Issue 53 - September 2020

Wombat Forestcare Newsletter

What a wonderful fungi season we have had this year. The early rains stimulated the emergence of a range of fungus not seen for a long time, although the coronavirus restrictions have meant that many fungus lovers missed this opportunity. As we head into spring, the birds are establishing territories and building nests. Migrating birds are arriving to breed. **Gayle Osborne** (editor) and **Angela Halpin** (design)

This Owl doesn't give a Hoot

By Trevor Speirs

Owls have fascinated people for centuries, with their incredible hearing, eyesight, silent flight and cryptic habits. The Wombat Forest has a good representation of Australian owls; the Southern Boobook *Ninox boobook* and Powerful Owl *N. strenua* being the most well-known. Other owls that have been recorded here are the Masked Owl *Tyto novaehollandiae*, Eastern Barn Owl *T.alba*, Sooty Owl *T. tenebricosa*, and Barking Owl *N. connivens*. Apart from the Eastern Barn Owl, the other three have not been officially recorded in the forest for many decades. One night a couple of years ago however, a few of us saw, fleetingly, what was either a Masked or Eastern Barn Owl, deep within the forest. As it wasn't the typical habitat of the Eastern Barn Owl we had high hopes this could have been a male Masked Owl (about the same size as an Eastern Barn) but follow up searches have so far proven fruitless.

Barking Owls were once known as Winking Owls (*connivens* means winking or blinking in Latin), but with their call being so dog-like, the Barking Owl name has prevailed. Apparently the first recorded use of the name Barking Owl was by the famous Queensland explorer Ludwig Leichhardt. Although nocturnal and somewhat cryptic, unlike the ill-fated Leichhardt, they can be found, especially in northern Australia where they are still reasonably common. Occurrences in Victoria however are rather scattered, with their "strongholds" being the Chiltern/Beechworth region in the North East and the Grampians in the West. With an estimated number of around 50 breeding pairs throughout the State, it is not surprising that they are listed as endangered under the *Victorian Flora and Fauna Guarantee Act 1988*[1].

"An extrovert of the open places as compared with an introvert of the hidden mountain gullies" was how the naturalist David Fleay compared the Barking and Powerful Owl[2]. Woodland with scattered large, old eucalypts, and not far from open country (the more rabbits the better) would be considered ideal Barking Owl habitat. Not what you would associate with the wet, tall, well-timbered Wombat Forest. However there are parts of the Wombat that are quite suitable, and earlier this year, returning home after collecting the Wombat Forestcare motion sensing cameras, we drove through bush that looked like it might fit the bill for a "Barker". As the Covid-19 lockdown was starting to be relaxed I revisited this area in late autumn and set up a song meter to record some nocturnal sounds. Always a little worried about theft, I usually leave the song meter out for just a week at a time, but with a good weather forecast before the next cold front decided to leave it out for an extra couple of days.

The male Barking Owl stays close to the breeding hollow during the day. Photography © Lynda Wilson.

Listening to the retrieved data, the occasional yelps of Sugar Gliders and grunts of Common Brushtail Possums could be heard, and then something very different, 30 minutes before dawn on the last night of recordings. At first I wondered if it was a farm dog but the "wook- wook" calls were regularly spaced, nearly always of two notes, never three, tapering off not long after the dawn chorus was in

continued next page ...

full swing. After checking the recorded calls of Barking Owls on an old bird song CD, my partner Margaret and I were pretty convinced that it was a Barker. An owl expert gave us a 100% confirmation a short time later. It was an amazing stroke of luck getting that call on the final morning's recording.

Visiting the site a few days later it was apparent there was a male and a female, with two different pitched calls heard just on dusk. The male call is deeper, though not as far-carrying as the female call. An added excitement about this discovery was the time of year – a month or two before Barking Owls begin their breeding cycle. It took another visit before a couple of roost trees were found and it will be a case of regular checking to see if breeding is going to occur.

