

Girraween National Park

January 2013



Two Girraween Forays

by Vanessa Ryan

Hi, tonight I'm going to talk about two of my solo forays to Girraween National Park.

The first foray was in January, just after the New Year.

(Photo is of The Pyramid at sunset.)

What We (Chris and I) Found

The weather had been hot with strong, dry winds.

Agarics: 1 ?

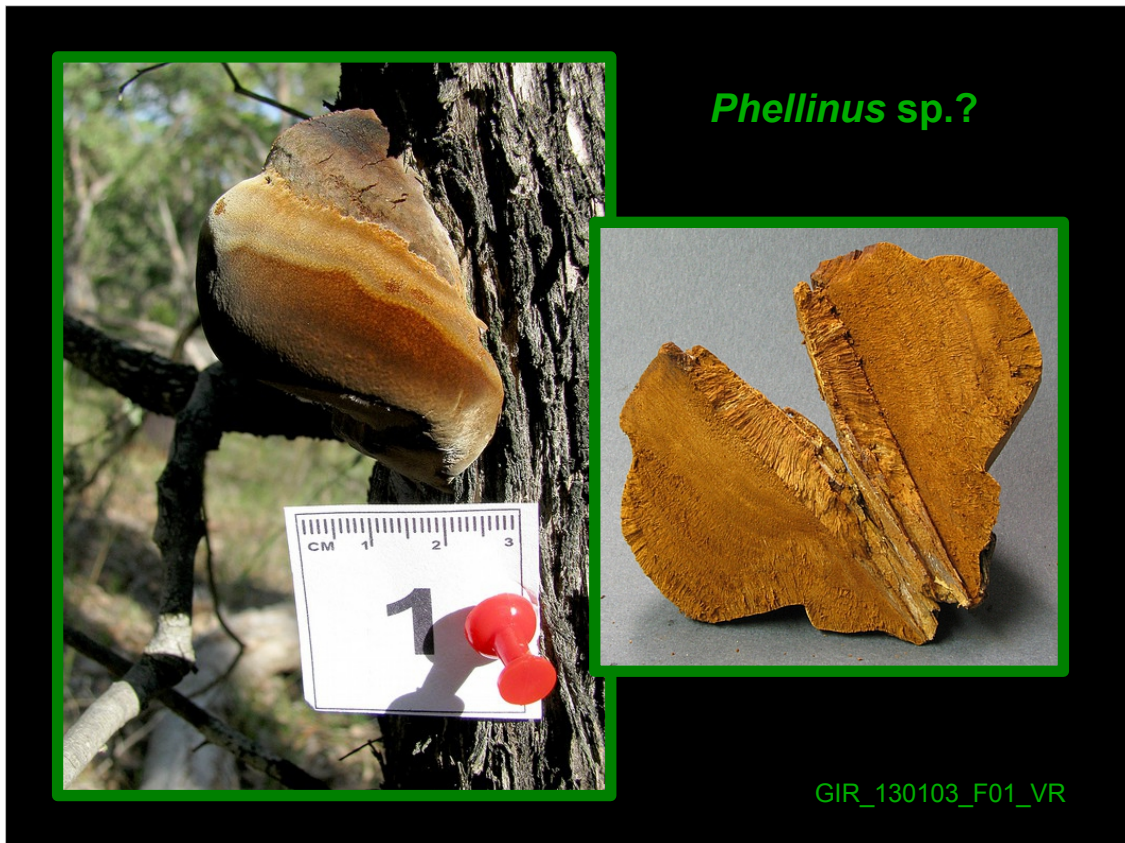
Boletes: 1

Polypores: 6 (collected 3)

The weather had been quite hot with strong winds. It was just before the rains began, so everything was very dry.

In the three days we were there, we (my husband, Chris, and I) found only eight fungi. I collected five of them.

As usual with my experience in Girraween, the greater proportion of fungus type was the polypores. And what I've noted on the slide above as an agaric is really a woody gilled polypore.



Here's the first fungus I found. From its distinctive “hoof” shape and toughness, I think it's a *Phellinus* of some sort.

When I cut it in half, it was interesting to see the internal growth patterns.

