The Natural News

Central North Field Naturalists Inc.

No. 57 – April 2014

Letter to the Editor of 'The Natural News'

Richard Donaghey

I read the article on nesting Yellow-throated Honeyeaters with interest. Not many people get to witness avian nest predation or the parents' response to a nest predator. The high nest failure of Australian passerines is caused mostly by predators. Birds respond to potential predators with alarm calls and other behaviour such as distraction displays, fleeing or attacking. For the past 12 years my partner Carol and I have spent thousands of hours observing parental care at active nests of Australasian robins and other passerines. We've been fortunate to observe nest predation and predators on many occasions. If an observer is familiar with a bird's vocalisations then he or she can cue into alarm calls or other calls one hasn't heard before. Some birds have specific calls for different types of predators. For example, the flightless endemic Tasmanian Native-hen has a specific 'cat alarm' call. Some birds have specific alarm calls for reptiles such as snakes and lizards that prey on birds' eggs and young. In response to snakes Superb Fairy-wrens twitter constantly. I don't know if these twitters are specific to snakes but each time I hear them I see a snake. Some birds attack snakes near their nests or fledglings. Once we watched a pair of Little Wattlebirds attacking a Tiger Snake on the ground 2 m from their recently fledged young perched nearby. Several times one wattlebird faced the snake while its mate darted in behind the snake and pecked it behind the head. On this occasion the snake slithered away with the two wattlebirds in pursuit.

Superb Fairy-wrens twitter constantly when they see a snake.

Dusky Robin performing a "broken wing" distraction display in the presence of a snake.

Once I saw a Southern Scrub-robin, a ground-foraging/nesting passerine, utter a specific alarm call in the presence of a Sand Goanna and walk/run away from the goanna in an effort to lure it away from its nest. Once in lowland rainforest at Iron Range NP, Cape York Peninsula, I was extremely fortunate to hear the alarm calls of two White-faced Robins perched above a coiled python on the ground. The dependent fledgling robins also perched above the python so perhaps the parents were teaching their young to recognise pythons as predators.

Ralph and Bee's observations on the role of the sexes of the Yellow-throated Honeyeater

in nest building and parental care are also interesting. Volume 5 of HANZAB (*Handbook of Australian, New Zealand and Antarctic Birds*) reveals that only the female Yellow-throat builds the nest, incubates and feeds the nestlings whereas the male helps to feed the fledglings. In the mainland White-eared Honeyeater, the sister species of the Yellow-throat, both male and female feed the nestlings so one might predict the same pattern for the Yellow-throat. Male and female Yellow-throats have very similar plumage. One way to recognise individuals is to put a unique combination of colour-bands on their legs. Because I watched a nest of a Yellow-throated Honeyeater in which the male was colour-banded I know for a fact that both male and female feed the nestlings and the male definitely feeds the fledglings as has been reported before. Ralph and Bee wondered if the female Yellowthroat is fed by the male during incubation. This type of behaviour is known as incubation feeding. In over 20 species of Australasian robins throughout Australia and New Guinea we have observed males feeding their mates at and away from the nest before egg laying, throughout incubation and while females are brooding young but to my knowledge this behaviour has never been recorded in honeyeaters. Renesting, following loss of eggs or young, is probably widespread among Australian passerines but rarely quantified. The Yellow-throats I watched raised two broods in a season. Sometimes observers mistake breeding later in a season as evidence of double broods when it may have been renesting or simply nesting late for the first time.

Yellow-throated Honeyeater at Sykes Reserve, Railton. (Photo: S. Lloyd)

More Yellow-throated Honeyeater observations from Mole Creek

(Edited e-mails from Ralph and Bee Bradshaw)

22 Dec 2013 The second nest had three nestlings.

24 Dec Parents and three young birds were observed flying from bush to plum tree. Adult Yellow-throat was collecting long strands of grass and building another nest in another bush by the entrance to the house.

29 Dec The Yellow-throat was sitting on three eggs in the new nest. As usual, the male sat guard on top of the plum tree. Both birds flew off now and again and the female returned in a circuitous route.

31 Dec The fledglings (from the second nest) have left although one is still about now and again with the adult chasing it away. Saw three yellow-throats on 30 Dec and a few days before but one was being chased away. Is it possible that the parents have given up their responsibilities to the fledglings to concentrate on the eggs? One of the yellow-throats is still keeping watch over the nest area.