With the loss or decline of many small native mammals since European settlement, rabbits have become a vital food source for a number of Australian raptors, and in Victoria this is particularly so for Barking Owls. Also on their menu are birds like smaller-sized parrots, magpies, choughs, frogmouths, ducks etc., as well as bats, small gliders and possums, rodents and many insects. Fleay also wrote of fish bones being found in disgorged pellets, which seems a little odd, although Barking Owls do have a liking for early morning bathing. Below one of the roost trees, there were plenty of tufts of rabbit fur scattered around. If these birds are going to successfully raise a family, possibly up to three hungry owlets, rabbits look like playing a very important part.

Up to 45cm in length (males are larger than females) Barking Owls need large hollows for breeding and the overall loss of tree cover in Victoria has no doubt contributed to their perilous state. Also wildfire and planned burns see many old habitat trees come to grief, especially those with openings/fire scars at ground level. Just as worrying, large habitat trees are still being illegally felled for firewood. Fortunately this particular spot has several large trees with suitable hollows and spouts.

Towards the end of June the birds were calling every day well before dusk and then throughout the night until dawn. By mid-July the Barkers could always be found in the same location, the female often much more alert than her partner. I also saw the pair mating just around dusk, on several different occasions. I was lucky enough to be able to record their mating on the song meter and it makes interesting listening on the link below[3]. From around the 19th of July, only the male could be found in the usual roosts and I believe this was about the time when the female would have entered the nest hollow. In all the observations from then until early August, the male could always be found roosting close, within 10 to 20 metres, of what was believed to be the nest tree, presumably on the look-out for nest robbers. In other parts of Australia goannas and the like are easily capable of scaling trees in the search for eggs, while the Common Brushtail Possum has been known to eat or destroy Southern Boobook eggs. Interestingly, whenever we saw this fellow during daylight, hidden amongst the foliage, he gave the impression of being very relaxed, nearly always with his eyes closed. On most visits, just before dusk the male would call softly with the female responding from its hollow with muted grumbling, before joining him in a nearby tree.

On the 5th of August with Covid-19 stage 3 restrictions restarting and putting an end to unnecessary travel, unfortunately this is where the story ends for now. By my rough calculations this date is about the halfway point of the incubation period which will then be followed by about 35 days of fledging. During this time, with newly born chicks in the nest, the parents, especially the male, can be very aggressive in defence of their young. People have been attacked by Barking Owls, even when some distance from the nest. With their impressively large talons, maybe it's a good time to be confined to the house after all. Hopefully, by late September, all going well, we will be able to get back to see if successful breeding has occurred. ■

Notes

1. FFGA Action Statement www.environment.vic.gov.au/__data/assets/pdf_file/0024/32856/Barking_Owl_Ninox_connivens.pdf
2. Fleay, D. 1968. *Night Watchmen of Bush and Plain*. Jacaranda Press, Brisbane.
3. www.xeno-canto.org/species/Ninox-connivens

The female Barking Owl photographed a week before mating. Photography © Gayle Osborne.

The Waiting Game

Words and image by Gayle Osborne

It is more than ten years since we launched our campaign for park status for the Wombat State Forest and in that time we have recorded nearly 300 sightings of Greater Gliders, established new locations for populations of Brush-tailed Phascogales and breeding sites for Powerful Owls. As well, we established locations of the critically endangered Wombat Leafless Bossiaea.

These records were important to establish that the Wombat forest, despite being a regrowth forest, is worthy of protection.

In June 2019, the Victorian Environment Assessment Council (VEAC) released their recommendations for the Central West investigation. The recommendations were tabled in the Victorian Parliament on 15 August 2019, with the government legally obliged to introduce legislation to the parliament within six months.

We are still waiting. The Minister for the Environment cites the summer bushfires and the Covid-19 pandemic as reasons for delay, yet there has been time to sign the extension to the Regional Forest Agreements.

While we wait, mineral exploration licences have been issued, exploration drilling undertaken near Blackwood and exploration markers have been installed in the Wombat forest. No wonder we are anxious.

Add to that, the stated intention of VicForests to undertake sawlog harvesting in the Wombat forest, claiming that the forest is able to sustain a yield of 10,600 m^3 annually. That would see at least 3,000 large trees harvested every year.

