Central North Field Naturalists

CNFN

the

NATURAL NEWS

Autumn 2003

Patron - Dennis Morris

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Memberships Now Due for 2003

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Please send to Sarah at 999 Denmans Rd Birralee, 7303

Program and Events

March 2003 Federation Meeting Friday 14, Saturday 15, & Sunday 16, in Bridport at the Bayview Centre, Francis St. Contact Jim for info

April 6, Neil Hoffmann's at Reedy Marsh Meet at 9:30 am at the Deloraine trainpark at the bottom of town near the river to travel together. A wander through some interesting forest, and perhaps an opportunity to identify an elusive burrowing crayfish. As always, bring a lunch and carry wet weather gear

May 4, 10 am An inspection of Joan Elliot's property at Railton. Hopefully, it will be fungi time in the Badgers Range. Joan will show us her covenanted areas, and has agreed to talk about her interest in bird's nests. Travel from Railton towards Sheffield on B14. Turn right on Newbed Rd. and meet at 251. We'll choose on the day where to walk, depending on weather etc.

June 1, An inspection of Colin Morse's property 3109 Railton Rd. near Latrobe. Meet at **10 am** at Somerset Orchid Reserve parking lot on road B13 (Spreyton/Railton Rd) just a few kilometres south of Latrobe. We'll travel together from there, and will be looking at rare bushland values, marking any follow up sites for orchids, and hopefully finding fungi to add to the list of species recorded for this important, covenanted private forest.

Fossils from December Excursion

Jim Nelson

On our December excursion to Bogan Gap, we were amazed by many fossils lying on top of the ground in some areas. I undertook the task of trying to find out more about them, and this was painlessly accomplished by dropping one off at the Queen Victoria Museum along with the relevant details regarding where they were found. The museum geologist, Dougles Ewington, kindly supplied the following information:

"The rock type is a calcareous siltstone of lower Permian age (about 280 million years ago). This rock outcrops widely around the edge of the Western Tiers between Poatina and Quamby Bluff. Perhaps the best outcrop is at a road culvert on the road from Golden Valley to Liffey, about 4 km SE of the Golden Valley road intersection on the way to Liffey."

The fossils in the rock looked at by Dougles were all spiniferid type brachiopods. Brachiopods are marine molluskliko animals of the phylum Brachiopoda, which have a dorsal and ventral shell hinged like a clam or mussel. Some of the fossils were internal casts where the original shell was slowly removed by solution in groundwater. Two fossils were able to be identified to species level: *Marinopsis ovata* and *Gruntonia hobartensis*.

I extend the group's appreciation to Dougles.

Quoll takes a fall for a white elephant

by John Hayward

Some people took the Resource Management and Planning Appeal Tribunal's recent plug-pulling of the Meander Dam as evidence that the government contained some vestige of integrity. It would be nice to think so.

Through the alchemy of Hydro, the dam's development proposal describes something like Lasseter's Reef. However, the assessment reports in the appendices, on which the proposal was supposed to be based, were startlingly different.

Transfer of water off-river was prohibitively expensive, making it likely that only half the 24K megalitre (ML) of irrigation water provided by the dam would be subscribed, almost wholly by the riverside farms already irrigating for more or less nothing. Most of this land, like 88% of all MV agricultural land, is under pasture, which ranks just above bitumen as a cost effective target of irrigation. Such a use can support a water price of about $55 per ML, which is about a third of the cost recovery price needed even if all the water was subscribed. Some 77% of the potential irrigation area was class 4 medium or worse and not suitable for intensive cropping or irrigation. Taken together, the reports portray a boondoggle.

The decision which sank the $32 million project (dam construction here has experienced cost overruns averaging 56%) is a mere nine pages, and worthy of both a read and "Yes, Minister".

The tribunal gravely considered the gulf between the $39 million benefit bonanza promised by the proposal and the less than nothing predicted by an actuary for the TCT. Both sides were very well qualified, they said, and both did everything right.

