

As we transition from late summer into autumn, with the cooler temperatures, our migratory birds will travel north. Powerful Owls will be calling and mating. Autumn orchids are beginning to appear. Fungi will start to emerge. Autumn is a perfect time for forest walks.

Gayle Osborne (editor) and **Angela Halpin** (design)

Scenting the Wombat

Words and images by Alison Pouliot

Under a heavy sky we headed into the Wombat. My nose twitched with the alchemical blending of scents that precede a summer storm: ozone, dust and something less definable. Then came the rain, enlivening the Wombat and releasing a cavalcade of forest fragrances – damp earth, aromatic leaf litter, tang of bat, heady eucalypt and the funk of the first autumn fungi.

We skirted the ridge and dropped down to Nolan's Creek. On a fallen trunk, the umbrellas of Yellow-Stemmed Mycenae (*Mycena epipterygia*) poked through the moss. We paused to investigate. 'What do they smell like?' I asked my friend. He then did something rather odd. To my surprise, he opened his field guide, found the page and read the description. 'Cucumber-like', he replied. I was a tad perplexed. It seemed like a bizarre choice to rely on something someone else had written (having presumably smelt it) rather than use the amazing sensory organ wedged between our eyes. A strangely sense-less approach. How is the Wombat perceived in all its sensory wonder if not directly via the senses?

Sense of smell is overshadowed by sight, the dominant sense for most people. Even with sight, seeing takes practice – developing a search image, fine-scaling, observing tracks and traces. It takes a long time looking until we see. While the forest is commonly navigated by sight, it can also be experienced by its olfactory cues. Smell unlocks memory and sensory knowledge. To smell is to attune to both the sensation of the scent plus the associated emotions it triggers. In the *Perfumier and the Stinkhorn*, naturalist Richard Mabey notes that smell inhabits an evocative, ephemeral space in our imaginations, citing Marcel Proust who considered the 'vast structure of recollection' to be caught in scent. Our brains are outgrowths of our noses, says Mabey



The Yellow-Stemmed Mycena (*Mycena epipterygia* group) smells like freshly cut cucumber. Photography © Alison Pouliot

and hence it is unsurprising that smell is so evocative in triggering memory.

Sniffing out the Wombat's fungi means making smell deliberate rather than accidental. It requires a fine-tuned nose (to mix sensory metaphors). It is not so much about randomly sniffing, but deliberately smelling, seeking out smells with the knowledge of a range of possibilities, while remaining open to surprise. Among the mixed

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Several native *Amanita* species smell like rancid flour and some smell like squashed ants. Photography © Alison Pouliot

palette of fungal fragrances are those that resemble a suite of different plants. The bracket fungus, Curry Punk (*Piptoporus australiensis*) smells like curry. Many smell mealy (like flour) such as the Grey Jockey (*Asterophora mirabilis*) and several *Amanita* species. Some mimic rotting flesh. There are those with a distinctively chemical edge, such as the Yellow Stainer (*Agaricus xanthodermus*) described as being like iodine, phenol or dentists' waiting rooms. Others are unexpectedly aromatic, reminiscent of bubblegum or grandma's rancid perfume. The Fairy Ring Champignon (*Marasmius oreades*) can faintly resemble garlic, bitter almond or freshly cut hay. Perhaps it depends on what it ate for dinner the night before. Those with olfactory super-sensitivity might detect the artichoke smell of Gold Tufts (*Cyptotrama asparatum*). The Wood Blewit (*Lepista nuda*) has an aromatic almost floral smell. Despite its lethality, my experience of the infamous Death Cap (*Amanita phalloides*) is that it smells pleasantly aromatic and not remotely 'cadaverous and unbearable' as described by French botanist, Pierre Buillard in 1780.

However, it goes to show that smell is not just subjective, but also changes over the lifetime of a fungus. The Slimy Green Waxcap (*Hygrocybe graminicolor*) has never passed my nostrils but apparently smells like burnt grass. Many fungus scents are hard to pin down, reflecting our deficient olfactory lexicon.