12 Jan 2014 The third nest was ransacked and the three eggs were gone. The good news is that the family of four is still around this morning! They managed to have one brood alive and well out of their three nesting attempts.

30 Mar 2014 Ralph emailed:

'… [they] are still with us and surprisingly tame. They forage under the bark of eucalyptus trees a couple of feet from us. I find "trust" in fellow creatures one of the most rewarding things in nature.'

Observations of the Breeding and Foraging Behaviour of the iconic Greater Roadrunner

Richard Donaghey

Continental Australia has an extraordinary wealth of unique birds such as Emu, the mound-building Malleefowl, two species of lyrebirds, the artistic bowerbirds, three species of riflebirds (birds-of-paradise), colourful fairy-wrens with fascinating mating systems and parental care and the most gorgeous diverse array of parrots and cockatoos in the world to name just a few birds. So why would you travel to North America to see birds there? Well Carol and I lived and worked in Canada for five years in the 1970s and have a clan of Donagheys resident in Canada so it seemed like a good reason to return.

We began our 2-month visit to USA and Canada in early May 2013 in the deserts, canyons and 'sky island' mountains of south-east Arizona. I first heard about this amazing place from a National Audubon film when we lived in Edmonton, Alberta, 40 years ago. This part of Arizona features Sonoran deserts with towering Saguaro cactus, high mountains with an altitudinal gradient of different conifers, and broad-leaved deciduous trees such as maples. It borders Mexico and harbours many birds found nowhere else in the USA. Only one species of hummingbird, the Ruby-throated Hummingbird, occurs in eastern North America but in south-east Arizona, a hummingbird hotspot, we saw nine species at hummingbird feeders. South-east Arizona is also rich in many other birds such as owls, woodpeckers, tyrant flycatchers, wrens, New World wood-warblers and sparrows, and much more. The iconic bird I most wanted to see was the Greater Roadrunner *Geococcyx californianus*, a terrestrial, monogamous pair-breeding member of the cuckoo family, Cuculidae. The large 50 cm Greater Roadrunner of south-west USA and Mexico lives up to its reputation as a charismatic,

Cave Creek Canyon, Chiricahua Mountains, South-east Arizona. (Photo: R. Donaghey)

Greater Roadrunner (Roadrunner photo by drumguy8800. Licenced under Creative Commons Copyright)

ground-dwelling, fast running bird like the cartoon character. On cold desert mornings it sits on a perch with its back facing the sun and erects its back feathers exposing the black skin and feathers to absorb the sun's radiation. It feeds almost entirely on animal food including arthropods, lizards, small snakes and rodents. Pairs have been known to cooperate in killing rattlesnakes. We saw our first rattlesnake, a 1.5 meter Diamondback Rattlesnake *Crotalus atrox*, gliding smoothly across a path with its tail rattle held at 45°away from the head at a wetland near Tucson. Awesome!

We saw our first roadrunner as it ran across the road and perched near the top of desert shrub and preened. In the early morning of 17 May at the Rio Rica Resort near the Mexican border we had an excellent view of a male with a lizard in its bill running along the edge of the car park. This male continued running straight across the car park for 60 meters or more then veered off and bounded up the steps of the resort. The male disappeared out of sight on the steps so I quickly walked over and saw the male with the lizard still in its bill copulating the female. The male dismounted, passed the lizard to its mate then bounded back down the steps. After copulation the female must have swallowed the lizard quickly because when I focussed on her she had no lizard in the bill and her belly and flank feathers were ruffled. She then ran to the base of a fan palm beside the steps, bounded up the palm and settled on a nest 3-4 m up well concealed below the palm canopy. I walked around to the top of the steps overlooking the palm and saw the female sitting on the nest. At the time of this copulatory behaviour I wondered whether the

female was still laying eggs to complete a 3-6 egg clutch or whether she was incubating the full clutch. A literature search later revealed that unlike most birds Greater Roadrunner pairs continue to copulate during the incubation period. I presume this ritualised behaviour functions to maintain the pair bond and provide nourishment to the female to restore the high energetic cost of laying eggs. In birds in which only the female incubates, such as Australasian robins, males feed their mates throughout the incubation period. Both sexes of Greater Roadrunner incubate but interestingly females incubate for longer periods than males during the day and males incubate at night which is energetically more expensive. Females have less time to forage during the day than males so high protein lizards provided by males help to restore female energy. Why don't males simply pass lizards to their mates without copulation? For the Greater Roadrunner it seems that sex during incubation does have rewards.