The truth, they concluded, must lie somewhere in the middle, suggesting that both experts were seriously wrong. Though reportedly questioned by one member of the tribunal, the decision does not mention the proposal's extraordinary paucity of detail or hard calculations on how these benefits would be achieved. Just how much additional productivity will result from throwing additional water on an area already irrigating in unknown volumes on soils already getting a metre or so in rain? What enormously lucrative activities will be enabled only by flooding the area?

Similarly faint in both the proposal and decision are the myriad disastrous impacts of river damming currently being lamented by the CSIRO and other scientific bodies. Totally absent is any consideration of an activity which will both silt up your dam and deprive the catchment of up to 2 ML per hectare of recharge or runoff per year – plantations. Nor is there anything about the eutrophication resulting from saturating manure carpeted paddocks along the river.

For cynicism fans, however, the best part of the decision comes after the grave consideration of the environmental impacts on two species which the government would normally poison on principle, the quoll and *Epacris aff. exerta* (incredibly, the government's SC, Stephen Estcourt, formally declined to cross-examine on any environmental or economic evidence) . The Tribunal declared itself confounded by the lack of any legislative guidelines as to how to weigh environmental impacts against uncertain economic benefits.

Why didn't the Tribunal turn its mind to the fines levied against environmental wreckers in Tasmania (N = 0). Or consider what happened to the developed world's most prolific destroyer of habitat and threatened species, Tasmanian forestry, when it lost its first and only RMPAT case on threatened species grounds (it was swiftly exempted from threatened species legislation). The Tribunal falls back on the fact that the Environmental Management and Pollution Control Act does, theoretically, provide for substantial fines for significant environmental harm. That will do, said the decision, the dam is off.

The decision leaves the greenies carrying the can for blocking Meander Valley's rezoning as El Dorado, while providing the government with the Lancelot role of delivering overriding legislation, which can only be slain by the federal Liberal government's competition policy ruling, which is supposed to prevent pork barrel rorts.

So how did this seemingly hotly contested issue seem to go against a government which has heretofore shown little tolerance for separation of powers.? Maybe it didn't. Nearly all river dams are ill-advised, but this one is so exceptionally bad that even the Bacon government may have realised the scandal might emerge before they were safely retired.

The RMPAT Chairman, K.A.M. Pitt (QC) (Tas) is obviously a man of certain principles. Amongst those principles are those which forestry considers just dandy for its Forest Practices Tribunal, to which they appointed him chairman.

My own measure of Pitt (QC) came last year, when I filed a notice of appeal against the Meander Valley Council for having withdrawn their objection to a Private Timber Reserve in a

rural residential zone at Weegena, where the zoning prohibits forestry. The Land Use Planning and Approvals Act (LUPAA) makes it an offence for a council to fail to uphold its own planning scheme; penalty $50,000.00.

Pitt (QC) refused my application with a letter claiming that the MVC had made its decision under the Forest Practices Act (FPA), over which the RMPAT has no jurisdiction.

I replied that councils had no decision-making power under the FPA, and that, in any case, they had no legal authority to breach LUPAA pursuant to that act. I added that I was entitled to written reasons for his decision as per the Judicial Review Act.

Pitt (QC) stuck to his guns: no appeal, no reasons. An appeal to the Ombudsman saw that office mimic the response of a startled wombat, leaving above ground only one of the more comical bureaucratic evasions I have come across.

Many people close to the case are also convinced the government wants the project quietly strangled – by someone else – and that recent moves to override the RMPAT decision are simply a panic response to the low-road but successful populism employed by the Libs. It is clear that respect for the notional integrity of the planning system won't play in Tasmania, given the quality of our media and the collective intelligence of the population. The noticeable coolness of Tasmania's federal Liberal parliamentarians suggests the issue is one that would be both awkward for them to kill, and embarrassing to sanction through any pretence of a competition policy.

Meanwhile the Meander Valley Council has decided to do something they would rather not talk about, allocating a $10,000 slush fund to be dispensed at the discretion of the General Manager and Mayor. Unknown to at least some of the councillors, a "communications consultant" has already been engaged for purposes to be disclosed only at a closed session of the March meeting, so as not to let the details fall into critical hands.

