlled burns are out because they are uncontrollable and threaten assets such as, say, plantations. Tuckey eschews the views of conservationists in favour of what he terms "leading vegetation based academics".

"When it comes to making the serious judgements that effect (sic) our forests I believe I should listen to the appropriate academic rather than a rock singer, football coach or the many other apparently self appointed persons who never publish a balance sheet, membership list, or electoral return".

These "leading botanists (i.e. those who have published doctoral returns etc) argue simply for disturbance", recognizing that trees are too dumb to distinguish among fire, chainaw, or atrazine; they simply love being skilted in order to be reborn.

The kernel of Ironbar's idea seems to have germinated in last year's huge wildfires in the US which did catastrophic damage. That much of it occurred in post-logging scrub and dense plantations is not part of his story. The conclusion there, whence two of the five articles originate, was that cool fires, long suppressed by landholders and loggers, should be tolerated or even ignited to prevent congestion and fuel build-up. Some areas might require mechanical thinning to allow the bigger trees to reach a fire-resistant size. This tenuous analogy between fire and logging was pounced upon by logging's boys on Madison Avenue and packaged for the junk brain market. Ironbar swallows it whole, and expects that we will too.

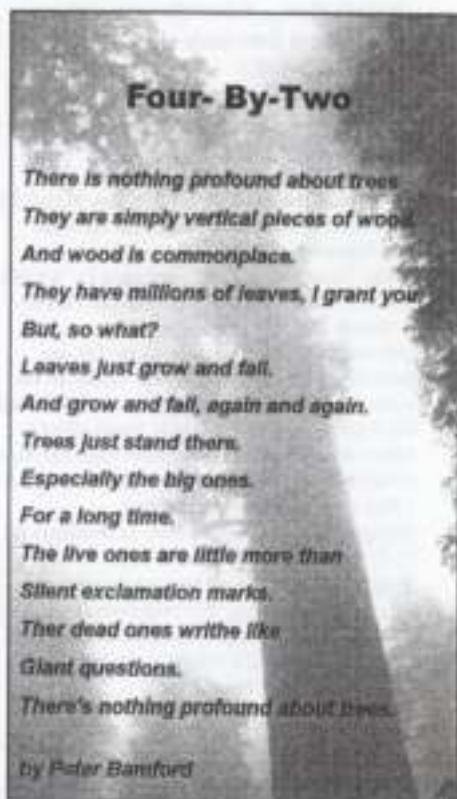
Unburdened with details, Ironbar soars over the momentous discrepancies in his argument and in the articles. The ome from a US TV news website observes that the loggers go for the fire-resistant big stuff, not the tinder below. A reprint from the Washington Post bluntly states that the forest thinning push was coming from "highly politicised interests" and was "cautiously" supported by mainstream environmental groups and a scientific consensus that "certain forests" needed to be thinned. No such qualifications in Ironbar's plan, not even an "s" on "forest".

Two of the three Australian articles, from THE AGE and from TIME (which Ironbar neglected to list) deal largely from a Melbourne Umi forest ecologist named Peter Attiwill, whose opinions, from the standpoint of a forester, seem almost too convenient to be true. The Ash Wednesday fire was insufficiently catastrophic to promote optimal *E. regnans* regeneration, according to Dr Attiwill, who also refutes the charge that logging results in nutrient depletion, which he finds in any event to be irrelevant to *E. regnans* regrowth rates. Nestled in this stand of towering claims, however, is a brick from the Wilderness Society's Stephen Taylor: "It is no wonder that our native forests are so mismanaged, given the apparent ecological incompetence of the forest industry's self-proclaimed ecologists; they (the forest industry) should learn some basic animal ecology before making such ridiculous claims as those of Peter Attiwill."

The fifth article, from the Australian Forest Grower, is a compilation of early observations on how much of Australia was originally fire-maintained, open woodland. In the absence of comparative data on forests, the overall

effect is to suggest that forests are a lot like those boat people, invading aliens, and good on the loggers for sorting them out.

Protecting Our Forest is a gambit borrowed from the place where oil companies get away with pushing their product as "organic". It was designed for use on dopes, not by them. In Ironbar's hands it succeeds mainly in raising alarm at the volatile demerol of our minister. However, being free to those seen to have "a genuine interest in forest protection", it is a bargain, if only for the barmy gravitas of the editor's photo on the cover.