Is the real reason the government is not acting on the recommendations, the intention to log and mine the forest? Recently, a government spokesperson, in response to the exploration in the Wombat, was quoted in The Courier saying "Growing investment in mineral exploration across Victoria is bringing jobs and vital income back into our region."

The spokesperson failed to say how many jobs and how much investment. What about the cost of the environmental degradation? It is telling that the Hon Jaclyn Symes, Minister for Agriculture and Minister for Resources has failed to respond to our letter detailing our concerns about proposed logging and mining in the Wombat forest and the current logging at Mt Cole and the Pyrenees.

Scientifically, the case for park status has been established, but as we see with many other issues, the science is ignored and it is the powerful lobby groups that influence the decision.

We need to take every opportunity to promote the protection of the Wombat and all other forests in the investigation area. Do not be shy, stand up and have the conversation with our elected members, the media and the community. We cannot have a future without nature. The rivers emanating from these forests provide vital water to communities and farms. The importance of these forests as a refuge for many species and as carbon sinks is significant.

For 50 years VEAC (and its previous entities LCC and ECC) has been considered by both sides of government to be a respected, independent and scientifically rigorous organization, whose recommendations are in the main accepted by government. We believe that VEAC has again delivered a well-considered and thoroughly researched scientific based final report. We cannot allow the report to be ignored by this government. ■

Wombat Forestcare members Judy Weatherhead and Trevor Speirs stand up for the Wombat forest.

Historical Gold Mining and Water Quality Impacts – A legacy from the past and lessons for the future

Words and images by David Tiller

Potential impacts

It is now more than 150 years since gold mining began in Victoria. The legacy of these activities is still evident today in the upper Loddon, Lerderderg and Campaspe catchments. Water quality and ecosystem health has been affected by historic gold mining operations and impacts are ongoing. The process of extracting gold historically involved substantial disturbance to stream beds and banks, loss of forest cover and the use of toxic chemicals. Remnant mullock heaps (overburden) and tailings (a by-product of the extraction process) may continue to leach toxic contaminants into waterways for decades or more.

Eroding tailings dam near Smeaton.

The major contaminants entering waterways from historic gold mining are sediment, mercury and arsenic. These contaminants have the potential for profound effects on aquatic ecosystems.

Sedimentation is a major issue in all of our streams and does not only arise from historic gold mining but also from past and current land use practices and fires. The ongoing issue with sediment from gold mining comes from the erosion of overburden mullock heaps and, in particular, tailings dams. Tailings arise from the crushing of the gold-bearing rock with water into a fine sandy slurry from which much of the gold was removed by chemical processes. The tailings slurry was then usually, but not always, deposited into a dam to dry out. Unfortunately, these were never managed for the long term and the dam walls can deteriorate resulting in the tailings eroding into nearby streams. In very hilly country, where tailing dams would have been difficult to build, the tailings were sometimes simply discharged directly from the battery into the nearby stream.

Mercury, a liquid metal, was the primary chemical used to extract gold from the crushed ore in the nineteenth century. The liquid mercury usually sat in long riffle boards over which the crushed ore slurry passed. The metallic mercury formed an amalgam with the gold and would later be separated. Some of the mercury, however, was picked up by the tailings and was then discharged either to a tailings dam or sometimes a stream. Tailings from historic mining operations continue to provide a potential source of mercury to waterways.

In waterways, the metallic mercury is usually deposited in the bottom sediments. Once in a stream, the metallic mercury will either be buried by new sediments entering the stream or gradually move downstream with sediments during flood events. Mercury is toxic to many organisms including bacteria. Bacteria in the sediments can convert metallic mercury into organic forms, effectively detoxifying the metallic mercury to the bacteria. These organic mercury compounds, and in particular methyl-mercury, can accumulate in animals, often to very high levels (they bioconcentrate) and will be passed up the food chain (biomagnify). The result is ongoing mercury contamination of aquatic organisms, some of which may be consumed by humans.