The Mayor let it drop that he has campaigned for some years for the dam as a member of the Meander River Resource Management Group. This worthy-sounding outfit is actually a subsidiary of Timber Communities Australia. They have special reason to appreciate dams. These structures trap the silt from their activities for decades, while discreetly hiding the often massive drop in river flow caused by plantation uptake.

Another councillor's family stands to gain directly from the dam, while she is herself part of the dam lobby group cited as prospective recipients of fund money. She enthusiastically voted "aye".

As with the looming war in Iraq, nobody I know can work out how such an ill-conceived idea stays afloat. I suspect some powerful synergy between venality and stupidity.

Christmas day at Brushy Lagoon

by Sarah Lloyd

Brushy lagoon is a popular fishing spot 4k west of our home at Birralee, but being Christmas we rightly assumed that the place would be deserted. Despite its close proximity to home the bird fauna is quite different. Black Currawongs, for example, are only recorded at home once or twice a year but are always heard/seen during our infrequent visits to Brushy Lagoon.

We were greeted by the sound of Swift Parrots. 5 or 6 have been near home since late August but have recently left. (Interestingly, just as many of the eucalypts are coming into flower.) A Bassian Thrush was keeping to the small patch of Tea-tree *Leptospermum scoparium* that sheltered us from the strong winds that periodically swept over the water and a Dusky Woodswallow was visiting what looked like a possible nest site.

A large raft of several hundred water birds, mostly Eurasian Coots and Hardheads, was in the middle of the lagoon. They were gradually approaching but after being stirred up by a passing Swamp Harrier started congregating on the far side of the water with a group of Black Swans.

The harassment of a Forest Raven on the water's edge by four or five Dusky Woodswallows seemed to indicate that there was something worth protecting, but it wasn't until we noticed constant activity by the adults that a nest was detected. It was well hidden between a vertical limb and the trunk of a small eucalypt and further concealed by a vertical dead limb and some shedding bark. At only one point on the ground was some nesting material visible, and from there, with the aid of a spotting scope, I was able to observe the downy back of a nestling when an adult came to remove faecal matter.

Meanwhile, we were trying to establish just what the Swift Parrots were eating. Despite the presence of many White Gum *E. viminalis* in flower the Swift Parrots were spending more time in a nearby *E. rodwayi* that was not flowering, the birds were clearly taking something - probably lerp - off the foliage. (Lerp is produced by Psyllid insects, Hemiptera). It i

a sugary secretion that forms a protective cover over these sap-sucking insects that are found in abundance on the leaves of some eucalypts.) While I left Ron at the scope to determine this I watched a Dusky Woodswallow deposit something on a rock near the water's edge. Upon close inspection I saw that a dozen or so faecal sacs had been deposited on this one small rock.

For several hours we watched the nest as three or more adults kept up a food supply of various insects - mostly dragonflies. Diverted by the sight of Satin Flycatchers, which we had been hearing since arriving, it was only when the adults changed shifts that I noticed their well-camouflaged nest. Satin Flycatchers usually position their nest on a horizontal dead limb 5-25m above the ground under live foliage. However, this one was in a vertical dead fork of a tall, spindly sapling, very exposed but beautifully hidden, its bark strips tightly bound with spiders' web to exactly match the colour of the limb.

On a short walk along the edge of the water, I was startled by a flutter of wings and only caught a brief glimpse of what I thought was a Latham's snipe. I was hoping Ron had got a better view, but a Spotted-tailed Quoll had diverted his gaze.

We also heard/saw many other species of birds as well as spiders, ants, lichens and some interesting ground cover plants.

By any standard this was no spectacular forest. Were it on private land, any self-respecting (but ignorant) landowner might replace this 'degraded' bush with straight rows of healthy young eucalypts. (As is happening in so many part of the state) But what a wealth of habitats these 'degraded' trees provide!