I have seen quite a lot of *Phellinus* fungi in Girraween during previous visits.

Same area as *Phellinus*...
(Not collected)



Usnea scabrida subsp. *elegans*

New *Polyporus arcularius*



I found these near the *Phellinus*.

That particular species of lichen is very common in Girraween.

Although I didn't collect the *Polyporus arcularius* because it was way too far gone, I did make a note of it. I'm glad I did, because when I checked my list of fungus species for Girraween, it wasn't on it.

The orange “new” means the fungus is new to my species list.



Fomitopsis feei

GIR_130104_F02_CR

New



The second day of my foray began more promisingly.

This *Fomitopsis* was growing on a fallen and burned log.

At first I thought it might be *Fomitopsis lilacinogilva*, but later and closer examination showed it to be *F. feei*.

This was definitely another species to add to my fungus list for Girraween.



Polypore – Reject!

GIR_130104_F03_GR



It's a shame that this interesting polypore was so mouldy underneath. It was a good size and quite plate-like.

Tread lightly!
This is someone's home...



While I was searching the area for fungi, I found some very large holes in the ground.

It was a gentle reminder of the not-so-common, Common Wombats that the national park was created all those years ago to protect.

Fomitopsis feei

GIR_130104_F03_CR



Here's the real specimen #3.

It was another *Fomitopsis feei*. Like the first, it was growing on a fallen and burned tree trunk.

Gloeophyllum sp.
(*abietinum*?)

New

GIR_130104_F04_CR



The last fungus for the day was also growing on a fallen and burned tree.

This collection of fruiting bodies was in various shades of grey. Not far away on the same log, another collection was in shades of brown. Both had brown-coloured, tough gill structures underneath.



I didn't get to do much fungus hunting on the last day, but as we were leaving the park, my husband (who was driving) suddenly stopped the car and said: “There's a huge mushroom over there!”

At first I couldn't see it, as it was in a hollow, underneath a fallen branch.

It turned out to be a large bolete – my first ever!

Unfortunately, it was riddled with maggots and ants. I did try to collect it, but didn't have much success. That was my first real lesson in not getting too attached to your finds.

Lucky last, but definitely another reject.



Not far from where we found the bolete was this polypore. There were a few of them on the same tree. Most of them were quite high up the trunk with only this one within reach. All of them looked to be very old and dry and definitely not worth collecting.

I made a note of where it was, however, because it showed evidence of possible perennial growth. I will try to go back there again some time and hopefully catch it in a growth phase.

So ended my January foray into Girraween...

Back to Girraween...

April 2013



My next foray in Girraween was in early April.

(Photo: Sunrise on the Pyramids.)

What We Found

The weather had been cool with occasional showers.

Agarics:	13
Boletes:	2 (both turned to mush)
Corals:	2
Corticoids:	3 (not collected)
Leathers:	1
Polypores:	6
Puffballs:	3

This time, the weather had been a lot more fungus friendly and I was looking forward to a more successful trip.

It was. The ground was still quite damp in places and I found quite a few fungi.

It is interesting to note that this time there were a lot of Agarics about.



My first fungus was a *Podoscypha petalodes* – the only leather for the foray.

My husband spotted it when we were putting up our tent. I carefully covered it with a couple of sticks so we wouldn't step on it. It turned out that I needn't have worried, as there was quite a lot of it growing under one of the trees next to our tent. There was a thick, frilly crust of it right up against the base of the tree's trunk, but they looked to be not as mature as the ones further out.

Again, it was a new species to add to my list.

By now, I had my microscope and I could start looking at spores. That's a photo of the *petalodes*' spores.



That first afternoon, after setting up the tent, I collected another three species – all from under the same tree!

This one looked a bit old and dry around the edges, but I gave it a go and got a really good spore print from it.

I used the information Pat gave us at the Agarics and Boletes workshop and managed to key this one out to possibly being a *Lepiota* species. Its spores turning brown in Melzer's was an important clue.

So, even though it wasn't the best possible specimen, I had a new genus to add to my species list.



GIR_130408_F03_VR

???

Haven't yet examined it.

Spore print – very pale
pinkish-brown.



I initially thought that this would be another fruiting body of the previous fungus, as it was growing about a meter away from it and, from above, the cap looked very similar.