Wallis Warfield Simpson "Bird"

Monograph on the Grey Butcherbird

by John & Lynn Hayward

The Bird, arrived on Christmas Eve, either a rescued or unwittingly stolen nestling on the verge of its first short-hop flights. With both our small aviaries occupied with mammals, we converted our house to same by tacit decree.

Butcherbirds, *Cracticus torquatus*, are related to Australian magpies and currawongs rather than kookaburras or shrikes, as appearance and habits might suggest. This familial background was something we failed to note with sufficient alarm. This particular bird was dubbed "Wallis/Wallace" due to our inability to determine its gender. Two months on, the persistence of brown on head and upperparts has us leaning toward the former.

Wallis took readily to rissoles of mince, insectivore mix and ground puppy chow, as well as pieces of fruit. She also showed initial interest in anything small enough to be removed and flown around. Culture was provided mainly in the form of music, particularly woodwinds, to which she often responded, and the violin, which could reduce her to rapt silence.

We were not concerned that she would bond with us, given her relatively advanced age on arrival, but did not expect her fascination with two red-neck daily visitors-Bennetts wallabies, with whom she would dine and recline , and follow ground in seeming hero-worship. To wombats she is seemingly oblivious, while dogs are often subject to fierce and gratuitous attacks. Guinea fowl are sometimes the target of seemingly recreational

harassment swoops and kookaburras have been sternly seen off, only the emus seem to command serious respect.

The butcher bird has a virtuoso range of vocalisations, plaintive mewling, urgent baby begging (with fluttering wings), the trademark musical piping, a melodious but addled conversational burbling, a harsh raven-like caw, and any number of imitations and improvisations. Inside a house, and on a shoulder in close proximity to an ear, some are also amazingly powerful.

Wallis was soon spending the days outside, while her desperate entreaties secured her an evening roost on the ceiling fan or some top shelf. Eventually her long term interests and the whitewashing of several features of the house saw her consigned almost wholly to the outdoors. This has not been accepted. The house is under siege from a determined Wallis who lurks in the roses by the front door in the morning waiting for the dogs to be let out. She has learned to get into the conservatory and berate us through the dividing door. She has squeezed through a mouse hole in the screen to temporarily seize the bedroom. She has been seen lying on her side on the quilt next to a recumbent human and flipping onto her back in dead bird pose for a tummy scratch. She has learned that a perch between the shoulder blades of anyone, even a stranger, entering the house is easily defended from tender, reaching fingers. She knows that a human beats a humiliating retreat when bare feet are subjected to attacks from a 100 gm helicopter with a big clacking hooked bill. The windows are patrolled for an occupant to receive her entreaties. If she gets in close to dusk she

immediately repairs to some inaccessible point near the ceiling for a satisfying sleep in her rightful territory.

The conclusion from our study is that butcherbirds are not all that different from a great many entrepreneurial humans. A judicious mix of intimidation, cunning, aggression, shameless opportunism, and charm can take you a long way.



Grey Butcherbird

Observations: The Restless Flycatcher

by Sarah Lloyd

Ron and I had our first sighting of the Restless Flycatcher near Robinvale, NSW, in an area of mallee just north of the Victorian border. When we first heard its "scissor-grinding" call we found it hard to believe that such a weird sound could emanate from the syrinx of a bird.

The Restless Flycatcher is not found in Tasmania, but is widespread on mainland Australia. It is similar



Restless Flycatcher

in appearance to the Satin Flycatcher and Willie Wagtail, but its entire underparts are whitish.

Like the Satin Flycatcher, the Restless Flycatcher emits a variety of calls from liquid whistles to harsh rasping sounds, but it is most famous for its "scissor-grinding" call, for which, it seems, there is a particular purpose.

Pizzey (1997) states that the call "appears to disturb insects into movement", and recent observations by the producers of the Interpretive Birding Bulletin, Dr Jim Davis and Gail Hill, suggest that this call is used to entice wolf spiders from their burrows.

On many occasions they heard the bird emit buzzing calls or songs, but it seems that the scissor grinding call is only used by the bird when it is either hovering over low vegetation or perched near the ground and is hunting for prey. In these situations, the bird had its beak open and was faced such that sound energy was directed downwards.