Fungal aromas did not evolve purely for the olfactory amusement of *Homo sapiens*. Truffles often confound those trying to describe their peculiar aromas. Among the more endearing allegorical references to truffle smells that I've heard are: 'university student socks', 'an old wet labrador' and 'train stations'. In fact, the smell of truffles often resembles pheromones, or sex hormones, as a clever means of trickery to encourage a mammal to unearth it, gulp it down and bounce off elsewhere to deposit its spores. Over forty Australian mammals consume hypogeous (underground) fungi and most if not all rely on smell to detect them. The Wombat offers not just amazing things to see, but also the chance to delight in new and interesting aromas.

If you're interested in a sensory fungal discovery of the Wombat this autumn come along and join a foray. ■

Further information: www.alisonpouliot.com

A few interesting books worth sniffing out:

Diane Ackerman, *A Natural History of the Senses* (New York: Vintage Books, 1995).

Paul Moore, *The Hidden Power of Smell* (New York: Springer, 2015).

Constance Classen et al., *Aroma: The Cultural History of Smell* (New York: Routledge, 1994).

Patrick Suskind, *Perfume: The Story of a Murderer* (Camberwell: Hamish Hamilton, 2002).



The Curry Punk (*Piptoporus australiensis*) smells like curry. Photography © Alison Pouliot

Vulnerable Species

By Trevor Speirs

While the Wombat Forest is home to a number of species that are listed under the Flora and Fauna Guarantee Act 1988, it was still surprising to come across three of those species, classified as Vulnerable (v), in close proximity to each other in a gully, during late December and January.

Approximately 20 kilometres north-west of last year's fateful discovery of a dead Powerful Owl chick *Ninox strenua*, it was very heartening to come across two beautiful, healthy Powerful Owl chicks roosting with one of their parents in a tall Blackwood.

These youngsters were probably about three months old, with the darker chevrons coming through on their snowy chests. It takes about six months to achieve full adult plumage.

During autumn, as their parents prepare for the next breeding season, these young owls will be forced from the parents' territory and begin the difficult task of finding a partner or establishing their own home range.



A Greater Glider *Petauroides volans* emerges from its hollow.
Photography © Gayle Osborne



A pair of juvenile Powerful Owls *Ninox strenua* roosting high in a Blackwood.
Photography © Gayle Osborne

One evening two Greater Gliders *Petauroides volans* were spotlighted in separate Candlebarks *E. rubida*, within 100 metres of the owls' roost. This was a very precarious situation for the gliders as they are a favoured prey of Powerful Owls. Judging by the tufts of fur under several Blackwoods in the vicinity, the gliders are clearly providing the owls a steady food supply.

On a further visit to the site, while observing the owls, a Square-tailed Kite *Lophoictinia isura* circled gracefully over the treetops. It can be identified in flight by its small white head, large wings with long, fingered primary feathers and a wide, square tail.

Generally uncommon to rare throughout Australia, Square-tailed Kites prey mainly on small birds and their nestlings, and are more likely to be seen in the Wombat over summer when the local breeding numbers swell with the influx of summer migrants such as honeyeaters and flycatchers. ■

What Feather is That?

By Gayle Osborne

We are all drawn to the beauty of bird feathers. They can be exquisitely patterned and coloured, and in a multitude of shapes and sizes. Feathers have been used in all cultures for decoration and ceremony.

The mystery of flight captures our imagination. The flight of birds can seem miraculous, especially birds of prey soaring in the wind currents. Historically, men attempted to imitate wing structure in order to fly, however it is the design of the feather that enables highly sophisticated flight.

Discarded feathers indicate that the bird has passed through the landscape. Clumps of feathers can mean that the bird has fallen victim to an animal or bird of prey.

Some feathers are easy to identify. Crimson Rosella feathers, usually the blue wing feathers, are frequently seen in the forest. A Wedge-tailed Eagle feather seen near Spargo Creek was obvious due to its size. Kookaburra feathers, with the distinctive orangey bands, are also familiar. Where do you turn to for assistance if you see unusual feathers?

