

# HFNC Excursion to Mullinger Swamp, Kybybolite on 22 May 2022

Rod Bird

**Participants:** D Luhrs & R Bird, Y Ingeme & R Zollinger, W & P MacDonald, P Hocking, G Cayley, R Simpson, S Scott, K Aldridge, J Logan and V Keiller.

This excursion had been arranged for 2021 but Covid restrictions forced its cancellation. This year we left Hamilton at 9.00 am, driving to Casterton and then north through Dergholm to Apsley. From Wannon to a little beyond Dergholm we travelled through fog that was very dense in patches, resulting in an extended travel time. After a short stop in Apsley we drove a little way west on the Wimmera Highway, turning right onto the Benayeo Rd and after 15 km turning left on Butterworth Rd, arriving at the South Australian **Mullinger Swamp Conservation Reserve** after a further 5 km.

The reserve has changed significantly since 2008 when Diane and I visited to measure some of the River Red Gums (*E. camaldulensis*). The SA government has erected several information boards and part of the paddock of large trees west of the swamp has been fenced off, resulting in a prolific regeneration of River Red Gums (RRGs). That is not evident in the map below, which reflects the situation in 2008.



A question arose as to whether the 37-ha swamp was actually in South Australia. A Google Map shows that the border (141 degrees longitude) actually cuts across the swamp; the eastern 24-ha portion is Victoria's **Mullinger Swamp Wildlife Reserve**. The gigantic RRG that we came to see is indubitably on the SA side of the border.

We had a late morning tea looking at birds on the swamp, which unexpectedly had a shallow cover of water over about a third of the area. Waterbirds seen included a few brightly coloured Australian Shelduck, Little Pied Cormorant, Silver Gull, Grey Teal, Pacific Black Duck, White-faced Heron, Masked Lapwing, Australasian Grebe and Black-fronted Dotterel. At least 8 Whistling Kites patrolled the swamp and White-plumed Honeyeaters and Brown Treecreepers were prominent in the live and dead RRGs.



View across Mullinger Swamp from the picnic area near the NW corner



A feature of this swamp is that the waters once ran freely into two ‘runaway holes’ in the basal limestone near the entrance to the reserve. Folklore has it that when the water is running underground people in Kybybolite can hear cutlery rattling in the drawers. Many years ago a bank was constructed between those sink holes and the swamp in order to lift the water level in the swamp to a level that did not cause flooding to adjacent paddocks. One consequence appears to have been the death of most of the hundreds of RRG of varying size (age) in the swamp (see photos). The water mark on the dead trees varies from about 30 cm to 1.5 m above ground. Those trees could not survive long periods standing in water; therefore most of the swamp must have been an ephemeral wetland in earlier centuries.



Part of the swamp and its dead RRGs with water marks showing flooding depth



Runaway Hole NW corner and the blocking mound



Deeper N end of the swamp

‘Big Red’ is found across the track near the entrance to the reserve. One now approaches it through a mass of young volunteer RRGs and a few other species that have been planted. The tree has a massive bole which has been hollowed out by fungi and fire. Inside we found a small desiccated bat. Its forearm length was about 37.5 mm, in the range of the Chocolate Wattleed Bat (*Chalinolobus morio*), but other features were not easy to discern.

We measured the girth of Big Red at 1.3 m above ground and the result was 12.3 m. This was 18 cm more than in Jan. 2008, so the diameter growth was about 5.7 cm in 14 years (DBH 385.8 cm in 2008 and 391.5 cm in 2022). The mean annual DBH growth over that period is therefore 4.1 mm. If we extrapolated that to a lifetime (3915/4.1) then the tree could be 950 years old! That is pure speculation because, apart from errors in measurement over such a short period, we know virtually nothing about its growth history. It is more likely to be 600-700 years old (from an estimate from other sources of 6 mm/yr DBH growth). It was 42 m tall in 2008 but may be a little less now because some terminal branches appear to have died back (one erroneous report on the web states that it is 50 m tall).





Big Red and HFNC admirers



Big Red (the entrance is on the other side)

Big Red is a massive, ancient tree but whether it is the largest in Australia is debatable. It depends on what one is assessing – is it height, diameter, total mass of timber or span (or some combination)? In terms of mass of wood it may rank highest among the top 7 contenders – at Mt Remarkable and Charleston in SA and Fyans Creek, Dwyers Creek, Gariwerd NP and Barmah Forest in Victoria.

After our short walk from the NW corner to see Big Red we walked anticlockwise around (and sometimes on) the swamp. The southern areas had recently lost the surface water and carried a dense but shallow mat of green vegetation, principally Common Sneezeweed (*Centipeda cunninghamii*), on the sticky blackish mud. There was ample evidence of Common Yabby (*Cherax destructor*) on the swamp and this species is apparently sought here by fisher folk and birds alike. There were also many large bivalve shells of the freshwater Billabong Mussel (*Velesunio ambiguus*) on the surface of the mud.

One wind-thrown tree near the margin of the swamp showed a layering facility, rooting from a part that had sunk into the mud.