However, when I cleared the leaf litter away, I saw that the stipe was a lot thicker. When I dug it out and could see the underside, I saw that the gills were decurrent – quite different!

I haven't yet had time to try to key this one out. I did get a faint spore print from it – a very pale pinkish-brown.

#4 and #20

Both are *Clavulina*
species... New



GIR_130408_F04_VR



GIR_130411_F20_CR

#4 was a small clump of coral fungus. It was another first for me and another new species for my quickly growing list.

I've included #20 on this slide as it is also a *Clavulina*. This was just one of a huge mass of fruiting bodies that had sprouted around an information sign (at Bum Rock) on the Castle Rock track. The fungi in front of the sign had been quite trampled by hikers, but fortunately no one had walked on the slope behind the sign and I managed to get a very good collection.

I can't wait to look at these two under the microscope!



??? Haven't yet examined it.
Spore print – brown.

GIR_130408_F05_VR

This little brown fungus was the last to be collected on the first day of my foray. There was a very small troop of them growing in mowed grass in a very exposed area.

I managed to get a spore print and, not surprisingly, the spores are dark brown.

Macrolepiota sp.? New

GIR_130409_F06_CR

Haven't yet examined it.
Not expecting spores, as
it's immature.



My husband found this one. He thought it was some sort of weird puffball, but I wasn't so sure.

My suspicions were proved correct when I cut it in half to find the immature gills inside the cap.

Nigel thinks it might be a *Macrolepiota* species. One of the clues was that it was growing by itself, out in the open.

That's another new genus to add to my list for the park.



??? Haven't yet examined it.
Spore print – white.

GIR_130409_F07_VR

#7 is another little brown fungus, but quite different to #5.

This one was growing in the shelter of trees on a piece of burned wood. There were just these two fruiting bodies – one poking out on either side of the wood. There was a thick mass of white mycelium growing on the underside of the wood and in the charcoally soil beneath. It joined the two fruiting bodies.

Its spore print was white.

Puffballs

GIR_130409_F08_VR



These are my first puffballs for the park.

There were quite a lot of them in a group under a very large eucalypt. They were all growing in soil.

I thought I'd get a good collection, as they seemed to be in various stages of maturity.

Puffball confusion!

Looking forward to the workshop...

GIR_130409_F08_VR ?



You can imagine my confusion when I started digging them out and some of them had next to no stalk and tiny rootlets and others had a definite stalk and lots of rootlets. The one pictured on the right had a huge underground stalk and a great mass of rootlets.

I haven't yet cut any of them in half. I should have done it in the field when they were fresh, but I didn't think to. A lesson learned.

And I can't wait to go to the workshop being held later this year on puffballs, earthstars and stinkhorns!



***Amanita* sp.**
Haven't yet examined it.

GIR_130409_F09_VR

#9 is this nice little Agaric. I almost missed it, as its cap was just pushing up through a layer of leaf litter. Unfortunately, its cap came off when I was digging it out.

I got a good spore print from it – white.



I didn't know what this was when I first spotted it. All I could see was a brownish cap growing close to the ground at the base of a burned log.

It turned out to be a bolete. I could tell from the way it sagged that it was already decomposing, but I still collected it. I managed to write a description for it that afternoon, but it turned to a black mush overnight.

I will definitely be taking my food dehydrator with me next time I go to Girraween!

Fomitopsis feei

GIR_130409_F11_VR



It seems that it wouldn't be a Girraween foray without finding a *Fomitopsis feei*!

This was a lovely, fresh specimen. It may have been a little too young and fresh as I haven't been able to find any spores.