North Americans have a wonderful publication, *Bird Feathers, A Guide to North American Species* with photos of feathers for all their birds; primary, secondary and trailing secondary wing feathers, tail feathers, breast feathers, a total of 19 categories. I had not realised how complex feather identification could be nor how fascinating. We would welcome a guide for Australian birds.

A pair of Peregrine Falcons nest in the Wombat Forest in the top of a stag (dead tree) that is now only a very tall stump. After the young had fledged we examined the surrounding area. There was a mound of Galah feathers, some feathers from Crimson Rosellas, and also some feathers we were unable to identify (see image).

Our first thought for help was BirdLife Ballarat and there was a tentative identification of the feathers as belonging to an Eastern Koel, a bird that was recorded north of the NSW/Victoria border, but in recent years has been sighted in various Victorian locations and this year in Daylesford. The naturalists at BirdLife Ballarat then had second thoughts and withdrew this identification.

An image of the feathers has been emailed to the Discovery Centre at Museum Victoria, and we hope someone can identify our find. We would welcome assistance from our readers.

Powerful Owl feathers have barring patterns that are common to most owls and hawks. Their wing feathers have a velvety nap that allows silent flight.

Many birds moult during later summer and early autumn. This process is the periodic replacement of feathers. Old feathers are gradually shed and new feathers (pin feathers) grow to replace them.

Like scats and tracks, feathers give us clues about the species that inhabit the Wombat. ■