Laughable misconceptions

by Sarah Lloyd

Famous Swedish naturalist Carolus Linnaeus (1707-1778), best known for his contributions to plant classification and his introduction of the binomial system of nomenclature, believed to his dying day "that in winter swallows slept upon the bottom of lakes". This belief (as old as Aristotle) was supported by some of his contemporaries, but is not quite as bizarre as the view of another 18th century naturalist who was convinced that swallows wintered on the moon. (Blunt 1971)

Misconceptions can be absurd, amusing or downright dangerous, and most of us are probably guilty of having a few!

In an article titled "Where are the robins?" by journalist Don Knowler (Mercury 30/11/02) I am quoted as describing the reasons for the declines in robin populations in Tasmania as:

"Probably many and varied, the major one undoubtedly being habitat destruction. The landscape of Tasmania has changed considerably, especially in the past 10 years. Forestry operations have accelerated, now reaching areas that for many years have been inaccessible. Housing development on the perimeter of towns and cities also leads to much land clearing and as well, the conversion of mature forests to plantations is having an adverse effect"

In a response to this article, I received a letter from R.C. Ellis, a self-proclaimed "doctor of forests", stating that he too had witnessed a decline in small bush birds on his property on the Tasman Peninsula, especially pardalotes, robins, spinebills and various honeyeaters.

However, he disagreed with my assertion linking declines to forestry operations, instead declaring that "the decline can be attributed in large part to the unwise introduction of an aggressive predator: a predator as deadly as the fox, and which we would do well to attempt to eradicate." Viz. the Laughing Kookaburra (*Dacelo novaeguineae*).

For many years I too have accepted the popular belief that Kookaburras are rapacious killers of small birds. However, as a result of some research prompted by the "doctor's" claims I no longer hold that view.

Kookaburras had a restricted distribution at the time of first settlement, being confined to the eastern part of the mainland. They were successfully introduced to the southwest of Western Australia in 1897, Tasmania in about 1905, Kangaroo Island in 1926 and Flinders Island in 1940. In northern Tasmania and the southwest of Western Australia there were multiple introductions and now the birds are widespread. (Blakers 1984) It was also introduced into New Zealand and unsuccessfully to Fiji.

The reasons for these introductions are unclear, but

acclimatisation societies with specific aims such as "the introduction, acclimatisation, and domestication of all innocious animals, birds, fishes, reptiles, insects and vegetables" were extremely active in the nineteenth and twentieth century, and some truly bizarre introductions were undertaken. Monkeys, for example, were released near Hobart in 1920, and the African Secretary Bird (*Sagittarius serpentarius*) was introduced to South Australia and New South Wales to kill snakes. (Fox & Adamson 1979) It failed to establish.

Similarly, it may have been the Kookaburra's overstated reputation as a snake killer that was partly responsible for its introduction to Tasmania and Western Australia. (Legge 2002)

The Atlas of Australian Birds, (Blakers 1984) states that "about half its diet is invertebrate, including insects, earthworms and crayfish and the remainder is reptiles, frogs and other small vertebrates". More extensive studies of its lifestyle have been undertaken by Bob Green (1988) Veronica Parry (1970) and more recently, by Sarah Legge (2002).

In a study titled "Food and feeding of the Laughing Kookaburra and Tawny Frogmouth in Tasmania" (Green et al 1988) the authors examined the gut contents of 15 Kookaburras and 15 Tawny Frogmouths (*Podargus strigoides*). In the Kookaburras they found no bird remains whatsoever, instead finding mostly invertebrates, mainly beetles, two small mammals, a Little Pygmy Possum (*Cercartetus lepidus*) and a house mouse (*Mus musculus*), three reptiles and a frog.

The gut contents of the 15 Tawny Frogmouths examined during the study consisted of medium to large invertebrates and one frog. However, on another occasion a study of the gut contents of a single road killed Frogmouth revealed that it had gorged itself on Brown Tree frogs (*Litoria ewingii*) which on a wet night were active in large numbers crossing the highway.

Green draws interesting comparisons between the two birds. They are a similar size, weight and colour, and have a similar method of hunting. Both will watch from a perch before swooping to the ground to capture their prey, with the beak their main tool of offence and defense rather than their relatively short legs and weak feet. Both birds exploit a similar feeding niche, but the Kookaburra operates in the daytime while the Frogmouth is nocturnal.