On 18 May I watched one roadrunner foraging on the ground at the entrance of the San Xavier Mission on our return to Tucson. This roadrunner flicked out both wings together while foraging on a bare stony substrate. Presumably this behaviour flushes out insects since many times after wing-flashing it caught prey.

The ground-foraging Northern Mockingbird *Mimus polyglottos* (Mimidae), a fine songster with complex songs and a renowned mimic, has an exaggerated Wing-flash Display that has been considered to be a sexual display but detailed observations revealed that it is mostly associated with foraging and not performed toward another mockingbird.

We have spent many hours watching the two ground-foraging *Drymodes* scrub-robins in Australia. Wing-flashing of both wings is performed during foraging by both the Southern Scrub-robin *Drymodes brunneopygia* of semi-arid woodlands and mallee and the

Typical Greater Roadrunner habitat. (Photo: R. Donaghey)

Northern Scrub-robin *D. superciliaris* of rainforests in Cape York Peninsula and New Guinea.

The ten species of African scrub robins in the Old World flycatcher, chats and robin-chats family Muscicapidae have similar morphology, ecology and behaviour to the Petroicidae scrub-robins of Australasia. Only one species, the Rufous-tailed Scrub Robin *Erythropygia galactotes*, ranges out of Africa and into southern Spain. So when we birded in the Extremadura in western Spain in May 2012 we made a special effort to observe this bird and compare its foraging behaviour with that of the Australasian scrub-robins. The first Rufous-tailed Scrub Robin we saw sang from the inner upper branch of an olive tree in an olive grove and vineyard at Villafranca, south of Merida on 17 May. It flew down to the bare ground, cocked its tail up and foraged. It flew back up to an upper branch of an olive tree, cocked its tail up 45-60 degrees and fanned it to expose the white and black tips. After a short bout of singing it flew down to the ground with tail spread. I lost sight of this bird but then watched the same or another bird foraging on the ground with both wings rapidly flicked open and closed from time to time. No other scrub robin was present so this behaviour was associated with foraging and not an agonistic or sexual display directed at another bird. While foraging it stabbed (pecked) at the ground with its bill as if preying on ants. I was delighted to have a very good view of my first Rufous-tailed Scrub Robin and was very fortunate to observe foraging behaviour and behaviour such as tail pumping and spreading, and wing opening that is almost identical to that of the Southern Scrub-robin in semi-arid habitats in southern Australia. All the above birds with similar convergent wing-flashing behaviour are terrestrial ground-foraging birds mainly breeding in semi-arid and arid habitats. One of the joys and fascination of studying a family of birds, in my case the Australasian robins, and travelling to different continents is that you may discover birds unrelated to robins that have similar behaviour and vocalisations.

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Reptiles at Cape Tourville

Sarah Lloyd

The walk around the short track at Cape Tourville on Tasmania's spectacular east coast is a popular tourist destination in the Freycinet National Park.

Unlike some areas in the park that are being loved to death by overuse and creeping campsites, this walk is a joy. The barriers prevent damage to the vegetation and, in mid summer when we were there, the suitability of the site for reptiles was evident. There were numerous White's skink, lots of very young ocellated skink and a large immobile lowland copperhead. All reptiles seemed remarkably relaxed about the constant stream of people, in contrast to some of the visitors who were particularly disturbed, but nonetheless fascinated, by the close presence of a potential killer.

When we visited nearby bush following our short walk at the Cape, the reptiles were conspicuous by their absence. And the Kookaburras were very conspicuous by their presence. Which led me to conjecture, do visitors in some areas of national parks actually benefit certain elements of the fauna?

White's skink (*Liopholis whitii*)

Lowland copperhead (*Austrelaps superbus*)

From the editor

Recent editions of the Natural News have included articles from new contributors.

Issue #56 featured two articles by Hazel Britton. Hazel has had a lifelong interest in birds and since moving to Tasmania she and her late husband, Peter, have made a considerable contribution to our knowledge of Tasmania's birds, particularly shorebirds. It was Peter and Hazel's work that lead to the listing of Rubicon Sanctuary as an Important Bird Area.