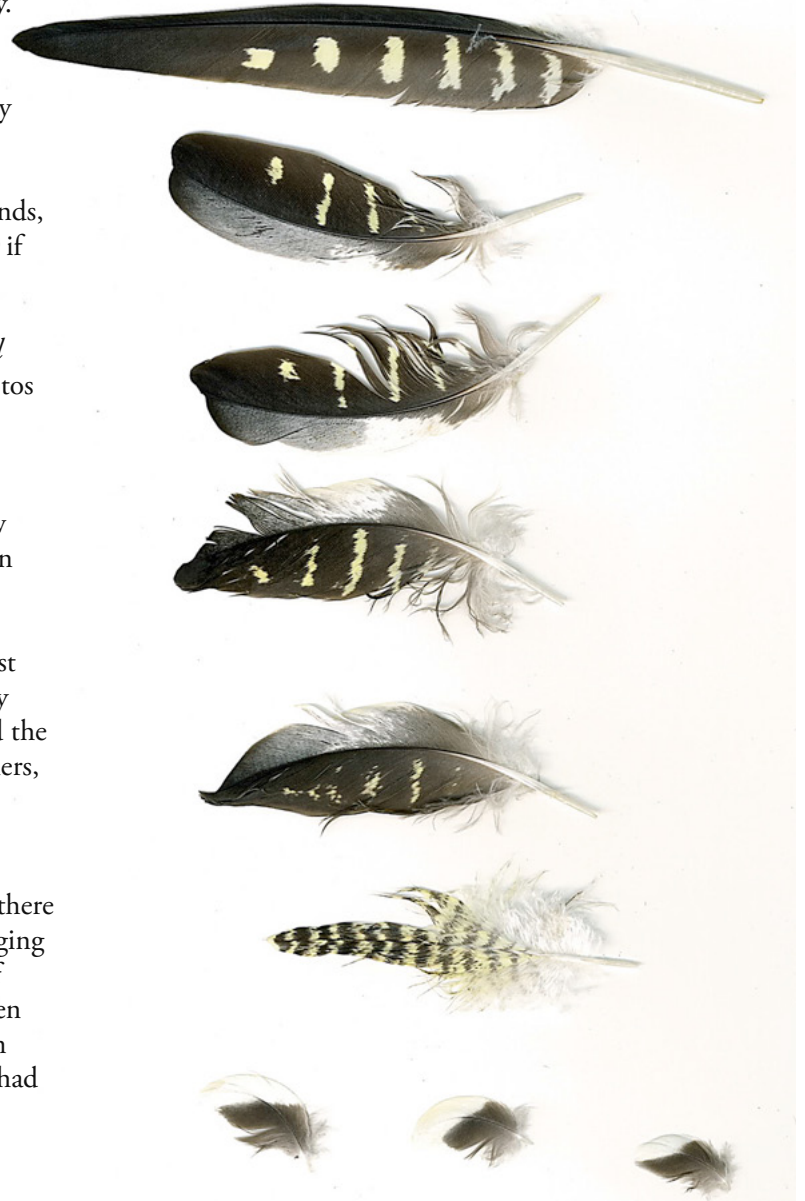


Image of the unidentified feathers.

It is not legal to collect feathers or bones of native fauna (Wildlife Act 1975).

Cinderella and the Star-haired Skin-lids

Words and images by John Walter

Perhaps the mark of a true Cinderella plant is the lack of an exciting common name, plus of course its small flowers in plain colours. Our subjects in this article suffer from both of these afflictions and yet they are generally large plants with distinctive foliage. One species is readily found in the Wombat Forest and reasonably well known although I suspect many of you will have never seen the flowers, let alone its star-hairs or the skin-lids for which they are named. There are an additional two species in the Wombat that are relatively easy to find if you know what you are looking for and a fourth species that has only been collected once.

The star-hairs are more correctly known as stellate hairs and are a diagnostic feature of the genus *Pomaderris* which, depending on your translation, could be called the Skin-lids. Now I am not really serious about using the name Skin-lids as a common name for the *Pomaderris* species, but it does have a certain appeal to it. My very reliable texts state *Pomaderris* is derived from Greek and that “poma” is a lid while “derris” is a reference to a skin or leather covering and it is describing a skin-like covering found over the seed when the capsules first open. I have no trouble verifying “poma” in the Greek language as a lid or stopper or cork etc., but have struggled to firm up “derris” as “derma” seems to be root used for pretty much everything skin/leather/fur related.

The most common species is *Pomaderris aspera* or the Hazel Pomaderris, which flowered abundantly last spring despite the dryer season. It forms a tall shrub or slender tree in the wetter parts of the forest and sometimes grows in dense thickets. The large leaves are crinkly like those of the European Hazel but they bear no resemblance in shape. This species is recognised as forming a mycorrhizal relationship with some fungi and is suspected to be an alternative host for the “stinky fungus” *Cortinarius perfoetens* I wrote about in our March 2012 issue (available on our website). The regular host for this fungus was thought to be Myrtle Beech *Nothofagus cunninghamii*, which is not found in the Wombat.



Large rusty stellate hairs sit over a bed of whitish stellate hairs on the underside of the leaf on *Pomaderris elachophylla*, leaves are less than 1cm in length.



The crinkly leaves of *P. aspera* range from 4 to 12cm in length.



The leaves on *P. racemosa*, seen here with a friend, have wavy margins and are 1.5 to 2cm long.

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You need to look closely at the next two *Pomaderris* species to separate them in the field as the both have smallish leaves and are medium sized shrubs. We all tend to take a quick look and assume what we see is this or that plant without taking the time for a full examination. I fell into this trap when I first saw *Pomaderris elachophylla* and assumed that it was *Pomaderris racemosa* which I had previously found at a number of sites, both in the Wombat and along some small streams running from the forest to the north. I realised my mistake when I was filing my photographs and returned to the field to properly record both species. If you saw both species side by side however, you would readily identify them as different plants.

The Lacy Pomaderris *P. elachophylla* can be seen in an area to the south of Lyonville and Trentham while I find the Cluster Pomaderris *P. racemosa* along the rivers like the Werribee, Loddon and Coliban. The fourth species, the Plum-leaf Pomaderris *P. prunifolia* was collected by Cliff Beauglehole in the far east of the Wombat in 1959. This locality has since been clear-felled and the subsequent regrowth forest was burned in recent Department activities; while I have not yet been able to locate any plants there, it may still survive. Its leaves are similar in size and shape to the Hazel Pomaderris but lack the deep crinkly nature and could therefore be easily overlooked or mistaken for the Hazel. ■



The flowers on all our local *Pomaderris* species are very similar and all lack true petals. What looks like petals in this image of *P. elachophylla* flowers are actually sepals (the outer protective covering of a flower) and each flower is around 5mm in diameter.



