

### COOLEMAN RIDGE PARK CARE GROUP

## Newsletter February 2024

### Previous Meeting Sunday 21 January 2024 Mt Arawang

After dealing with the *Vinca major* on the trig, five of us (Linda Spinaze, Jenny Shapcott, Jen Walton and Paul Sheils) headed down the north-western slope of Mt Arawang where we had successfully reduced the verbascum last year. We dabbed or dug-out the few verbascum that were re-growing, and moved on to another verbascum patch further down the slope. On the way we removed many Solanum chenopodioides, and a few small Chinese elm saplings. On making our way back to the path across the slope we came across a medium-sized wild-cherry tree, too big for us to deal with. Paul marked it on the weed-map. Beside the tree was a patch of interesting grass, suspected to be Chilean Needle Grass, but there were no seed-heads to confirm identification. Proceeding back down the path we cut back some protruding blackberry canes so that walkers would be less likely to be snagged as hiked up and down the mountain.

Linda Spinaze

### **Ancient Azolla**

Red Azolla fern plants continue to cover the surface of the Old Dam, and have done for just over a year now. They continue to arouse curiosity and did you know the humble Azolla fern has an impressive ancient history, and one with contemporary significance.

# Next Meeting Sunday 18 February 2024 Above Chauvel Circle

**Time:** 8.30 am – 11.00 am.

Meet: Chauvel Circle.

**Bring:** hat, gloves, water to drink.

**Task:** weeding – attacking woody weeds

Contact: Linda Spinaze 62886916

Mar. meeting: Sun 17 Old Dam

In favourable conditions, Azolla can double its biomass over two to three days. Warmth and phosphorous are usually the main limits to its growth, as Azolla can fix atmospheric nitrogen. So it's very efficient at sequestering carbon from the air. Around 49 million years ago, what's known as "the Azolla event" is believed to have occurred when huge Azolla blooms covered around 4 million square kilometres of the Arctic Ocean. As the Azolla grew and died over about 800,00 years, dead plants sank to the ocean floor and were incorporated into the sediment. They formed compressed layers many metres deep, as the absence of oxygen prevented decomposition. This process led to a draw-down of carbon dioxide, and is believed to have helped reverse the "greenhouse Earth" state of the Paleocene-Eocene Thermal Maximum, when the planet was hot enough for palm trees to grow at the poles. But the wheel is turning. Over millions of years these buried Arctic organic materials were converted into hydrocarbons – gas, oil and coal. A number of nations and companies are actively considering mining these Arctic reserves – a significant risk to local ecosystems, and ultimately adding yet more greenhouse gases to our atmosphere. On a more positive note, some scientists are experimenting with ways to utilize Azolla to sequester carbon dioxide to reduce atmospheric levels. So next time you look at the plants growing on the Old Dam, give them a bit of respect!

Peter Lindenmayer

#### **BNT** and the Wombat

At the end of January the Bicentennial Nature Trail (BNT) north of the Old Dam was repaired, yet again, with a wide and long strip of dirt. This completely covered and filled in the wombat's burrow. Presumably, it was escorted from the premises before work began. However, will the wombat accept that this area is probably not a long term solution to its housing situation? Or will it fail to be deterred and begin digging its burrow all over again. You will be kept informed. Meanwhile, that part of the BNT is now safe for everyone to traverse. For now.



Newly repaired BNT

Photo: Rob Lundie

Rob Lundie

### Sleeper Weeds

There are some plant species which are favoured in our gardens (and I confess I do have a couple of them!) that are actually getting out into the Canberra bushland and waterways preventing native grasses growing.

We do need to be more alert to the invasive nature of these 'sleeper weeds' by taking photos of any sightings in the bush and noting their location on the <u>Canberra nature map</u>. This will put some pressure on the ACT Government and nurseries who continue to encourage the purchase of these weeds. <u>Canberra Sleeper Weeds</u> shows 12 such species eg agapanthus (below) and nandina.



Helen Govey

### **Notes from the President**

No doubt you have all seen that PCS conducted a prescribed burn around Cooleman Trig in mid-December. They are legally bound to perform burns every year to reduce the harm from bushfires. However, members of the Group are a little disappointed that some of the Casuarina verticillata appear at this stage, to be more burnt than expected. As part of the plan I agreed to spray the weedy re-growth after the burn, so this morning I tackled a persistent patch of African Lovegrass. There were virtually no native plants in the patch, just ALG, St Johns Wort and skeleton weed. However, after I had sprayed the main patch I moved along the fence-line looking for outlyers, and was very pleased to be able to enjoy some areas with lovely native plants resprouting. It made the morning worthwhile! This year the Group is considering putting some plants into Kathner St Dam. Although this dam was formed about 20 years ago, there has been no recruitment of water-plants. We are not sure why this is so. We hope to get approval to plant some appropriate plants around the edges to improve the habitat and to attract more frogs and birds. I'm attending a habitat-renewal workshop this

weekend, so I am hoping to learn some new ideas on how best to increase native plants on the Ridge.

Linda Spinaze