His conclusion is that "this handsome kingfisher" is being wrongly persecuted and there is little evidence to support the view that the Kookaburra is responsible for declines in small bird populations.

Parry's observations and literature reviews support Green's findings, as does Legge's research. Legge was keen to 'put things into perspective' by stating that her studies near Canberra have revealed that the Kookaburra's diet is made up of just 0.3% of nestlings.

Green and Parry both make the point that Kookaburras are large and not adept at manoeuvring through the forest after small birds. Given this fact, it is quite absurd to attribute declines in small canopy dwelling species like Pardalotes to Kookaburras. Kookaburras don't operate in the canopy, nor would they have the slightest chance of taking eggs or chicks from the nesting hollows of these tiny birds.

King Island is an interesting case in point. I recently conducted arguably the most comprehensive surveys of forest birds on both private and public land on the island since European settlement. Although the endemic Dusky Robin is in good numbers, the same couldn't be said of the other two extant robins. The Pink Robin wasn't seen at all during my surveys and the Flame Robin was seen in only six of the 20 sites surveyed. Other birds such as Striated and Spotted Pardalotes, Black-headed Honeyeaters, and Satin Flycatchers were also in very low numbers and the Eastern Spinebill is now considered extinct. While forestry isn't a big issue there – neither are Kookaburras – there are NO KOOKABURRAS on King Island!

My conclusion is that the most likely explanation for the decline in birds on the island – as in the rest of the world – is because of the destruction of their habitat. Habitat destruction for forestry, agriculture or housing development is continuing at a rapid rate and this is having an enormous impact on our unique bird fauna.

Clearing and burning of the understorey further degrades the bush that remains, or it is becoming fragmented, leaving isolated patches that are too small to support viable bird populations.

There have only been three occasions when I have watched a feeding Kookaburra. The first left me in no doubt that this bird is indeed a member of the kingfisher family, as I watched it dive repeatedly into a small dam, presumably to take tadpoles.

On the second occasion I was surveying birds at the York Street Reserve in Wynyard. I missed the actual capture, but watched as the Kookaburra swallowed a large frog (probably a Banjo frog, *Limnodynastes dumerili*) after bashing it against a branch until it was

dead.

The other occasion was at Lake Mourmpall in the Hattah Kulkine National Park in northern Victoria. This time the prey was a large rubber band (*Streichus circularius*), taken from a picnic table at which I was sitting. This was also bashed with merciless ferocity against a branch, and as with the frog, swallowed whole – albeit with a little more difficulty. I was left to wonder at the damage such an object might do to the gut of the bird, but presumably the rubber band came out unscathed!

I have asked fellow bird watchers for their observations of the culinary preferences of kookaburras. Most haven't observed them taking birds, although one person told me that they have taken the odd goldfinch nesting in a hedgerow. The most amusing anecdote was of a Kookaburra taking a sparrow at Taronga Park Zoo in Sydney. Scattered crumbs were attracting several birds including Sacred Ibis (*Threskiornis aethiopica*) and sparrows (Passer domesticus). One Sacred Ibis decided that a pesky sparrow would be a more satisfactory meal than the breadcrumbs, but after it tried several times to swallow it whole, a Kookaburra swooped from a nearby perch and snatched the bird from out of its bill! (Ashby pers com)

The 'doctor' is not entirely misinformed, however, as he raises the important issue of tree hollows. While the Kookaburra is having very little impact on small bird populations, there are some serious concerns about it and other introduced species with regards to the availability of nesting hollows.

Hollow-bearing trees are an important feature of the eucalypt forests and woodlands that occur throughout the state and are crucial for the survival of much of our native wildlife. Both vertebrates and invertebrates use hollows for shelter, feeding, nesting, rearing of young, and regulation of temperature. They can also provide a valuable source of free water for mammals. The den sites used by Sugar gliders (*Petaurus breviceps*), for example, are often associated with water. (Gibbons)

Eucalypts form hollows when decay-causing organisms, mostly fungi, gain access to the heartwood through injuries caused by fire scars, logging damage or holes bored by insects. The heartwood is further excavated by the actions of fungi and invertebrates, typically termites and beetles, assisted in some cases by the action of fire, wind, and other animals such as cockatoos and parrots.