After the flycatcher captured a prey item, the observers watched it land on a nearby perch where they could then identify its catch - they could see long spider legs wrapped around the bird's beak. The bird released the spider's grip by wiping its beak on a hard object - usually the perch. Upon closer inspection in the vicinity of the capture the observers saw numerous

spider holes from which, they speculated, the bird was extracting spiders.

There is circumstantial evidence that wolf spiders are attracted to the entrance of their burrows after "hearing" (or feeling the vibrations of) the flycatcher's call. Consider the following:

-Wolf Spiders are attracted to airborne and surface vibrations. They have been reported to move towards the sound of a diesel truck left running. But it appears that they are only attracted to such vibrations during the day, but are repelled by them at night.

-Wolf spiders and perhaps pseudoscorpions detect substrate vibrations with their legs and airborne vibrations with bristles on their legs

-Male wolf spiders produce substrate vibrations by thumping their abdomen on the ground, leaf litter etc. possibly to attract females and repel rival males.

-An Argentinian arachnologist studying funnel web spiders attracts his subjects by producing in his throat a low hiss that is directed towards the web. This entices the spider to the entrance of the web where capture is facilitated.

-The frequency of the scissor-grinding call is lower than expected for normal communication between conspecific birds. The flycatcher seems to focus the sound energy exclusively towards the entrances of the burrows where the low frequency elements of the call possibly resonate within the burrow, enhancing the stimulation experienced by the spider.

References: Pizzey and Knight. (1997) The Field Guide to the Birds of Australia. Angus and Robertson. Sydney

Interpretive Birding Bulletin Vol. 4 no.3

Note: The Interpretive Birding Bulletin is entirely member supported. It is edited by Dr Jim Davis, someone who is obviously passionate about birds and their behaviour and takes the appreciation of birds far beyond that of purely ticking species off a list.

Topics covered since I have been a subscriber have included articles on both vocal and non-vocal sound production, antipredator behaviour, Sleep in birds (attempting to answer such question as Do Birds Dream? Do Birds ever fall on their Perch while asleep? and Do birds ever sleep walk?) Food Hoarding, Age related foraging and much more.

Subscription is \$30/year for 6 issues.

Interpretive Birding Bulletin

P.O. Box 362

Toowong, Qld 4066

Spotted Bowerbirds

Imitation by the Spotted Bowerbird

Another example of interesting vocalizations we heard whilst on our travels was an instance of imitation by the Spotted Bowerbird.

We try to avoid too much walking during the heat of the day, and usually spend the early afternoon doing other things. Its always interesting to spend some time at the campsite and allow the birds to come to you, that way you get some sense of their movements - something that is hard to determine if you are also constantly on the move.

This strategy soon had its rewards. Each afternoon we saw a small group of the rare Hall's Babbler foraging in the area and a Spotted Bowerbird would regularly come to a nearby overflowing water tank to drink. On one occasion it was quite vocal so Ron quickly got out his recording gear. Getting good recordings is as much a matter of good luck than anything else, so we were delighted to hear the bird not only go through its normal repertoire of hisses and grating sounds, but also add several imitations. First it copied the unmistakable call of the Whistling Kite, then it echoed the call of a raven we heard in the distance.

I supposed that its strategy may have been to trick the numerous White-plumed Honeyeaters and Yellow-throated Miners, which were aggressively mobbing any other birds that entered their territory, into thinking there were predators around and thus be left alone while drinking.

I have since learnt that this behaviour is common among female Satin Bowerbirds (R. Donaghey, pers. com.; IHB Vol.3 no 4) and they are known to imitate potential predators such as goshawks, ravens and butcherbirds and especially just before feeding chicks. I don't know if the bird had an active nest nearby, but the honeyeaters certainly left it alone!



Spotted Bowerbird

For Teachers interested in the Environment

From the Mountains to the Sea: A Feast of Ideas and Inspiration Tasmanian Environmental Education Conference 2001

Venue: Tasmanian Museum and Art Gallery & the Art School, Hobart

Date: Friday 23 March from 12 noon- Saturday 24 March

Cost: \$60 (includes morning & afternoon teas, lunches and twilight river cruise) NB Student discount available.