Arsenic is a major component of local iron pyrite gold deposits and as such may be a contaminant in tailings and mullock heaps. In addition, mine shafts (vertical) and adits (horizontal) can expose underlying pyritic rocks (high in iron sulphide) to oxygen and generate sulphuric acid. This acid will dissolve any metals or metalloids (arsenic) which are then free to flow out of the mine and into local streams. Similarly, mullock heaps high in pyrite and arsenic can also release these dissolved contaminants. Arsenic does not tend to bioaccumulate and is generally excreted by biota that ingest it. Nonetheless, if the concentration in the receiving water or the dose ingested is high, body burdens may reach harmful levels.

Impacts in the Wombat Forest

Gold mining was undertaken throughout the Wombat forest area, particularly in the upper Lerderderg, Werribee and Loddon Rivers.

While there is no quantitative evidence, sediment would have had a profound effect in the rivers and streams during mining operations. Removal of vegetation for mining, for timber to support mine and camp infrastructure and for burning would have resulted in substantial loads of sediment to rivers and streams. Photographs from the time across central Victoria show vast areas of land clearing. Sediment would have filled in pools and smothered habitat before gradually moving downstream during flood events. More than 100 years later there may still be sediment from this time remaining in Wombat forest streams.

While tailings disposed directly to streams would have been a relatively minor proportion of the sediment load, the mercury within the tailings is likely to be an ongoing issue.

How much mercury is in Wombat streams? Some assessments have been undertaken, the first being between 1978 and 1980 (Bycroft et al.). Elevated levels of mercury were found in stream sediments around Yankee Reef,

continued next page ...

Barrys Reef and Simmons Reef quartz reef gold mining areas. Mercury concentrations were generally between 0.2 and 0.7 parts per million (ppm or mg/kg) but up to 27 ppm in Yankee Creek. The default Australian guideline value for mercury in sediments, that is the upper limit where no ecological effects are likely, is 0.15 ppm (ANZECC & ARMCANZ 2000). The guidelines also include a high level value of 1.0 ppm that is considered more likely to be associated with biological effects. Sediment concentrations were, therefore, generally above the guideline values and in places above potentially harmful levels.

This study also found high levels of arsenic in stream sediments. Levels between 75 and 5,400 ppm of total arsenic were measured. This compares to the guideline value of 20 ppm and a high level value of 70 ppm.

Blackfish collected by this study from the upper Lerderderg and Werribee Rivers had elevated mercury levels, with one sample out of 18 fish above the statutory level of 0.5 ppm for human consumption (Food Standards Australia New Zealand 2016). Arsenic levels in blackfish were all low.

Mercury levels measured in the water as part of this study were low, however this would be expected as metallic mercury would be largely attached to sediment particles or in biota if in the form of organic mercury compounds. When high river flows mobilise sediments, mercury may be present in the water column for short periods of time.

More recent studies (2017) by EPA Victoria in Sailors Creek found a mean mercury level of 0.44 ppm and arsenic of 0.68 ppm, both above guideline values (0.15 and 20 ppm respectively), however neither were above high level values (1.0 and 70 ppm respectively). Mercury levels in yabbies were less than 0.44 ppm which is below the maximum level allowed for human consumption (0.5 ppm) and arsenic was less than 0.57 ppm, also below the maximum level allowed for human consumption (2 ppm).

No measurements were undertaken in the Werribee or Lerderderg catchments as part of this study, nonetheless, these more recent results further indicate the likely ongoing presence of mercury and arsenic in stream sediments and biota in historic gold mining areas, including mines in the Wombat Forest.

Lessons for the future

While ever there is a demand for gold, not only as bullion or jewellery, but in products such as computers, mobile phones, satellites[1], and in health care and aerospace industries, gold mining will be with us for the foreseeable future. Current mining approval and environment protection regulatory requirements, including the management of mine discharges, sediment runoff and tailing and chemical usage, are in place to prohibit impacts on waterways. Mercury is also no longer used.

What can be done to rehabilitate mercury contaminated streams? Clean-up of stream sediments is not practical and only time will diminish the risk as mercury and arsenic are either buried by sediment or diluted as they are moved downstream. The only other possible action is the rehabilitation of old tailings dams that continue to erode into streams. Little information seems to be available on the location of dams and contaminant levels in the Wombat forest.