GIR_130409_F12_CR

GIR_130411_F21_CR



#12, #21 and #26
Xerula species?
 aka *Hymenopellis*

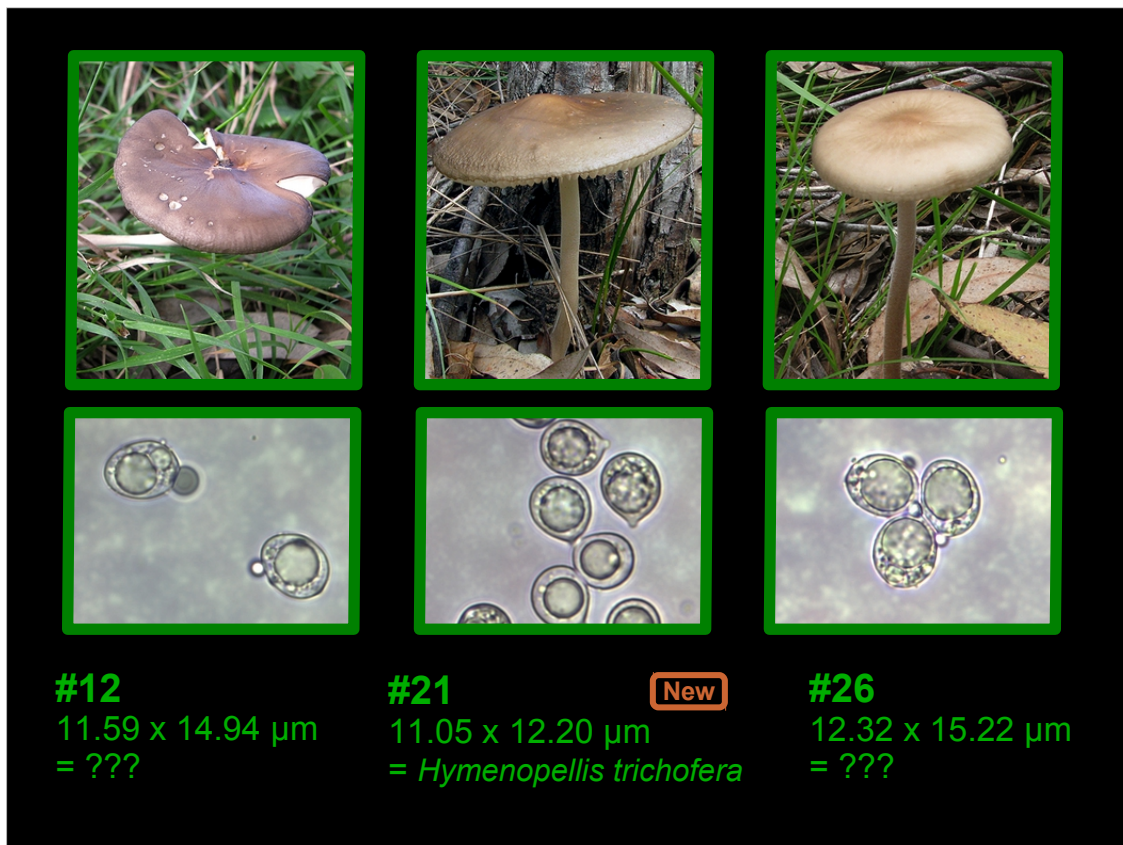
GIR_130411_F26_CR



I think that #12 is some sort of *Xerula* aka *Hymenopellis*. It was a bit squashed – a kangaroo had been sitting on it!

I found a couple more *Xerulas* - #21 and #26. These two were along the Castle Rock track.

All three specimens looked slightly different – colour, stipe length. I wondered if they were all the same species.



I used a key that Pat sent me to try to work out what they are. As you can see, I was successful with only #21.

The first step of the key is about spore size – if the spores are smaller than a certain size, it must be *Hymenopellis trichofera*.

Step two of the key refers to the basidia. I haven't yet been able to find any on my first attempts, but I will keep looking!

From the variation in colour and shape of the fruiting caps and the spores, I do think that I might have three different species.



Bolete
***Gyroporus* sp.?**

GIR_130409_F13_CR



This pretty little bolete was about a meter away from #12, the Xerula. Both fungi were only meters away from our tent – so that brought the total of fungi found near our tent to be six different species!

As with the other bolete, #10, I managed to write down a good description of it, but it likewise disintegrated over night.

More Puffballs!

GIR_130409_F14_VR



More puffballs!

To my surprise, I found these growing in a gnamma. A “gnamma” is a rock basin, formed in the surface of granite pavements by weathering. "Gnamma" is an Aboriginal word, originating from Western Australia where the local rock basins held an important water source for the indigenous people.