The flowers of this *Pomaderris racemosa* are past their prime.

Common Grass Blue *Zizina labradus*

Words and images by
Gayle Osborne

This small blue butterfly, with a wingspan of only about 2cm is frequently seen all summer flying close to the ground, around grass and low vegetation. Occasionally they can be seen resting with open wings, displaying a lovely iridescent blue.

They are found in many locations as they have adapted to modified habitats and introduced legumes for their larval food. ■



Common Grass Blue butterflies mating and butterfly with open wings.

Mycenas were all Greek to me!

Words and images by John Walter

I must admit that when I began studying our local fungi I struggled to recognise even the family groupings, much less the genera or species. Like everything however, the more you look the more you see, and I began to recognise patterns and shapes in the fungi I found. By this time, I had the beginnings of a fungus library and had developed a clearer sense of what it was I should be looking for.

For example, I knew that the word *Mycena* was derived from an Ancient Greek word for a mushroom and that *Mycenas* were small, fragile, white spored, sometimes striate and the cap always had straight sides and was never incurved. I thought that when armed with a suite of field guides I could venture into the Wombat Forest and find the name for all the *Mycenas* I found there. I soon realised my mistake and recognised that it is more likely for a species to be unnamed than named, but that still leaves lots of named species in our forest.

There is no better species with which to commence this series of *Mycena* articles than the Pixie's Parasol *Mycena interrupta*. It was the most popular fungus in the public vote reported in our June 2014 Fungi Special and its rich blue colour never fails to interrupt my passage through the forest. It was not this type of interruption that gave rise to the name however.

Joseph Dalton Hooker was the surgeon and botanist for Ross' famed voyage into Antarctica from 1839 to 1843 and Hobart was used as a stopover on the outward journey and later to refit the ships. Hooker's subsequent account of the Tasmanian flora was published in 1860 and includes our little blue friend although the official description was written by Berkeley and the associated colour plate was prepared by Archer. The drawing and Latin description note the gills were interrupted by a fleshy circle near the stem but Hooker commented that the portion of the gill shown closest to the stem in the drawing was absent from his dried specimens. This portion and the fleshy circle are also absent from Wombat Forest specimens found today although some other populations record the fleshy circle according to Grgurinovic 2003. It appears our *Mycena interrupta* was named for a feature it does not actually have! Perhaps the Pixies have had more influence than first thought.

In 1982 Cheryl Grgurinovic, believing a similarly shaped species to be a colour variant, used the name *M. interrupta* var. *fumosa* in a field key prepared for the Victorian Field Naturalists. After further research she confirmed that it was in fact a different species which is now known as



A whole band of Pixies could shelter beneath this group of *Mycena interrupta* found on a log south of Bullarto.



The striations on the cap of *Mycena fumosa* are actually the lines of the gills showing through.

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Mycena fumosa. It arises from a whitish basal disc which distinguishes it from yet another similar species, *Mycena carmeliana*, which arises from an orange basal disc. All three species are found within the Wombat Forest and while the little blue is relatively common, the two brown-toned species are not so easy to find.

I have recorded well over twenty named species of *Mycena* in the Wombat Forest and will bring them to you in a series of articles spread over the next few newsletters. Look out for “Bushrangers and other wild men of the woods” in our June issue. ■

References

Hooker, Joseph Dalton (1860) *The Botany of the Antarctic Voyage of H.M. Discovery Ships Erebus and Terror in 1839-1843* Part III. *Flora Tasmanæ* Vol II. *Monocotyledones and Acotyledones*

Grgurinovic, C & Holland, A (1982) A Field Identification Key of some Victorian Species of the Genus *Mycena*, *Victorian Naturalist* Vol.99 p102

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Mycena carmeliana has an orange basal disc as seen in the inset.

