

HFNC weed control report for Nigretta Flora Reserve 2022

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 Wannan 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 14 years to combat it, as well as other weeds (e.g. Phalaris (PA), Bent Grass (BG), Wild Gladioli *Gladiolus undulatus* (WG), Carrot Weed *Fumaria capreolata* (FC) & Cleavers *Galium aparine* (GA) resulting from a history of grazing, dumping of garden rubbish and other incursions.

Hamilton's rainfall for the periods May-Oct. and Sep-Oct are given below. The winter-spring period in 2022 was a little drier than usual but the Wannan River level was too high to cross from the Sth.

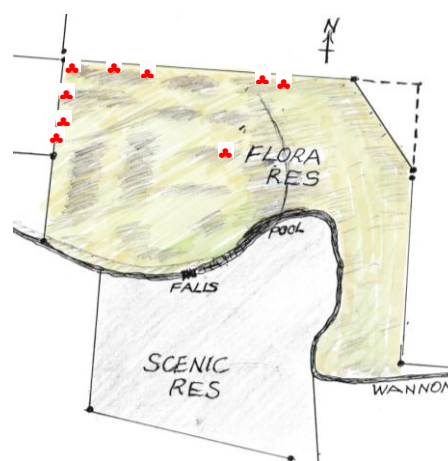
Year	May	June	Jul.	Aug.	Sept.	Oct.	May-Oct. mm	Sept. + Oct. mm
2022	66	71	73	78	73	66	367	139
2021	53	61	97	64	49	65	389	114
2020	90	61	38	70	95	91	445	186
2019	79	94	68	64	61	36	402	97
Long-term	66	71	73	78	73	66	427	139

Sunday 16 Oct. RB, DL, PH & SP spent 22 hrs wiping 2180 AWO (2 mL/plant) with 4.3 L of glyphosate (30 mL/L), metsulfuron methyl (1 g/L), wetter and dye. About a third of the reserve (west side) was not covered. A mass of GA was hoed from under 4 Tree Violets on NE fence. Light sprinkles of rain at 1.30 pm, 2.30 pm & 4.30 pm but this was not expected to negate the work.

Two new species seen: Tiny Caladenia (*Caladenia pusillus*) & Maroonhood (*Pterostylis pedunculata*).

Saturday 29 Oct. RB, PH, RZ, YI spent 13.5 hrs digging 166 AWO or wiping 1105 AWO (2.6 mL/plant), with 1272 AWO treated on western half. GA were hoed from under shrubs on N fence (2 places on W end) and centre.

Sunday 13 Nov. DL, RB, PH spent 19.5 hr digging 485 AWO and wiping 785 AWO (3.4 mL/plant). All of the open areas were covered, as in 2021. Also spot-sprayed (8 L) GA under Tree Violet shrubs at 9 spots (▲). This weed is spreading into bracken on W side, towards the N end.



Summary of works to control AWOs since 2009:

- 2022 – 4,720 AWO wiped (4,070 plants) or dug (650 plants) [55hr]
- 2021 – 2,945 AWO wiped (2,295 plants) or dug (650 plants) [59 hrs]
- 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]

We were thorough in our search of the reserve for AWO. Our tally was much higher than in 2021 when we considered that not many AWO were missed. We are just holding the problem, not removing it. We will reduce the number of visits to 2 next year and hope to have more volunteers. Control of Cleavers by hoeing and spraying must continue, as this is likely to be a greater threat.