Eucalypts take from 120-150 years to form hollows suitable for small species such as Striated Pardalotes, Eastern Pygmy Possums (*Cercartetus nanus*), Little Pygmy Possums and bats, and a further 100 or more years for larger animals like Sulphur-crested Cockatoos (*Cacatua galerita*), Yellow-tailed Black-Cockatoos (Calyptorhynchus funereus), Green Rosellas (*Platycercus caledonicus*), Eastern Rosellas (*Platycercus eximius*), Owls and the Common Brushtail Possum (*Trichosurus vulpecula*).

From the time of first settlement, tree harvesting saw the selective removal of large old trees for timber, fence posts and firewood leaving just the young trees to grow for future crops. And current forestry operations leave very few mature and over mature trees. Therefore, hollow-bearing trees are becoming scarce in forested and agricultural regions and their loss will mean that the conservation of hollow-dependent fauna will be an increasingly important land management issue. (Gibbons etc)

The problem of a shortage of tree hollows is exacerbated by a number of factors. The Common Brushtail Possum is favoured by current land management practices and its population has reached pest levels as a consequence. Strongly territorial, this possum will spend the day sleeping in a tree cavity or hollow log, feeding by night on pasture crops, orchards and young plantation trees. It has even been observed taking both birds eggs and chicks. (Low)

A further compounding factor is the increase of both native and introduced hollow nesting species, notably Common Starlings (*Sturnus vulgaris*), European bees (*Apis mellifera*), Little Corellas (*Cacatua sanguinea*), Galahs (*Cacatua roseicapilla*) and Australian Wood Duck (*Chenonetta jubata*) that, like the Brushtail Possum have been favoured by current farming practices and have extended their range in recent years.

The Tasmanian Masked Owl, (*Tyto novaehollandiae castanops*) a subspecies of the mainland Masked Owl, may be particularly vulnerable to competition from feral bees, Kookaburras and possums for nest hollows. (Garnett & Crowley)

Both Parry and Green regarded it as 'very strange' that Kookaburras did not naturally occur in Tasmania. But this shows a misunderstanding of the nature of island biology. Islands tend to have fewer species of birds and other organisms than neighbouring continents. (Ford 1989)

Kangaroo Island, Tasmania and other Bass Strait

Islands are all depauperate in birds compared with the southern mainland of Australia with Tasmania's bird population just 40% of the species occurring on the mainland. (Green) In some cases, this is clearly because suitable habitat does not occur, in other cases, there are no obvious reasons. (Ford)

There are many families of birds on the mainland with no representatives in Tasmania, including babblers, magpie-larks, bowerbirds, bee-eaters and treecreepers. (Ridpath & Moreau)

This last group is of particular interest, especially considering the nature of this 'thickly wooded island' (Ridpath and Moreau). However, the feeding niche left vacant in Tasmania by the absence of treecreepers is amply filled by some of our endemic species such as Scrubtits (Acanthornis magnus), Strong-billed Honeyeaters (*Melithreptis validirostris*) and Yellow-throated Honeyeaters (*Lichenostomus flavicollis*).

The Kingfisher family (Alcedinidae), to which the kookaburra belongs, does have a representative in the state namely the critically endangered Azure Kingfisher (*Alcedo azure diemenensis*). This beautiful bird is suffering from the activities of present day acclimatisation societies (a.k.a. the Inland Fisheries Service) as the most likely reason for its decline is competition for small fish, its principal prey, from the Brown Trout (*Trutta trutta*). (Garnett& Crowley) That voracious feeder was first introduced to Tasmania in 1864 with repeated introductions continuing annually despite the knowledge that they are having an enormous impact on our native aquatic fauna. Other possible reasons for the Kingfishers' decline are the deterioration of its habitat through clearing along stream banks, where it nests, and acidic runoff from mining tailings dams and logging, both of which affect stream health. (Garnett& Crowley)