Historic Taradale gold battery.

Historic Taradale gold battery crusher.

The legacy of gold mining on waterways in the Wombat Forest and the rest of Victoria is still with us more than 150 years after it all began. Mercury deposited into streams over 100 years ago remains in the environment. Tailings dams can erode and contaminants can leach from mines into waterways. As a community we have a responsibility to ensure that assessments of future mining proposals and our environment protection laws are adequately resourced and effectively implemented to protect waterways and the ecosystems that depend on them. ■

References

ANZRCC & ARMCANZ (2000). Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000. Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand, Canberra.

Food Standards Australia New Zealand (2016). Australia New Zealand Food Standards Code – Standard 1.4.1 – Contaminants and natural toxicants.

Bycroft, B., Coleman, D., Collier, B., Deacon, G., and Lake, S. (1982). Mercury contamination of the Lerderderg River, Victoria, Australia, from an abandoned gold field. Environmental Pollution 28, 135-147.

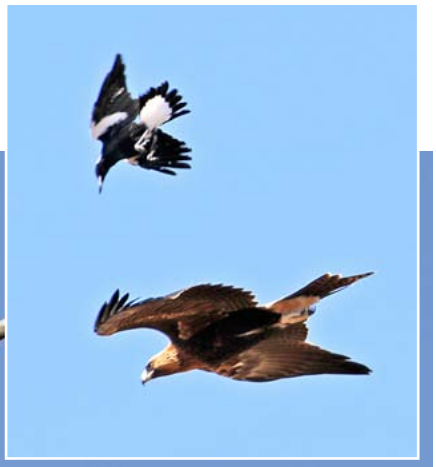
EPA Victoria (2017). Mercury and arsenic in Victorian waters: a legacy of historical gold mining. EPA Victoria publication no. 1637.1

Note

1. Exclusive of bullion, the main uses for gold in the United States in 2019 were in jewellery (50%), electronics (37%), the minting of official coins (8%) and 5% for other uses. Data from the USGS Mineral Commodity Summaries for 2019 accessed at www.geology.com/minerals/gold/uses-of-gold.shtml

Being Alert to the Calls from Nature

Words and images by Lynda Wilson



Wedge-tailed Eagle being harassed by Australian Magpie.

I'd be worried too if I was the subject of this majestic Wedge-tailed Eagle glare.

Stunning Black-shouldered Kite keeping a watchful eye.

Back in Issue 43 (March 2018) of this Newsletter, we had a story about acoustic monitoring in the Wombat Forest, and how sound information can lead to all sorts of discoveries. Over recent months, thanks mainly to enforced lockdown and regular participation in Birdlife Australia's Birds in Backyards program[1], I've become more conscious of various alarm calls from our visiting and resident garden birds and thought I'd provide a few anecdotes and some pictures from our 'backyard' to illustrate the value of being alert to the sounds of nature and the rewards it can offer.

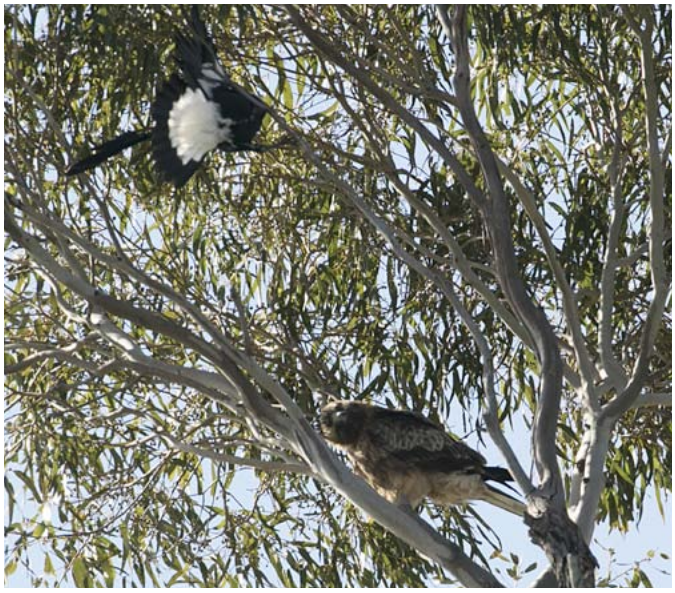
Just as our dog has a particular excited bark whenever she stumbles across a disgruntled Blue-tongued Lizard *Tiliqua scincoide*s or an expeditious Short-beaked Echidna *Tachyglossus aculeatus* (she has been trained to only look and not touch!), I've begun to take more notice of alarm calls from different bird species and the threats that appear to trigger them.