- * Leading keynote speaker
- * A variety of workshops and field trips with a choice of land and coastal/marine based education themes
- * Twilight environmental cruise of the Derwent River
- * Awards will be presented during the conference to Tasmanian teachers with the best innovative ideas in environmental education
- * Network with others interested and involved in the environment

Contact: Tania Stadler tel: 6226 2838

AAEE (Australian Association for Environmental Education) MESA (Marine Education Society of Australasia)

REGISTRATION FORM

From the Mountains to the Sea: A Feast of Ideas and Inspiration

Tasmanian Environmental Education Conference 2001

Please make cheque for \$60 payable to:

AAEE (Tas) and return with this form.

Student discount available:

Name:

School:

or

Organisation:

Address:

Postcode:

AAEE or MESA Member? Yes No

If yes, please indicate which one:

Phone: Work: Home:

Please photocopy form if necessary and return

with cheque to:

Tasmanian Env. Centre

102 Bathurst St, Hobart 7000

The Engaeus Project

by Jim Neilson

Over the past few years, members of the CNFN probably could not help notice my interest (okay, obsession) with the burrowing crayfish of the *Engaeus* genus. Therefore, it might not seem terribly surprising to hear that I have taken a position working for the Launceston Environment Centre as an *Engaeus* Project Officer through an NHT grant. This was a grant that I helped conceive, but without any intention of applying for the Project Officer position. A major change in my circumstances made me realise I would really like to do this job. All my life it seems, crayfish have been a great interest.

For me, the fascination with freshwater crayfish all started when I was a boy living alongside the Fox River in Illinois. I discovered that I much preferred looking for crayfish to attending geography class, and it was eventually put quite firmly to me that learning takes place in the classroom. However, I still think of the environment as the most fantastic classroom imaginable, where everything happens in real-time and without strict schedules, where observations lead to the questions and where the mysteries of life unfold with a never ending sense of wonder.

Imagine my delight when I landed in Tasmania and discovered a crayfish fauna beyond my wildest dreams. The largest crayfish in the world, *Astacopsis gouldi*, lived just down the hill from me, and suddenly getting nipped by a crayfish became a finger threatening experience! My interests in the giant crayfish led me to meet Dr Pierre Horwitz, who assisted greatly in my knowledge of these interesting creatures, and along the way the field naturalists ended up doing a survey of the giant crayfish for the Endangered Species Unit. We also adopted *A. gouldi* as our logo, with thanks to Premek Hamr for allowing us to use his excellent drawing.

It was Pierre who introduced me to the *Engaeus* group of crayfish for which he had just sorted out the taxonomy. *Engaeus* are specialist burrowers who spend most of their lives underground, and construct burrows that penetrate to the water table, or use a saturation zone, or occasionally are found in free water. They have evolved to occupy their own special niche, and live cryptic lifestyles in underground darkness. We would hardly realize they exist except for their 'chimneys' of pelletised soil around their burrows. You just have to love a crayfish that provides so much mystery and challenge! But, my real attraction to these little burrowers is an aesthetic one—they just seem such perfect models of form

and function. I never handle an *Engaeus* without feeling a great admiration for a creature so perfectly adapted to its chosen habitat.

There are 15 species of *Engaeus* in Tasmania, and 13 of those are endemic. The most recent species found was in Burnie just a few years ago within the city limits. There are perhaps more species to be found, and there is certainly a lot more distribution work to be done as well as life history information to discover. Public awareness also needs to be raised about this group of crayfish which locals usually just call "yabbies". 'Yabby' should properly refer to the mainland widespread crayfish *Cherax destructor*. This is a pest species in Tasmania and is a threat to what is arguably the most diverse crayfish fauna in the world. All of our crayfish are adapted to cool conditions, and this is reflected in slow growth rates. *Cherax destructor* grows quickly and is highly adaptable, and thus is a threat to our unique fauna as a competitor as well as a possible source of disease. It also destroys dams, and is well named as a 'destructor'.

