
Flora and Fauna Assessment 197 McGiffords Road, Fern Hill

Prepared for Ashbourne Landcare Group



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1.0 INTRODUCTION

1.1 Background

In 2021, the Ashbourne Landcare Group commissioned the author to conduct flora and fauna assessments across twelve private properties occurring within the Ashbourne district. The project was funded by a grant provided by the North Central Catchment Management Authority (NCCMA).

The surveys confirmed that the private lands across the Ashbourne district are of very high conservation significance. The following ecological values were recorded across the 12 properties:

- 306 separate plant species, 220 which are indigenous and 86 introduced,
- 59 separate bird species,
- eight plant species listed as *Endangered* or *Critically Endangered* under the Flora and Fauna Guarantee List,
- numerous plant species of regional significance,
- 43 of the plant species observed have not previously been (officially) recorded in the area according to a 10km radius search of the Victorian Biodiversity Atlas. Twenty-five of these are indigenous and 18 are introduced.

This report presents the results of the flora and fauna assessment at 197 McGiffords Road, Fern Hill. It provides a list of the flora and fauna species that were recorded, a description of vegetation and habitat values and some recommendations for the maintenance and enhancement of ecological values.

1.2 Study area

The property at 197 McGiffords Road is approximately 35 hectares in size. Most of the property has been cleared in the past, with the exception of a small group of trees in the southern half. The property contains two large dams, including in the northern section along a drainage-line and a large, narrow dam along the western border that is nearly 400m in length. The margin of this second dam

has previously been planted with a range of native and exotic species, including large stands of Radiata Pine (**Pinus radiata*).

1.3 Methods

197 McGiffords Road was assessed for approximately three hours on the 15th of November 2021. Most areas of the property were traversed on foot and a list was compiled of all flora and fauna species observed. For fauna, most species were recorded from identification of calls (e.g. birds, frogs) or scats and tracks (e.g. Eastern Grey Kangaroo). Notes were taken on the vegetation, habitat features and management issues, whilst photographs were taken of representative areas.

2.0 RESULTS

2.1 Flora species

During the December 2021 survey, a total of 66 flora species were recorded at 197 McGiffords Road (see Appendix 1). Of these, 48 are indigenous species and 18 are introduced. One of the recorded species is considered to be of regional significance:

- several plants of Pointed Swamp Wallaby-grass (*Amphibromus archeri*) were recorded in a wet depression in the central section of the property. There are very few previous records of this species for the region.

Table 1 Significant flora species recorded at 197 McGiffords Road, December 2021

Scientific Name	Common Name	Status
<i>Amphibromus archeri</i>	Pointed Swamp Wallaby-grass	Regional

2.2 Vegetation description

The majority of the property is dominated by introduced pasture species, with only occasional scattered native grasses such as Weeping-grass (*Microlaena stipoides*) and Wallaby-grass (*Rytidosperma* spp.). Remnant trees are restricted to a small group of Narrow-leaf Peppermint (*Eucalyptus radiata*) in the southern half of the property (Manna Gum and Swamp Gum around the dam in the west are probably planted). The drainage-lines, depressions and dams support a variety of native wetland sedges, rushes, grasses and forbs, with the northern dam supporting the highest cover. These species include Common Spike-sedge (*Eleocharis acuta*), Tall Spike-sedge (*Eleocharis spathulata*), Hollow Rush (*Juncus amabilis*), Pointed Swamp Wallaby-grass (*Amphibromus archeri*), Common Blown-grass (*Lachnagrostis filiformis*), White Purselane (*Montia australasica*), Shining Buttercup (*Ranunculus glabrifolius*) and Small River Buttercup (*Ranunculus amphitrichus*). Amongst the plantings around the dam on the western border of the property there are patches of remnant vegetation, including scattered Blackwood (*Acacia melanoxylon*) and native grasses.



Plate 1 the dam in the western section of the property has been planted with a variety of native and introduced species



Plate 2 Remnant trees in the southern half of the property.

2.3 High threat weeds

Of the weeds recorded within the property, two are considered to be high threat species that are recommended for control. These species are listed in Table 2 below. Common Blackberry was only recorded as scattered small plants while large mature Radiata Pine occur around the western dam.

Table 2 High threat weeds recorded at 44 Daniels Road, November 2021

Scientific Name	Common Name
<i>Pinus radiata</i>	Radiata Pine
<i>Rubus anglocandicans</i>	Common Blackberry

2.4 Fauna

During the December 2021 survey, a total of 25 fauna species were recorded, including 21 bird, two frog and two mammal species (see Appendix 2). The property would support a much greater diversity of fauna species, however due to the high mobility and cryptic nature of many species, it would take a survey across multiple years and seasons to prepare a detailed list.