This particular gnamma was quite shallow and the puffballs were growing in only about half a centimetre of very clayey soil.

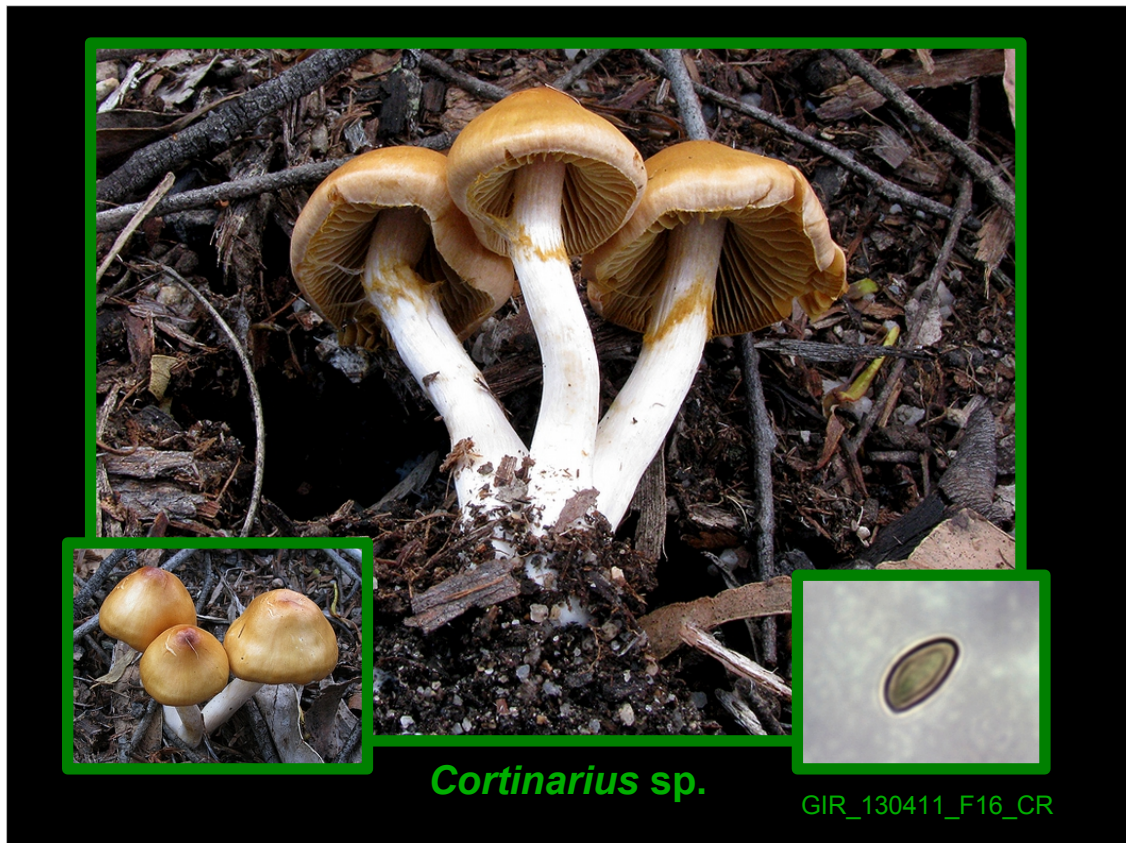


And so we come to the fungi I collected on my last day of the foray.

This little *Amanita* was growing at the base of a large eucalypt.

If you look closely, the veil and rings have a strong yellowish tinge to them. The flesh of the cap and stipe bruised yellowish.

The spore print was white.



This little group of *Cortinarius* was growing less than a meter away from #15, the *Amanita*.

You can see here one of it's spores – looking quite a greeny-brown in water.

I need to get hold of a key for this genus before I can try to work out its species.



GIR_130411_F17_CR

???

Haven't yet examined it.

Spore print – white.



This was a weird little thing. It was growing in the crack between two rocks placed as a step on the track. Water had obviously recently flowed down the steps, leaving some soil behind in the crack and partially burying the fungus.

I had no idea what it was and was surprised to find that it had gills. I managed to get a spore print from it – white.