Thus, the position of Project Officer is one that I am looking forward to with the hope that I can make a difference, particularly for the three threatened *Engaeus* species on the Tasmanian mainland. It will involve rehabilitation of habitat, raising community awareness, monitoring, and on-ground actions in support of the DPIWE Recovery Plan. The three locations are Burnie, Lilydale and Scottsdale, so there will be a fair bit of travelling around. I will be based at the Lilydale High School, where an office is to be provided. Working with schools will be an important part of the job, and one of the things I'm particularly looking forward to is working with young people and teachers convincing them that learning does NOT necessarily just take place in the classroom! There is a whole world out there.

Volunteers Wanted for Threatened Species Survey in Cataract Gorge

The Launceston Environment Centre is in the process of retaining a consultant to survey two threatened species in the Cataract Gorge. The Trapdoor Spider, *Migas plumbeus*, and the freshwater snail *Beadlopiella launcestonensis* are both apparently confined to the Gorge, and very little is known about them. The consultant will direct a group of volunteers in searching for the occurrence of the two species sometime in April. This is a great chance to get involved in a good local project. If you are interested, contact either Jim or Sarah.

Jim's Scraps

The "Tech-fix"

Sustainability is a much used term these days, but perversely it seems to be used for everything from justifying the rape of our native forests to maintaining soil destroying yields in agriculture. Given that billions of people in the world live on less than \$A2.50 a day, there is a large proportion of the world's population that isn't part of or even aware of the sustainability debate, and one wonders how they might view the ridiculous logic of addicted consumers trying to hang on to over-indulgent lifestyles.

Back in the 1970s, Paul Ehrlich established an equation that measured environmental impact (I) as a function of P (population) x C (levels of consumption) x T (technology). The population of the planet will be 10 billion by the middle of the century, failing some major catastrophic event(s). Consumption?, well, no politician is going to take on consumption—the meaning of life. Therefore, all hope must be placed on technology, if that gives you any comfort (GM food?).

Jonathon Porritt (BBC WILDLIFE JAN 2001), a director of Forum for the Future, has calculated that the number of planet Earths we would need to meet our rising consumption levels with "business-as-usual" through to 2050 would be at least 12 planets. Even with eco-efficiency gains of around 2.5% a year which he considers "pretty ambitious" we would need the resources of 3 planets. Given that we are unlikely to find these 3 planets in the next half century, surely today's children are going to live through some interesting times. Can we change? Is it too late? What are our individual responsibilities? Any comments out there?—

Dracula ants bridge the evolution gap (THE EXAMINER 11/1/01)

SAN FRANCISCO - A colony of cannibalistic ants discovered in Madagascar represents an important piece of the puzzle in understanding the evolution and behaviour of one of the most successful insect species in the world, scientists said.

The fearsome-looking insects, dubbed Dracula ants by their discoverers because they suck nourishment from their own larvae, are believed to be a transition species bridging the gap between ants and wasps from which they evolved millions of years ago.

"A living organism cannot be a true missing link,"

said Brian Fisher of the California Academy of sciences, who found the ant colony in a rotten log about 90 km outside Madagascar's capital, Antananarivo.

CENSUS TIME FOR WORLD'S OCEANS

Forwarded by Christian Bell

Senior marine scientists from across Australia are meeting at Hobart's CSIRO Marine Laboratories this week as part of an ambitious plan to record all life in the world's oceans. The billion-dollar international Census of Marine Life, could boost Australia's capacity to survey its vast, biologically diverse and resource-rich marine territory.

The Census is being championed by Jose Auzubel of the US-based, Alfred P Sloan Foundation, a private philanthropic organisation that fosters important scientific programs. Mr Auzubel is seeking Southern Hemisphere participation in the 10-year project, which began last year with a \$4 million investment in a system for storing, linking and accessing census information. "Scores of people around the world - at 63 institutions in 15 countries - have begun work on the Ocean Biogeographical Information System that will support the census," Mr Auzubel says. "This catalogue of life will be linked with information on environmental features such as seabed geology and ocean currents, providing a basis for studying changes in marine populations." Mr Auzubel says the benefits of the census will extend way beyond research, to all users of information about life in the sea. "Anyone, at a computer anywhere in the world, will be able to click on any ocean location and discover what is reported to live there," he says. "This capability will guide marine conservation, helping nations to comply with the International Convention on Biodiversity, and to improve the management of fisheries, marine reserves and other human uses of the oceans.

