

HFNC weed control report for Nigretta Flora Reserve 2020

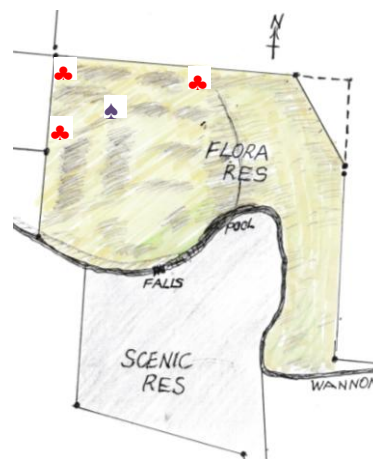
HFNC requested the Lands Dept to cancel the grazing lease on this Crown Land in 1975. HFNC submissions to the LCC were successful and this 12 ha grassy woodland block with frontage to the Wannon River and Nigretta Falls became a Flora Reserve in 1982. Our flora surveys have shown 205 native species present. An aggressive invader, African Weed Orchid (AWO), was found in great numbers on this 12-ha site in 2009 and action has been taken over the last 13 years to combat it, as well as other weeds (e.g. Phalaris) resulting from a history of grazing and other incursions.

Hamilton's rainfall for May-Oct. was 90, 61, 38, 70, 95 & 91 mm, a total of 445 mm, cf. the long-term average of 427 mm. The 6-month total for 2019 was 402 mm. Sep-Oct spring rain for 2020 was 186 mm, cf. 97 mm for 2019 and 139 mm long-term. November was also wetter in 2020 than in 2019.

Saturday 17 Oct. 4 members (RB, DL, PH, & RT) approached from the northern side through private property, the river level being too high to cross. We variously worked from 10 am to 5.15 pm (total 24 hrs) and wiped 5,330 AWO with 9.3 L of glyphosate (30 mL/L), metsulfuron methyl (1 g/L), wetter (5 mL/L) and dye (5 mL/L) solution. Excluding some thistles that were treated, approximately 1.75 mL of wipe solution was applied per plant. There was a light shower (2.5 mm) after 4.45 pm.

A Purplish Beard Orchid (*Calochilus robertsonii*) was seen – a new record for the reserve. There were buds aplenty for Sun-orchids, Golden Moth and Onion Orchids. Plants in flower included Blue Grass-lily, Hop Glycine, Trigger Plant, Bulbine Lily, Candles, Blue Squill, Bent Goodenia, Twining Fringe-lily and Dianella. A Tiger Snake, Blue-tongue Lizard and Shingleback were also seen.

♠Saturday 31 Oct. DL, RB, PH, RT, PM & WM entered from the Nth side and worked variously from 9.30 am to 5 pm (32 person hrs) on weeds and wiped 3,005 AWO (8.4 L wipe solution; 2.8 mL/plant). About 6 L of glyphosate spray was used on *Galium* weed under Tree Violet (and some clumps of Phalaris nearby) at 3 spots: mid-way on the north side; the NW corner; along the W fence. ♣



A mob of 24 Eastern Grey Kangaroos were seen in the reserve.

Friday 3 Dec. DL & RB crossed the river (the water level was too high on the planned club visits 15 Nov or 28 Nov) and spent 2.30-5.0 pm (5 person hrs) on AWO and Cleavers. Along a strip of 20-50 m on the Sth & W edges 225 AWO were dug; 255 were pulled in the central area. Cleavers beneath shrubs on the mid-W side that survived earlier spraying, or were new germinants, were hoed.

Saturday 12 Dec. DL, RB, PH & DD crossed the river and pulled (1900) or dug (500) AWO (18 hrs); the plants were removed from the site to prevent seed dispersal on the reserve. Infestations of Bent Grass were discovered on the western slope ♠ - at least 40 spots, 'circles' from 1-3 m diameter.

Sunday 13 Dec. RB & PH (4 hr) sprayed spots of Brown-top Bent Grass (8 L) and pulled 85 AWO.

Summary of works to control AWOs since 2009:

- 2020 – 11,300 AWO wiped (8,335 plants), dug (725 plants) or pulled (2,240 plants) [83 hr]
- 2019 – 7,370 AWO wiped (6,765 plants), dug (499 plants) or pulled (106 plants) [68 hr]
- 2018 – 3,480 AWO wiped (3,225 plants) or dug (255) [60 hr]
- 2017 – 5,190 AWO wiped (3,820 plants), dug (1,265 plants) or pulled (105 plants) [57 hr]
- 2016 – 16,100 AWO wiped (13,625 plants) or dug (2,480 plants) or pulled (2,665 plants) [93 hr]
- 2015 – 4,045 AWO wiped (3,215 plants) or dug (830 plants) over the entire site [46 hr]
- 2014 – 7,975 AWO wiped (6,665 plants) or dug (1,310 plants) over the entire site [65 hr]
- 2013 – 8,275 AWO wiped or dug (8,125 plants) or pulled to remove heads (150 plants) [71 hr]
- 2012 – 6,900 AWO wiped or dug (6,800 plants) or pulled to remove heads (100 plants) [46 hr]
- 2011 – 5,500 AWO wiped (5,000 plants) or pulled to remove heads (500 plants) [39 hr]
- 2010 – 13,720 AWO wiped (10,140 plants) or pulled (3,580 plants); NW & E not done [27 hr]
- 2009 – 22,500 AWO dug (2,290 plants) or pulled (20,280 plants) but NW area not done [68 hr]

It is apparent that, at best, we are only just holding the AWO problem and not removing it. The removal of Phalaris, Cleavers and Wild Gladiolus has been more promising. We had not previously been on the site in late December and so had not found the Bent Grass. Whether it will be possible to exterminate this pest is uncertain. Where it is dense it has out-competed the native flora species.

Scenes from the Flora Reserve on 17 October 2020 – Wannan River looking upstream from Nth bank into a side stream and then downstream from Nth bank to the main stream and the Falls.



Golden Moth Orchid, Grassland Trigger-plant and Purplish Beard-orchid.



Scenes from the Flora Reserve on 12 December 2020 – Featherheads, fungus and Echidna

