

HFNC weed control report for Nigretta Flora Reserve 2021

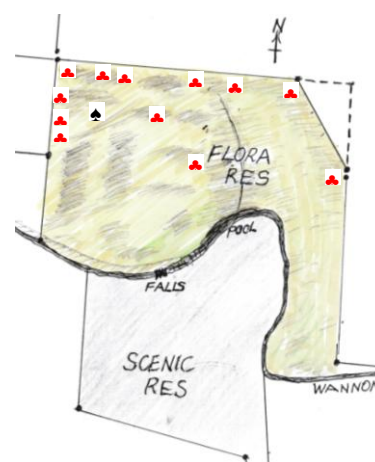
HFNC requested the Lands Dept to cancel the grazing lease on this Crown Land in 1975. HFNC submissions to the LCC were successful and this 12 ha grassy woodland block with frontage to the Wannan River and Nigretta Falls became a Flora Reserve in 1982. Our flora surveys have shown 205 native species present. 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 13 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 6-months May-Oct. and Sep-Oct periods are given below. These data show that the winter-spring period in 2021 was a little drier than usual and quite a lot drier than in 2020.

Year	May	June	Jul.	Aug.	Sept.	Oct.	May-Oct. mm	Sept. + Oct. mm
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

Saturday 16 Oct. 3 members (RB, DL, JS) entered from the northern side. We variously worked from 10.30 am to 4 pm (total 15 hrs) and wiped 1120 AWO & 100 WG with 4 L of glyphosate (30 mL/L), metsulfuron methyl (1 g/L), wetter and dye. Approximately 3 mL of wipe solution was applied per plant. We also dug 50 AWO. About a third of the reserve (west side) was not covered. A small patch of leaves of *Leptoceras menziesii* (Hare Orchid) – a 'new' species for the reserve – were found towards E end.

Saturday 30 Oct. DL, RB, PH, RZ, YI entered from the N and worked variously from 9.30 am to 4 pm (26 hrs) on weeds and wiped 1,175 AWO (4.15 L wipe solution; 3.5 mL/plant). 10 L of spray glyphosate was used on GA under Tree Violet on 7 sites (2 on W fence, 1 on NW corner, 3 on N fence, 1 near edge of gully), 1 site on W fence in bracken, 4 sites under trees (3 on N fence, 1 near Xanthorrhoeas. PA in NW corner and N fence were sprayed. A few WG were wiped in the SW corner and river crossing areas.



Sunday 14 Nov. Abandoned because the water level was too high to cross the river and the day was too wet for chemical application.

Sunday 05 Dec. DL, RB, PH, RZ & YI dug 600 AWO (16.75hrs) and spot-sprayed some GA, PA and 2 spots of BG (1 hr, 4L)♣.

Summary of works to control AWOs since 2009:

- 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. This was the lowest recorded and we do not think many were missed. However, we may be just holding the problem and not removing it. Following 2020, 2 more small patches of Bent Grass were treated and spraying of Cleavers continued.