

Hamilton Field Naturalists Club's Landcare projects

The Hamilton Field Naturalists Club (HFNC) was formed in 1958 and, apart from its interest in fauna, flora and geology, has been engaged in landcare-type works for most of its 56 years existence. The Club is affiliated with the Farm Tree & Landcare Association and the Glenelg Hopkins Catchment Management Authority and its members are vitally concerned with land management on private and public lands. This article mentions some long-term landcare projects on public land that HFNC has undertaken over the years.

Early projects included fencing, weed control and rubbish removal from what was then, in 1963, the "18-acre Reserve", now the Wannan Flora Reserve. Tree-planting on areas such as Tower Hill, Bryans Swamp, Grange Burn, Lake Linlithgow and the bare summit of Mt Napier followed.

Later projects include the restoration of local vegetation at Wannan Falls Scenic Reserve (the 30-acre pine plantation area), the 1.2 km Kanawalla Rail Reserve and more tree-planting at Lake Linlithgow.



HFNC working bee, "18-acre Reserve", June 1965).

HFNC's revegetation project at Lake Linlithgow began in 1975 (with the former Shire of Mount Rouse) when 180 local trees were planted on the east bank. Further planting in 1977 (89 trees) and 1990 & 1991 (590 trees) augmented the early planting of HFNC and that of Penshurst Primary School in 1989.

HFNC assisted the Lake Linlithgow restoration project of John Harris (ParksVictoria) from 2003, when we planted 600 trees and shrubs grown from local sources (Silver Banksia, Sweet Bursaria, Tree Violet and Austral Hollyhock) at the northern end of the lake. In 2004 and 2005 we planted a further 340 trees, on the western flank of the lake. Meanwhile, the late John Harris had achieved a dream – boundaries secured, local trees planted and livestock removed from the 1,447-ha Lake Reserve that includes the 1,015 ha lake bed.



1990/91 planting at Lake Linlithgow, seen in Dec. 2000.



Sep. 2004 planting at Lake Linlithgow, off Nth Lakes Rd.

From 1994-1999 the club planted 1,182 trees at the Wannan Falls Scenic Reserve on the site of the old pine plantation, off Morgiana Rd. The species were Blackwood, Manna Gum, Drooping Sheoak and Bursaria, grown from local sources by the members. Most of the planted trees survived and there has been a substantial natural regeneration of native ground flora.



1998 planting at Wannan Falls Scenic Reserve.



1998 planting at Wannan Falls Scenic Reserve.

Rather more strenuous was the re-establishment trees on the bald summit of Mt Napier. Major Mitchell began the clearing in 1836 when he cut down the trees in order to survey the land around. Subsequent fires, rabbits and livestock grazing completed the process. From 1984 to 1989 we planted 1,900 Manna Gum and Blackwoods on the summit and most are there today, despite feral goats and very harsh site conditions.



The bare summit of Mt Napier in 1973.



The revegetated NE area of Mt Napier summit in May 2014.

The Kanawalla Rail Reserve project (2003-2008) was assisted by GHCMA, DSE, Timbercorp, Jigsaw Farms and our own funds to fence the ends of the reserve and remove over 100 large pine trees (13 had a diameter over 120 cm), 110 smaller pines and 41 old cypress trees. In all, 830 local species of trees were also planted – Bursaria, Silver Banksia (plains form), Blackwood, Drooping Sheoak, Swamp Gum and Manna Gum) – and infestations of Harlequin Flower (*Sparaxis bulbifera*) and Purple Oxalis (*Oxalis purpurea*) attacked.



Field Nats at the North end Kanawalla Res Oct. 2006.



Planting on South end of Kanawalla Res. in Sep. 2007.

The club's focus has now turned more to the problem of environmental weeds on our roadsides and public reserves where Landcare groups do not often operate, there being many issues still to address on private land.

The damage done to native vegetation by using large-scale spraying equipment to spray Cape Tulip (*Moraea flaccida*) at the Fulham Streamside Reserve became apparent to us in 2005 when the club visited the area. We were appalled at the effect of the spraying that killed swathes of native vegetation on the heathland areas but appeared to leave most of the Cape Tulip alive! The 860-ha Fulham Reserve has 325 native plant species and is one of the best conservation sites in SW Victoria. That sort of damage was clearly unacceptable.



Older & recent areas bared by Tulip spraying at Fulham.



A better way – a tool for herbicide-wiping of Cape Tulip.

We offered our assistance to Parks Victoria and adopted the approach of herbicide-wiping individual plants in September before the peak of flowering. That was a monumental task but not back-breaking or difficult, but it does require a lot of walking to find plants dispersed through the 200 ha part of the western block that we cover. We used a modified grasping tool with small pads on the claws. The pads are dipped into a small container of herbicide and then several plants are wiped before re-dipping. This provides a selective dose to the weed but leaves adjacent vegetation untouched. Cape Tulip was widespread in the reserve before we started and we estimate that we ‘wipe’ between 50-100,000 plants each year. Biological control is needed.

Apart from Cape Tulip, we found *Sparaxis bulbifera* also invading the heathland. This invasive plant is capable of dominating the entire ground flora and had to be stopped. Wild Gladiolus (*Gladiolus gladiatus*) is an emerging weed problem, along with Bridal Creeper (*Asparagus asparagoides*).

Members of the club have visited Fulham on several days each Spring since 2006 to conduct weed control works. The collective hours devoted to the works at the site were: 2006 (80 hrs), 2007 (83 hrs), 2008 (72 hrs), 2009 (82 hrs), 2010 (66 hrs), 2011 (111 hrs), 2012 (100 hrs), 2013 (101 hrs) & 2014 (92 hrs).



Showy Podolepis on the Fulham heathland.



Nodding Greenhoods on the Fulham heathland.

Another nasty weed has emerged in Victoria. This is African Weed Orchid (*Disa bracteata*) (AWO). This pest seems to have invaded SW Victoria in about 2003. It was particularly noticeable first in the Rocklands area. We first saw it on the 12-ha Nigretta Flora Reserve in 2009, where it was abundant. That was our first visit there for several years. This reserve contains over 200 species of native plants and is one of few reserves that now represent the original flora in the district.



We were dismayed to find AWO on this magnificent natural area across the river at Nigretta Falls. We conducted working bees in 2009, and every year since then, digging up the plant to remove the corms, pulling up the plants to remove the flowering heads, or herbicide-wiping the plants.

Numbers of AWO treated each year:
 2009 (22,500 plants, 68 hrs)
 2010 (13,720 plants, 27 hrs)
 2011 (5,500 plants, 39 hrs)
 2012 (6,900 plants, 46 hrs)
 2013 (8,275 plants, 71 hrs)
 2014 (7,975 plants, 65 hrs).



African Weed Orchid in October

Herbicide-wiping in early spring is now the choice method for AWO control, achieving a more complete coverage of the site than can be achieved by digging, but followed later by digging of plants missed earlier that now had developed seed heads. Whether this pest can be eliminated is doubtful but we have made some progress in its control. It might be eliminated in areas where fewer than 1,000 plants are first seen – that number can be easily dug up to remove corms and head. But perhaps 10-20 years of follow-up work is needed thereafter, because of previous seed drop and likelihood of new wind-blown seed arriving.