Nature Study

Words and images by Gayle Osborne

There is a great delight in the minute examination of insects.

Leafhoppers and treehoppers are in the same sub-order as cicadas. The two species photographed occur in the Wombat Forest. They are small winged insects with hind legs modified for jumping. They suck sap that contains sugar and water from plants and the excess is excreted as honeydew.

Both species are actively attended by ants, which provide protection from predators in return for oozed honeydew. ■



Acacia Horned Treehopper *Sextius virescens*



Ant collecting honeydew from a Punctata Gum Leafhopper *Eurymeloides punctata*

The Aeroplane and the Koala

Words and image by David Harris

I love aeroplanes. Mum and Dad used to take us to all the airshows. I bought model aeroplanes as a kid, although in the assembly process I usually ended up with more glue on my fingers than on the wings. I like to get to Tullamarine at least 3 hours before any flight, even a domestic one, to get in some quality plane watching time. My wife is convinced that I am going to kill us both, because if a plane flies overhead when I am driving on the freeway, she thinks that I pay more attention to it than to the car in front. She may be right. I love flying over our part of the world, Daylesford and the Wombat Forest provides glorious views.

What has this to do with Koalas? Well, one day I was walking on Babbington Hill, when I heard the sound of an aircraft passing low overhead. As is my habit, I immediately stopped to scan the skies for an aviation fix (after struggling upwards for some time, I was secretly pleased for the excuse to take a breather). I didn't get to see the aircraft, but I did notice an odd shaped lump in the branches directly above my head. After literally years walking in the Wombat, this was the first Koala I had seen there. Koala spotting has become my new sport. It must be said that it is a sport that is only rarely rewarding. Koalas are very difficult to see. Anybody looking for native animals will tell you that they are most visible when they move, and alas, Koalas rarely do. I have been surveying a scene in the forest, and only noticed a wallaby when one of the tree stumps hopped away. It is said that Koalas sleep for 20 hours a day, and are most active at night. It is interesting that the initial name given to the animal by European scientists was "Australian Tree Sloth". The chances of their moving coinciding with your walking are small. It does happen though. One day I was tramping adjacent to Quartz track, mostly looking down to avoid slithery encounters, when my eye was drawn to a movement in the periphery of my vision. It was a Koala moving from one branch to another. Without that movement, I would have wandered by and seen nothing.

Koalas seem to have two favourite positions to sleep in a tree. Famously, they wedge their ample rump between branches and the trunk, but I have seen them most often in the leaf clusters at the ends of branches. I suppose, given their diet, when they do wake up, they are already in the dining room! I think that because Koala encounters are rare, they become memorable. I see wallabies and kangaroos almost every day in the forest, and a week rarely goes by without a wombat sighting, but as a rule Koalas seem much less common. Are they less common, or are they just more difficult to see? Of the trees that dominate the Wombat, the Messmate, the Broad-leaved Peppermint and the Narrow-leaved Peppermint have bark admirably coloured to conceal a shy Koala.



I recently had an embarrassing meeting with a Koala. I was walking along the banks of the Werribee River on an extremely windy day. The trees were being thrashed backwards and forwards by the wind, and the track was covered in recently deposited detritus. Apparently in these extreme conditions, Koalas will instinctively seek safety lower down on the tree. As I came round a corner in the track, I was confronted by a Koala clinging to the trunk of a tree, at about my head height, and only a couple of metres from me. He took a long stare at me, and obviously unimpressed, decided to seek safety higher up. Another instinct, that is to put as much distance between themselves and a potential source of danger, now kicked in. The Koala sped up the trunk, and continued upward to the topmost branch capable of bearing its weight. The strong wind meant however, that as I stood at the base of the tree, I could see the poor Koala clinging to a tiny bough and being violently swept around the sky. Anybody in the vicinity would have observed my declarations of friendship, and suggestions that it was safe to return to less agitated regions further down. I do not consider talking to Koalas a sign of insanity. Not like talking to a dog anyway.