From an elevated position atop a volcanic cone towards the northern end of the Wombat State Forest, a variety of raptors are frequently observed soaring the thermals, or perched in the larger remnant trees on the hilltop. Unless you're wandering with your head continually tilted upwards to the clouds, many of these often-silent raptors might go un-noticed. Some very vocal resident species have, however, enabled me to witness these majestic species quite frequently.

The Australian Magpies *Cracticus tibicen* and ravens (Corvid spp) are extremely vocal when the Wedge-tailed Eagles *Aquila audax* or Little Eagles *Hieraaetus morphnoides* are perched nearby, and aggressively harass the eagles as they soar around the hilltop. The magpies in particular, while very noisy around perched eagles, don't appear to attack the perched Wedge-tailed Eagles as much as the significantly smaller Little Eagles when it's perched. Perhaps the wedgie's huge beak and talons have something to do with that! It's a different story in the air, though, as the magpies and ravens will generally attack both the wedgies and Little Eagles while in flight. Occasionally a Nankeen Kestrel *Falco cenchroides* has been observed joining in the attack.

On one occasion lower down the hillside, a raucous cackling alerted me to an aerobatic challenge between a Swamp Harrier *Circus approximans* and a Little Eagle. Now that was a sight to see. Similarly, an almost shrill screech prompted me to look up to see a Black-shouldered Kite *Elanus axillaris* dive-bombing a pair of Brown Falcons *Falco berigora* perched high in the old Manna Gum in front of the house.

continued next page ...



Just one of the Australian Magpies harassing this Little Eagle.

This Nankeen Kestrel and Australian Magpie appear to quietly tolerate each other.

Brown Falcon wary of aerial attacks from the likes of a Black-shouldered Kite.

A harmless blue-tongue lizard doing its best to look very scary.

On a smaller scale, when I've responded to the alarm calls of the resident New Holland Honeyeaters *Phylidonyris novaehollandiae* perched atop the bushes in the garden, I have been treated to sightings of a Peregrine Falcon *Falco peregrinus*, Collared Sparrowhawk *Accipiter cirrocephalus*, Nankeen Kestrel *Falco cenchroides*, Black-shouldered Kite *Elanus axillaris* or Brown Falcons *Falco berigora* either perched in a nearby tree or hovering overhead while on the hunt.

And when the tiny Superb Fairy-wrens *Malurus cyaneus* and White-browed Scrubwrens *Sericornis frontalis* join in the carry-on, flitting within and around the shrubs, I do investigate carefully as it could be a harmless blue-tongued lizard or something a bit more sinister like a Lowland Copperhead *Austrelaps superbus* or one of those terrifying echidnas.

The photographs attached to this article provide a sample of the rewards triggered by responding to one or more calls from nature in this backyard right near the Wombat. There's so much more to learn from listening to nature, but it makes me appreciate that the more we tune all of our senses to the natural environment, the greater our experience of nature can be. ■

Note

1. Go to Birdlife Australia's website at www.birdsinbackyards.net/ to find out how you can participate.

There and Back Again

Words and images by John Walter

I have heard many reports describing what must have been a wonderful fungus season in 2020 but unfortunately, I was only able to venture out into the Wombat Forest twice myself in late May. What struck me the most, aside from the general abundance of fungus, was the much greater diversity of species than I have seen in recent years. This includes several species that I saw in my first fungal ventures into the Wombat in 2011 but I have not found since. That was an exceptionally wet year and the rainfall totals for the first 6 months of this year are within 10 mm of the total for the same period in 2011. The 2011 total however came on top of an extremely wet second half to 2010 which made it a standout season.