As well as being depauperate in species, islands are characterised by their high levels of endemic species and subspecies, and Tasmania is no exception. For example, 75 of the 89 land snails, (Bonham pers com), 114 of the 163 species of Caddis flies (Neboiss 1981), 7 of our 18 reptiles (Hutchinson 2001), and 13 of the 15 species of Engaeus burrowing crayfish in Tasmania are endemic (Nelson pers com) — that's what makes islands special and particularly rewarding places for naturalists to study.

It may be interesting for people to know just how a "doctor of forests" views forestry operations.

(Needless to say, I thoroughly disagree with his assertion! Whenever I have visited a clearfelled coupe there has been very little vegetation left standing. The trees that are still there have been blitzed by fire along with the remaining logs, branches and other organic matter. This eliminates possible nest sites, shelter from predators, invertebrate food and nesting materials, such as spider webs, bark strips, grass, mosses and lichens etc. And to add insult to injury, large aggressive birds, notably Ravens, Currawongs and, yes, Kookaburras sit around the edges of the coupes cleaning up the homeless fauna that may have survived this catastrophe.)

Here's what he had to say:

"It is an accepted fact in ecological science that such (forestry) operations, particularly in natural forests, increase the variety of habitats available to birds and, thus increase the variety and numbers of birds present".

And some people still believe that the earth is flat!

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Geology Excursion a Ripper!

by Jim Nelson

Okay, I admit that I have always been a bit reluctant about the study of geology. Working in ceramics has necessitated that I gain a working knowledge of minerals and some understanding of clay bedding. But as an autodidact mostly through necessity, the geology texts have always seemed dry enough to use for overcoming insomnia. However, when I reflect back to my boring school biology classes and texts, a conclusion can be reached that the essential ingredient missing was a brimming cup of reality — being out in the field!

Our field trip in March with Bob Richardson certainly provided all the ingredients to make geology fascinating. Not only were we out in the field where we could see the action, we had a very talented interpreter to lead us in reading the clues and explaining the concepts of scale, time and forces.

Most of us were surprised to learn that northern Tasmania is such a rich source of geological features. Many of those features, Bob explained, such as the basalt columns behind the Burnie Skate Park are classic examples that are little appreciated by local authorities, and have almost no protection from development. Sounds like the Tassie we know.

Our excursion led us first to Chasm Creek road cutting, where folding and faulting of young Pre-cambrian material was in evidence, and we learned to read anticlinal and synclinal folds. Then on to the Skate Board Park where columns of Tertiary basalt formed during slow cooling. There was also evidence of a later flow of basalt that pushed columns to one side. Its amazing how easy it is to read this kind of activity after someone points it out.

Next we visited the shore at Cooe where we saw the rare remains of igneous intrusions of Pre-cambrian dolerite squeezed between Pro-cambrian sediments. Then after lunch near Fossil Bluff at Wynyard, we viewed fossiliferous sediments, glacial Tillite and some amazing and puzzling weathering patterns in rocks. We could look over at Table Cape which is the remains of a volcanic centre.

At this point I had to leave, but several enthusiasts continued on to Ulverstone I believe.

On behalf of the group, I would sincerely like to thank Bob for showing us how interesting geology can be, and what a fantastic record of time and activity we have to look at in northern Tassie. I vote that we should get into more of this geology stuff.

Haiku Variations: Frogs Galore

by Peter Bamford

Softly, at moth-time,
Frogs calling from the reed-bed.
Natures's sentinels.

.....

Black wrigglers struggle;
Grow towards uncertainty.
Tadpoles in aspic.

.....

A frog in the hand
Is certainly worth
An ecologist in the bush.

.....

Give me (un)common names.
Taxonomy not with Latin!
Green and Golden Bell Frogs..
Barking Frogs...
Pobblebonk....
Wow!!

.....

Survey me quickly!
Plot me on endangered maps.
Before I croak it.