"Mr Auzubel says the success of the census will depend on the participation of marine research institutions, and the political and financial support of countries including Australia. Chief of CSIRO Marine Research, Dr Nan Bray, says Australia has much to contribute to the census, and stands to benefit from the momentum created by this major international initiative. "Australia's marine research institutions are storehouses of knowledge about one of the world's more pristine and biodiverse marine regions," Dr Bray says. "A good example is the Ian Murray Fish Collection at CSIRO Marine Research, which houses 120 000 specimens representing 2700 species from the tropics to Antarctica. "Much of our marine region, however, has yet to be

explored. "At present funding levels, it will take another 100 years just to map Australia's 11-million-square-kilometre Exclusive Economic Zone. "Intensive surveys have so far recorded only 5% of its physical terrain, and less than 2% of its marine life and habitats. "The Census of Marine Life is an opportunity for international assistance to fill these gaps in our knowledge, and deserves our support. "The census itself will involve field projects designed to observe marine populations in a variety of regions. These will link with surveys conducted by marine laboratories and fisheries and environmental agencies. "Reliable, cost-effective techniques are being developed for surveying poorly-known marine communities such as those that inhabit the ocean floor," Mr Ausubel says. "These will enhance our understanding of ocean systems, such as the ecological processes that cause marine biodiversity to vary with latitude and across ocean basins."

Advanced electronic data-storage tags will be used to track and monitor the behaviour of large animals at the top of the food chain, such as whales, sea turtles, and tuna, offering clues to the distribution and abundance of many other marine species.

A history of marine animal populations is also being developed as part of the census. This will enable the study of changes in marine species in the past 500-1000 years. It will also enable historic visualisations of the marine environment, helping to guide the planning of marine protected areas. The Census of Marine Life is led and guided by an international Scientific Steering Committee from marine research institutions in US, Europe and Japan. The committee is due to release a scientific strategy for the data collection component of the census later this year.

More information about the census is available at <http://www.coml.org>

Farewell to Karen Wilson

Karen Wilson has been the Project Officer for our NHT LEAPFR0G project for the past two years. She has now taken up residence on 3 Hummock Island as the tourism coordinator. With Rob Allison's amphibious Lark now operating, the tourism potential for 3 Hummock should be about to expand rapidly.

We have enjoyed working with Karen. Her enthusiasm and hard work has been impressive, and with her every success in this new venture. If any CNFN members are looking for that magic place for a holiday, then look seriously at hopping over to the island. It is a place of beauty and serenity-you will never forget it.

Vale Mary Cameron

Mary Cameron passed away on 3 January after a long illness. Many field naturalists will remember Mary for her patient guidance through the minefields of botany. She was always willing to help with those sticky little problem plants that defied our attempts at identification, and along the way she would show us the clues we were missing and encourage our interest.

As the Honorary Research Associate in Botany at the Queen Victoria Museum, she organised the plant collection into impeccable order, and contributed long hours on a voluntary basis. She was a long standing member of the Launceston Field Naturalists Club, and held a number of positions in the organisation. She also helped establish the North East Field Naturalists Club, and was a lifetime member. When the Deloraine Field Naturalists Group was established (now CNFN Inc), she encouraged and assisted the group and involved us with the Federation of Field Naturalists. She was instrumental in helping us achieve a survey of the flora and fauna for the Gog Range through a Plumley grant. She simply asked that we "try to save it". Alas, the evil empire won.

Mary received the Member of the Order of Australia for her outstanding work and dedication to Tasmanian botany and its conservation. She also received the Natural History Medalium for her contributions to the understanding of Australian flora. However, as John Simmons relates she considered that one of her greatest achievements was learning to drive a motor car.

Mary lived a life of dedication to the things she loved, and along the way she set an example that others might follow. Few of us will ever achieve a fraction of what she accomplished, but we will always feel privileged to have benefited from the experience she so generously shared. And whenever those tricky plants try to elude us, we will feel her looking over our shoulders prompting us to look a little closer for the clues.

There will be a special Commemorative tree planting ceremony at The John Skemp Field Centre on Sunday 22 April.

Subscriptions Now Due

\$20 Family

\$15 Individual

\$5 Independent Young Adult