Early in the 2020 season I saw lots of reports of *Boletellus emodensis*, which I found numerous times in early 2011. I missed seeing it this year as I was too late getting out into the field, but this prompted me to make some very quick checks for the IUCN Red Listed *Sarcodon* sp. *nov.* "Wombat" which we last saw in March 2011. Unfortunately, this species was once again missing from all known sites in the Wombat Forest. Refer to our September 2019 newsletter for details on the IUCN listing process and I can now confirm that *Sarcodon* sp. *nov*. "Wombat" has been listed as vulnerable on the IUCN Red List and *Auriscalpium* sp. *nov.* "Blackwood" is listed as endangered.

In May I found a spectacular coral species that to my knowledge has not previously been recorded in the Wombat. This is the beautiful *Hericium coralloides* which I located on the underside of a large partly rotted log. I have previously seen it in the Otways, and also in the Tarkine in Tasmania. I also managed to re find a population of *Gliophorus pseudograminicolor (Hygrocybe pseudograminicolor* in older texts), which I had not seen since 2011 although I had found a second population in another part of the forest in the meantime. This species may have been there all along, but it is extremely difficult to spot as it grows amongst the litter and mosses in heavily shaded locations in gullies beneath the *Olearia* and *Pomaderris* shrub layer.

I was able to make a collection (under permit) for the National Herbarium of Victoria and they will soon hold two specimens of this species from the Wombat State Forest. Collections were also made for most of the species on the following pages which I hope will add to the general knowledge of the diversity of fabulous fungi in our region.

Shaggy cap and yellow pores of *Boletellus emodensis.*

The beautiful coral *Hericium coralloides* outshines the cluster of the white-spotted *Mycena nargan*.

The 1 cm diameter cap of *Gliophorus pseudograminicolor* sits just above the leaf litter and its yellow gills are shown in the inset.

continued next page ...

The remaining species in this article are either not named or are species that I have not been able to positively match against a known name. The first four are all *Cortinarius* species, recognised by the fine veil remains on their stipe (stem) that is stained a rusty brown by the spores.

Some have suggested this is *Cortinarius submagellanicus* but I am not convinced.

Above 3 images: My wife Sue dubbed this species *Cortinarius "LED"* back in 2011 after the LED light of a similar colour often seen on digital displays many years ago.

Above 2 images: This looks similar to *Cortinarius austrocyanites* var. *brunyensis* but once again I am not convinced.
Lower 2 images and inset: The large clusters and slimy caps of this pink capped species makes it quite distinctive, but I have had no luck in finding a name for it.

continued next page ...

The last species that reappeared in large numbers this year is, I believe, a *Tricholoma* species with white spores. Back in 2011 Alison Pouliot and I were discussing species we had seen and realised we were both sighting this particular species wherever we went. It promptly became known as the "find it everywhere fungus". It is pleasing to know that many of the fungus species that were there in the forest in 2011 are now back again in 2020.

I am sorry if you thought after reading the title that this article was going to take your through wild, wet and mossy forests to a distant lonely mountain with a dragon. Of course, the wild forest was there throughout but you had to be out there with me to see it. I hope you managed to spend some time in the forest this fungus season and I offer you a purple-winged phasmid as compensation for the misplaced dragon. ■

The "find it everywhere fungus" can grow quite large and is similar to *Tricholoma eucalypticum*.

This purple-winged phasmid is *Didymuria violescens,* the Spur Legged Phasmid and no doubt would seem dragon-like to the smaller creatures. They prefer to feed on leaves instead of Hobbits and Dwarves.

Can a fungus catch a virus? Apparently so.

In fact, viruses occur ubiquitously throughout the Kingdom Fungi in almost every major fungus group.

However, these socially-distancing *Calostoma fuscum* (common pretty mouth) are keeping themselves safe in the Wombat….

Words & Image by Alison Pouliot