Ralph and Bee Bradshaw's backyard observations about nesting Yellow-throated Honeyeaters have been of great interest to Tasmanian ornithologist, Richard Donaghey, as described in his letter to the editor. Many people are in a position to make such observations which, however inconsequential they may seem, are always worth reporting.

Richard's article about the Roadrunner gives a more realistic account of this species than we get from the cartoon character. Richard and his wife, Carol, have travelled the world to study birds.

John Campbell, one of CNFN's Victorian members, is an old friend of CNFN Secretary, Ron Nagorcka. John's article describes the stony rises country around Lake Condah in western Victoria, its important Aboriginal heritage, and the rehabilitation work being done there.

In late February I referred Hazel Britton to the insectsoftasmania website after she emailed me a photo of a beetle. Hazel was delighted with the fast and informative response she received from Tony Daley, who jointly runs the site .

A few days later I used the website to identify the stonefly in the photo by Phil Collier (right) as *Eusthenia spectabilis*.

Eusthenia spectabilis is in the Eustheniidae family that includes some of the most colourful and largest stoneflies in Australia.

Stoneflies (Plectoptera) are a small group of aquatic insects abundant in alpine streams.

Because stonefly nymphs are sensitive to low levels of dissolved oxygen and require cool water temperatures they are restricted to fast flowing pebbly, alpine streams. They are voracious feeders and predate other aquatic invertebrates

Stoneflies first appeared in the fossil record in the early Permian period, approximately 290 million years ago. Modern stoneflies from the Northern Hemisphere have been identified from the 38-54 mya Baltic amber

Reference: Gooderham, J. & Tsyrlin, E. 2002 *The Waterbug book*, CSIRO Publishing

Stonefly *Eusthenia spectabilis* on a plain near Lake Nameless, Great Western Tiers. Photo: Phil Collier

Budj Bim

John Campbell

In November 2001 I was lucky enough to tag along with a group of South Australian Museum staff being shown significant Gunditjamara sites by Daryl Rose, from the Winda Mara Aboriginal Corporation at Heywood in southwestern Victoria. Starting in Nelson on the Vic/SA border we visited shell middens; a canoe tree; wetlands where various plants were farmed for roots and tubers and puung'ort grass was collected for making nets; the old Condah Mission which was established in 1868; and Lake Condah (Tae Rak), where stone channels and weirs once supported the aquaculture which in large part was responsible for permanent human settlement.

Since then, I've returned to walk and camp near the lake and in the adjacent Budj Bim - Mount Eccles National Park many times. The Condah "lake" of 2001, which held almost no water because it was drained in the 1950s, has since filled following a 2010 weir-building project and some reasonable rainfall in recent years.

As elsewhere in Australia, settler-colonialists had turned natural waterways into drains, ripped out vegetation for pasture, and imported weeds, rabbits,etc. Until a few years ago, cattle still trampled significant sites and had reportedly destroyed reed beds. But no more, as the weir project is just one part of a bigger project. It is still too early to say how the revitalised lake may affect the Condah habitat. It will probably be many decades before substantial change occurs. However the listing of 10 000 hectares of this area as the Budj Bim National Heritage Landscape in 2004 was recognition of its great importance and has given impetus to further work on rehabilitation.

Lake Condah, looking north west from the top of a stony rise. (Photo: J. Campbell)

The history of the land and the people, as well as the potential of both now that Europeans are loosening their grip on it, is well documented in *The people of Budj Bim*, by the Gunditjamara people with Gib Wettenhall, Em PRESS Publishing, 2010. The book is subtitled *Engineers of aquaculture, builders of stone house settlements and warriors defending country*, indicating the range of topics it covers. Clearly all topics are inter-related so far as life experience is concerned, but the aquaculture component may be the one of most interest to CNFN members.

The book begins with a description of the volcanic eruptions that commenced c. 27 000 BP which formed Mt Eccles. Myriads of stony rises and depressions were created when the lava solidified. These widely distributed basalt stones were then used for housing and aquacultural structures, which have been the subject of quite a few archaeological studies since the 1970s. Communities of indigenous people were able to reside permanently here due to the reliability of food. Recent research indicates that eel and fish traps in the region may be among the oldest known such traps in the world, at c. 6600 BP.