Laetiporus portentosus
White Punk New

GIR_130411_F18_VR



I saw three of these that day. The first was about 10 meters off the ground, still attached to the side of a Stringybark. My husband jokingly asked if I was going to climb up and get it!

Fortunately, I found two that had fallen from their hosts. One was quite soggy and rotting, but this one I thought was worth collecting.

As you can see, it is absolutely riddled with insect holes. Not a specimen worth giving to the Herbarium, but it is firm evidence that the species is in Girraween.

Another new one for my list!

??? Polypore

Haven't yet examined it.
No spore print.

GIR_130411_F19_VR



This little polypore was growing on a tree stump right next to the track.

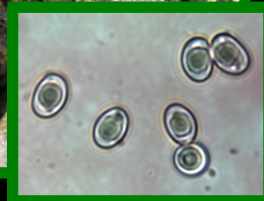
As is usual for me and polypores, I couldn't coax a spore print from it.



I think this one is my favourite for the foray. The pores are quite interesting. When I looked at them from the side (as in the big photo) they looked white. When I looked at them directly, they looked a light brownish colour (small photo on the left). It was almost like an optical illusion.

This fungus drove me crazy for a couple of days. I was determined to try to key it out, using the information I got at last year's Polypores workshop.

I think it *might* be a *Phellinus* and I think it *might* be *P. inermis*. But I could be wrong.



Coltricia cinnamomea

GIR_130411_F23_CR

Here's an easy one. It's a bit tattered and not worth the Herbarium's attention, but again it is proof that the species is in the park. It was already on my list, but it was nice to see one for myself.

It was also interesting to have a look at its spores under the microscope.



***Amanita* sp.**
Haven't yet examined it.

GIR_130411_F24_CR

Another *Amanita*. This was a lot bigger than #15 and quite different. The cap is quite brown in colour and the ring is a lot less defined – just a brownish smear on the stipe.



GIR_130411_F25_VR

Trametes???

**Haven't yet examined it.
No spore print.**



This is a nice little bracket I found growing on yet another fallen and burned tree trunk.

Megan thinks that it might be a *Trametes* of some sort.

As usual, I didn't get a spore print.

**The Ones I Left Behind...
And Later Regretted It.**

Hyphodontia sp.? →



During that last day, Chris and I found three Corticioids. Not knowing what to do with them, I didn't take any specimens.

Later, when I was going through my photos, I began to regret leaving them. They really are quite interesting looking things and I've now decided that I want to learn more about them.

Next time I go to Girraween, I hope to find some more and then I will treat them with the respect they deserve!

In Conclusion



So far, 10 new fungi for my list of Girraween's species.



I have learned:

- A dehydrator is a must!
- Spores should be measured at 1000x in KOH;
- It's impossible to identify many fungi without looking at their microscopic features;
- Due to how their sensor plate works, many cameras for microscopes don't take as clear an image as the one you see through the eyepieces.

Even though I haven't yet finished identifying all my specimens, I have ten new fungi to add to my list for the park.

I've learned that a dehydrator is a *must* for preserving boletes. The brown bag treatment dried the rest of my specimens enough so I could get them home safely, where I finished off the job properly with the dehydrator.

Now I have my microscope, I'm learning all about how to make up slides and how to measure things. I've learned that spores shrink when you dry them, so you should put them in KOH to rehydrate them before measuring. I also learned that the standard is to measure spores at 1000x.

As a beginner amateur mycologist, this is a very important lesson I've learned. You simply *cannot* identify many fungi properly without looking at their microscopic features.

And finally, no matter how hard I tried, I couldn't get as clear an image in a photo as I could by looking through the eyepieces of my microscope. I discovered that the softer focus is due to how the microscope's camera sensor plate works. I will have to put up with slightly burry images until I can afford a much more expensive camera!



Camera: Canon SX100 IS

**Microscope: Prism Optical
BK 5000 T with
Tucsen IS500 camera**



Finally, after my talk “A Beginner's Foray into Fungi” earlier this year, someone had asked me what camera I use.

This is my camera. It is fairly old, but it still does the job.

I've only recently bought my first microscope. Apart from not initially understanding the limitations of its camera, I've been very happy with it.