The swamp is ringed with picturesque RRGs, including some of the lunette on the east side and extending a little way onto the adjacent Wimmera Plain. There is a track around the swamp, passing along the top of the sandy lunette.



A layered tree on the swamp margin



Track on the sandy lunette





Views through RRGs to the swamp from the lunette on the east side

We encountered a party of two 4WD vehicles and trail bike on our walk. The party were enjoying an afternoon of noise; luckily we had looked at the birds earlier, for most of the ducks and some other species departed once the motor bike started up.

Birds found the dead trees on the swamp quite inviting and we saw Whistling Kites, White-plumed Honeyeaters, Brown Treecreepers, Little Ravens and Welcome Swallows on them. Cormorants perched on stumps and logs where there was water.



Track on the N<sup>th</sup> (Wimmera Plains) edge of reserve



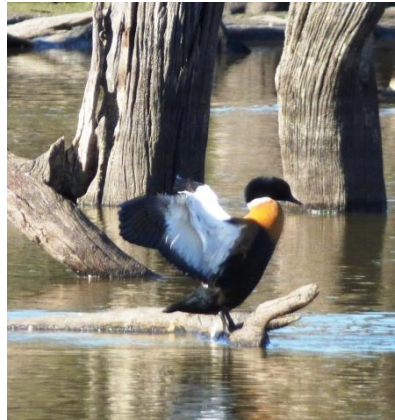
Welcome Swallow



Brown Treecreeper DL



Silver Gull DL



Australian Shelduck DL



White-plumed Honeyeaters DL

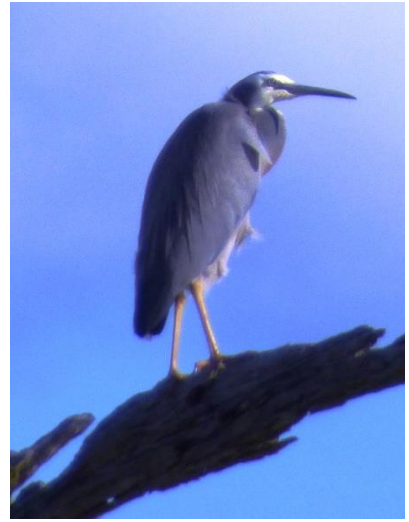




Grey Teal DL



Little Pied Cormorant DL



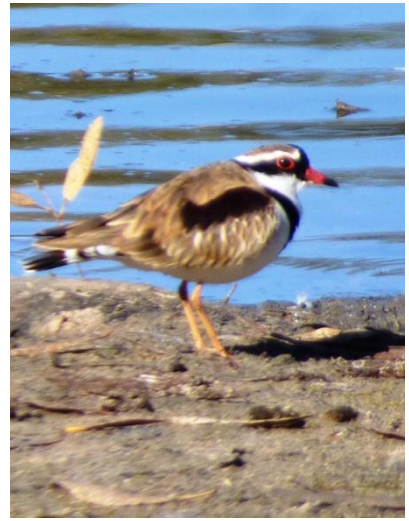
White-faced Heron DL



Grey Shrike-thrush DL



Red-rumped Parrot DL



Black-fronted Dotterel DL



Australasian Grebe (non-breeding)? DL



Mullinger Swamp bloom DL



Whistling Kite DL



A Puffball sp. on the swamp DL



A Puffball sp. in woodland DL





Black-fronted Dotterels DL



Afternoon tea before departing Mullinger Swp DL

Upon leaving Mullinger Swamp we turned right off Benayeo Rd onto a dirt track near a sign for **Lake Jaie Jaie**. This short track has some deep ruts followed by deep sand and would be a little tricky in winter. It would be best to walk from the road. The lake is extensive and bordered by RRGs. There is a patch of Cumbungi (*Typha* sp.) on a seepage area near the entrance. There was also a colourful patch of what appeared to be Mud Dock (*Rumex bidens*) on the muddy surface of the lake. Other plants included Common Sneezeweed and *Alternanthera denticulata* (Lesser Joyweed). The tree near the gate has a branch that curls around the trunk in a very odd manner. The roughly circular shallow lake is a **Wildlife Reserve** (open to duck-shooting in season) and it is about 40 ha in area. It was dry when we visited.



Lake Jaie Jaie DL



Mud Dock and view to the Cumbungi patch DL



RRG with the twisted branch



Mud Dock and RRGs on the rim of the lake

### Birdlist for Mullinger Swamp (WM)

Australasian Grebe  
 Australian Magpie  
 Australian Shelduck  
 Black-fronted Dotterel  
 Brown Treecreeper  
 Galah  
 Grey Shrike-thrush  
 Grey Teal

Laughing Kookaburra  
 Little Pied Cormorant  
 Little Raven  
 Magpie-lark  
 Masked Lapwing  
 Noisy Miner  
 Pacific Black Duck  
 Red-rumped Parrot

Silver Gull  
 Sulphur-crested Cockatoo  
 Superb Fairy-wren  
 White-necked Heron  
 White-plumed Honeyeater  
 Welcome Swallow  
 Whistling Kite  
 Willie Wagtail