The book's final chapter emphasises "the inseparable link between the cultural and natural values in the Budj Bim landscape that were crucial to it gaining national heritage listing." My interest in Budj Bim is a result initially of being a bushwalker who has great regard for natural values; I've also wanted to explore the land to find what I can of remaining stone structures. These arouse a feeling about the country that I can't explain. I should point out that I've not seen many that I'd be confident as describing as definitely being pre-contact. Only a few, and there are several reasons for my uncertainty. First, it can be quite difficult to negotiate the stony rises and troughs, along with vegetation of various densities and prickliness; and secondly, the presence of some relatively recent European-built stone structures in

Part of an eel trap near Darlot Creek at the South West end of Lake Condah. (Photo: J. Campbell)

various states of collapse. Ann Clark has closely studied this in her article *Romancing the stones: the cultural construction of an archaeological landscape in the western district of Victoria*, Archaeology in Oceania, 29/1, April 1994.

If I could widen the scope of this briefly, can I say that I do believe that most of the problems which beset the contemporary world can only be satisfactorily resolved from an ecological position: "*one which finds the bases for a new ethics and politics in the natural limits we face as finite, vulnerable creatures in a natural world, the very beauty of which speaks to its larger independence from human domination.*" (Matthew Sharpe, *Bringing them the plague: Camus at 100*, Arena Magazine, 127, Dec2013 – Jan 2014.) Studies of indigenous practices suggest that this ecological position was a given during the pre-invasion period. So perhaps we can learn something if we try to find out more about how and why this was so.

Indigenous management of the land is certainly returning to Budj Bim. It can't be known yet whether traditional aquaculture will have any significant role in the future but it is a possibility. What is happening is that revegetation projects are in place, fences are being built, baiting of pest animals and weed control are also underway, all in long neglected areas. The Gunditjmara are welcoming others onto their land to show them what can be done. Teaching respect for country.

In *The people of Budj Bim*, Gib Wettenhall writes:

> *Gunditjmara man Daryl Rose finds the sight of leaden winter skies and pouring rain exhilarating.*

What a novel response to a natural thing that typically annoys or depresses us! Yes, more water going into the lake has to be a joyful thing.

For John's article with excellent links check the disjunctnaturalist website.

This photograph of a stone circle near Lake Condah was taken during a tour of Gunditjmara sites led by Daryl Rose, from the Winda Mara Aboriginal Corporation at Heywood. (Photo: Megan O'Connor)

'Armchair foraying' - anyone can do it

Sarah Lloyd

Field surveys of myxomycetes (acellular slime moulds) are almost always augmented by the culturing of myxomycetes in the laboratory, a technique that in some instances can add 20-60% of species depending on the habitat. The technique was discovered inadvertently in 1933 when botany teachers set up moist chambers to demonstrate to their students the algae that grew on the bark of living trees. Much to their surprise they found numerous fruiting bodies of an undescribed myxomycete on the bark.

The process is simple and requires no specialist equipment except for a x20 or x 40 microscope for searching for fruiting bodies. The method simply involves collecting organic material e.g. bryophytes, wood, leaf litter, bark, or dung. Wet material is placed on moistened tissue in a covered Petri dish or similar (shallow plastic supermarket containers are ideal). The material should be kept moist and the containers stored at room temperature out of direct sunlight. They should be checked regularly during the first few days and then once a week.

This is a particularly useful technique for certain groups of myxomycetes. For instance, species that live on the bark of living trees are usually extremely small and inconspicuous and have probably evolved to withstand the prolonged dry periods of tree trunk habitats and to respond rapidly when it rains. Numerous such species are reported to turn up in moist chambers within days.

In late November 2013 I set up six moist chambers and by 3 December several species appeared including the very common *Physarum viride* and *Echinostelium minutum*, a new addition to my Black Sugarloaf species list.

Herbivore dung can be productive for myxomycetes but it can take several months for them to appear. In the meantime *Pilobolus crystallinus* ('hat thrower' or dung cannon fungus), and a very small *Coprinus* species appeared on some pademelon dung.

In a US school students were asked to collect substrate for moist chamber cultures. They shared observations and compiled species lists that invariably included some rare or unusual species including some from their own backyards.

For a more extensive description of the method see David Mitchell's paper on the disjunctnaturalist website.

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Keller, HW and Everhart, SE 2010 '*The importance of myxomycetes in biological research and teaching*' Fungi Vol 3:1 Winter

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Acknowledgements:

We thank David Mitchell for permission to put his paper about the culturing of bark myxomycetes on the CNFN website, and for his ongoing encouragement.