I am not aware of Koalas being territorial in their habits like wombats, but they may have limited ranges. Having said that, it is rare to bump in to a Koala, for 6 months in 2015, at least two Koalas lived in the small triangle formed by the first two kilometres of the Toe Rag Track and the adjacent two kilometres of Mahers Track at their junction. They seemed always to be sitting in Manna Gums, but I wondered if that was simply because they were more noticeable against the white bark. In that period, it was rare to walk in that area and not see them. One day they disappeared from the area, and have not to my knowledge returned. I wonder what accounts for my fascination with Koalas? Is it purely anthropomorphic? Is it the symbolism? I only know how excited I was this morning when I stumbled upon what I initially took to be an oddly shaped Wombat sitting in the middle of the track on the side of Mount Wilson. Koalas remain my favourite denizens of the forest (except for Echidnas, obviously). ■

Motion-sensing Camera Project

By Gayle Osborne

How are the mammals of the Wombat Forest faring?
How would we know given that there are insufficient data about their populations and distribution?

At a recent SWIFFT* presentation on threatened possums and gliders, Peter Menkhorst, Arthur Rylah Institute, Department of Environment, Land, Water & Planning explained that in Victoria we have “a very diverse fauna of possums and gliders with 14 species.” He discussed a lack of funding for monitoring fauna, except for a few endangered species.

“Peter spoke about the situation where all Victorian fauna has suffered due to drought conditions over the last 15 years or so and apart from some of the high priority species we

Once we have entered the data, it needs to be verified by an expert to be accepted onto the database. Unfortunately the VBA is experiencing a backlog of data for verification and none of our fauna records have yet been accepted. It is not clear when this will be addressed and we know that for other areas there are records that have been lodged four years ago and not yet verified.

These projects will not give population sizes but will give a good picture of distribution. It has been interesting to observe that all the brushtail possums we have recorded have been Mountain Brushtail Possums *Trichosurus cunninghamii* and no sightings of Common Brushtail Possums *Trichosurus vulpecula*. Birds often pop into the frame and although this is not an appropriate method for surveying birds, we have had some sightings of interest. These include Spotted-quail Thrushes *Cinclosoma punctatum*, Red-browed Treecreepers *Climacteris erythrops* and a Sacred Kingfisher *Todiramphus sanctus*.



Sacred Kingfisher *Todiramphus sanctus* captured on camera.

Time spent in the forest for the projects increases the likelihood of finding other fauna and flora species. When we were moving cameras on one site, Trevor Speirs thought he would wander down the road and check out some blackwoods. There were indications of owl activity (splash and regurgitated crops) and that led to the discovery of a breeding pair of Powerful Owls, the sighting of the chick just out of the nest and the establishment of the breeding hollow.

have little knowledge of the status of wildlife in Victoria due to limited research. This makes it difficult to determine population trends, particularly for pygmy-possums and gliders.”¹

Wombat Forestcare members are trying to rectify the lack of information for fauna in the Wombat Forest. Our motion-sensing cameras are being moved around the forest, the images collected, species identified and data entered on the Victorian Biodiversity Atlas (VBA).

Involvement in our projects is very satisfying, affording an opportunity to increase identification skills and to spend time in the forest with like-minded people. ■

* State Wide Integrated Flora and Fauna Teams

1. http://www.swifft.net.au/cb_pages/video_conf_notes/11_feb_2016_-_threatened_possums_gliders.php#introduction

Wombat Forestcare Membership

research • education • action

Wombat Forestcare Inc. is dedicated to preserving the biodiversity and amenity of the Wombat State Forest by utilising the skills and resources of the community. By becoming a member you will have input into our activities and projects, and give support to caring for our forests.

For memberships and further information contact Gayle Osborne, (03) 5348 7558 or email info@wombatforestcare.org.au

Membership fees are only \$15 single and \$20 family. Visit our website - www.wombatforestcare.org.au