Physarum sp. on bark of E. exsiccatum

Marsupials and monotremes

Sarah Lloyd

Tasmania has 18 native marsupial species, one introduced species, the sugar glider, and one extinct species, the thylacine. All the marsupials have evolved specialized digestive systems to deal with Australia's predominantly hard, dry and leathery (i.e. sclerophyllous) vegetation. They also have various breeding strategies to cope with changing circumstances such as drought.

In 1816 the fundamental difference in the reproductive systems of female mammals was discovered. What are now called marsupials (Gk marsupion pouch) were originally named Didelphia (Gk di two; delphia uteri), a word that alludes to marsupials' two vaginae, two uteri and two oviducts. (Placental mammals have a single vagina, cervix and uterus and only the oviducts are paired.) This is what really sets marsupials apart from the placental mammals and monotremes.

Most marsupial species have a yolky egg with a thin shell from which the embryo is born after 10-12 days. The embryo crawls to the pouch and attaches to the teat. Its lips grow around the teat and the structure of its mouth allows it to suck and breathe simultaneously.

The milk of marsupials changes considerably through the extended period of lactation. While it is supporting the initial growth of the tiny bean-sized young the milk is a dilute fluid with more sugars than fats. By the time the young become independent animals at the end of lactation, the milk is rich in proteins and fats with very little sugar. The constituent sugars, fats, proteins, salts and minerals change during the lactation in relation to the needs of the developing young. The sequence of changes seems to be constant for different species.

When there are several young in the pouch, as is often the case, the more advanced offspring will receive high-fat low-protein milk from one teat and the younger offspring will get high-protein low-fat milk from another teat.

Forester (eastern grey) kangaroo
(see front cover)

Kangaroos are a remarkably successful group of animals, something that has been attributed to three things: foregut fermentation; hopping; and their method of reproduction known as embryonic diapause.

Having an enlarged forestomach means they can more easily access the biproducts of the bacterial fermentation of grass (the main component of their diet) than hind gut fermenters such as wombats and ringtail possums.

Bipedal hopping gives them the ability to cover long distances without the energy expenditure required for more conventional means of locomotion.

Embryonic diapause occurs in a variety of placental mammals and marsupials including wallabies, most kangaroos and pygmy possums. The tiny embryo enters a state of dormancy: cell division and growth either stop or slow

This young echidna was observed negotiating the rocky bank of the Mersey River during our December outing. (Photo: Helen Jones)

considerably. The embryo is stimulated to grow when the mother chooses,possibly by the release of a specific hormone.

Monotremes

Two of the three extant (i.e. still living) monotremes, the platypus and short-beaked echidna, are among Tasmania's most distinctive animals. (The third monotreme is the long-beaked echidna that occurs in Papua and New Guinea.)

Monotremes (Gk monos = alone; treme = hole) are egg-laying mammals that suckle their young. They are ancient animals that retain some reptilian traits, including having a cloaca, a single opening used for excretion and reproduction. They lay soft, leathery-shelled eggs similar to those of reptiles.

Platypus

Platypuses are found only in the eastern part of Australia where they live in burrows in the banks of lakes, rivers, streams and farm dams. Occasionally they venture into salt water at the mouths of estuaries. They have a streamlined, fur-covered waterproof body, strongly webbed front feet and the characteristic duck-like bill.

Males grow larger than females and have a venomous spur on the inside of each ankle capable of inflicting a very painful wound. Platypuses can spend up to 18 hours a day feeding. They catch a variety of mainly underwater invertebrates, including worms, shrimps and insects, and come to the surface to breathe and chew their food. They dive when alarmed and will often retreat to thick vegetation or their burrows. They lack a pouch, and lay their eggs (usually two) and raise their young in burrows which have entrances just above the water level often concealed by vegetation. The eggs take 1–2 weeks to hatch and young platypuses are weaned at 4–5 months.

Ref: Lloyd, SJ 2013 Birds, Bugs, burrows and bush: conserving habitats for Tasmania's native animals. TPT/FWT.

Platypus tracks at Lady Lake, top of Higgs Track, Great Western Tiers. (Photo: Phil Collier)

Short-beaked echidna

Echidnas are solitary animals with a large home range of about 40 to 70 ha. They are powerful diggers and use their short, strong limbs with large claws to tear at rotting wood or soil in their search for ants and other soildwelling invertebrates. They have tiny mouths and toothless jaws and, like platypuses, have electro sensors at the tip of their snout. They use their long sticky tongue, which protrudes from the snout, to collect their prey.

The Echidna lays a single egg that it deposits directly into the pouch. The egg hatches after 10 days and the young echidna sucks milk from the pores (monotremes lack teats). The young remains in the pouch until it starts to develop spines at about 45 to 55 days. The mother places the young in a nursery burrow and returns every five days to suckle it. The young are weaned at seven months. Echidnas have a lifespan of approximately 45-50 years.

Walks and other events

Sunday 4 May Lower Barrington: A fungi foray at the property of Philip Milner with Dr Genevieve Gates. Meet at 10:00 am at Philip's property at the end of Allisons Road, Lower Barrington. Allisons Road turn off is about 1km south of the Lower Barrington township on Sheffield Main Road. Genevieve will bring copies of her book "A field guide to Tasmanian Fungi" for sale at the special price of $35.

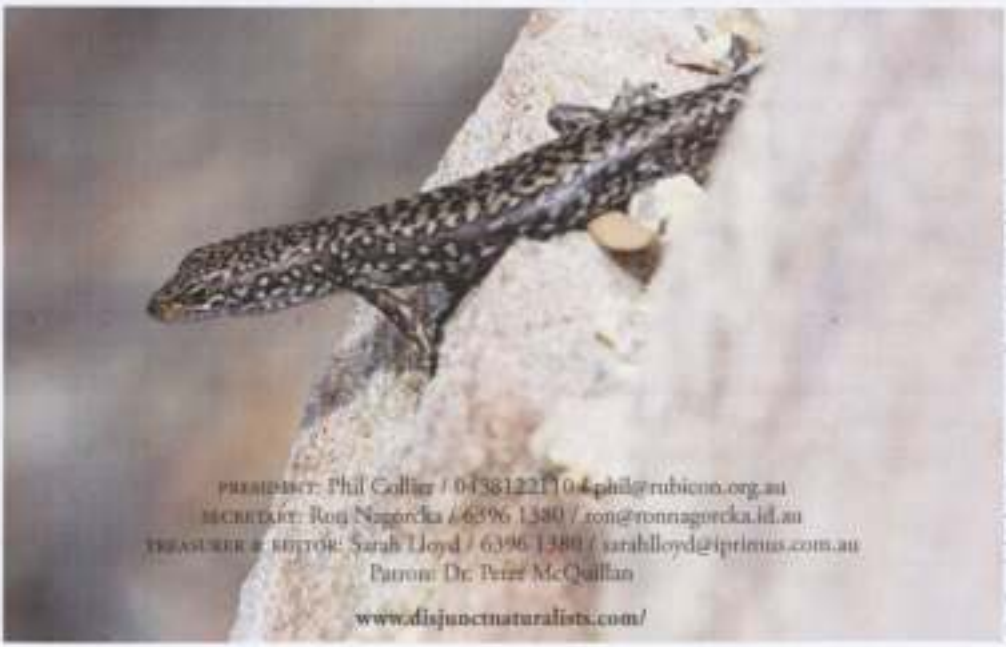
Sunday 1 June Bush Heritage Block, Liffey: An outing to document the natural values and provide a species list to the Bush Heritage Organisation. Meet at the LOWER Liffey Falls car park at 10.00. (Most easily accessed via Liffey.)

Sunday 6 July Winter get-together at Jim Nelson's place at 68 Dynan's Bridge Road Weegena. Jim will fire up the pizza oven and prepare the pastry. Please bring toppings to share.

Sunday 3 August Hagley Farm School Meander Valley Rd. (Old Bass Highway) just east of Hagley. DPIPWE botanist, Dr Wendy Potts, will present a hands-on introduction to the Natural Values Atlas (NVA). The NVA is an on-line atlas that holds records about observations of Tasmania's plants and animals. Field Nats or individuals can provide their own observations to the NVA. Martha McQueen, school librarian, will open the school at 10.00 and we will have the use of the computers. (The school is located between the eastern edge of town and St. Marys Church.)

Sunday 7 September Tasmanian Arboretum at Eugenana. Meet at the car park at 10.00.

Deadline for next newsletter July 2014



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(Orchard skink (*Cyclodomorphus melanops*) Photo: S.Lloyd)