Of the recorded species, the Latham's Snipe (*Gallinago hardwickii*) is listed as an important migratory species under the federal Environment Protection and Biodiversity Conservation (EPBC) 1999 Act. One individual was flushed from low sedgeland around the edge of the northern dam. Latham's Snipe breed in Japan and eastern Russia and migrate to the southern hemisphere during the summer months where they frequent wetland habitats. They are not common in the region. The landowner has also sighted the FFG-listed Powerful Owl (*Ninox strenua*) roosting in the Radiata Pine trees on the northern side of the dam in the western section of the property.

Habitat features observed within the property included:

- Several large trees with small hollows in southern half of the property. These trees are essential for many local birds and mammals which rely on hollows for breeding.
- The dams support a good range of aquatic vegetation and would provide habitat for waterbirds, frogs and waterbugs. They would also serve as a source of drinking water for many animals.
- Although mostly exotic, the planted Radiata Pine and other trees around the western dam provide habitat for many birds, including roosting areas for the threatened Powerful Owl.

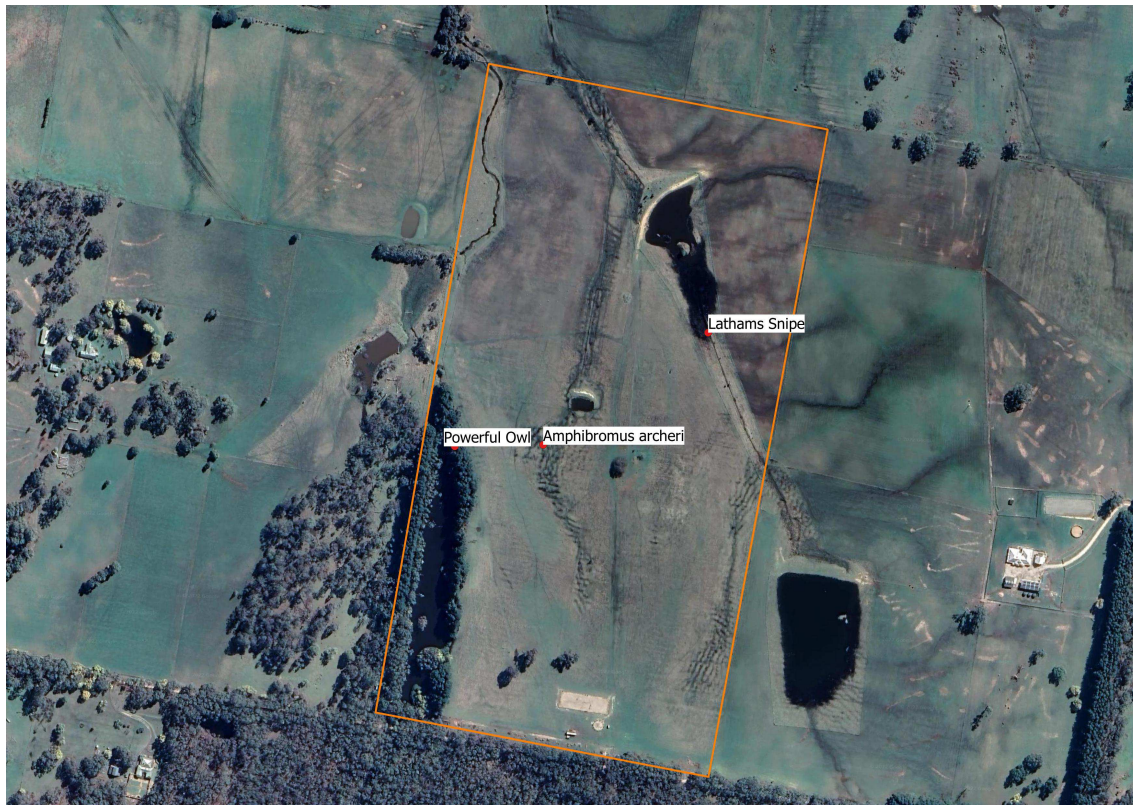


Plate 3 Significant flora and fauna species recorded at 197 McGiffords Road, November 2021

2.5 Management issues and recommendations

Maintaining and enhancing the ecological values of the property will require protection of remnant vegetation and occasional management. The following actions should be considered by the landowner:

- Control of Common Blackberry and other high threat weeds observed in future. Smaller plants can be removed by hand, however larger plants may need to be cut at ground level and painted with herbicide. If the landowner wishes to avoid using herbicide, plants can be regularly cut at ground level. They will continue to re-shoot but at least will be kept at a low height and will not spread further seed.
- Depending on the landowner's personal vision for the property, it would be of great value to restore more indigenous trees and shrubs across the property. This could include planting of narrow corridors along the outer edges of the gullies that run through the property. Any planted areas would require fencing to protect from stock.

Ideal tree and shrub species for planting in wetter areas include Swamp Gum (*Eucalyptus ovata*) and Yarra Gum (*Eucalyptus yarraensis*), while drier areas could be planted with Manna Gum (*Eucalyptus viminalis*), Narrow-leaf Peppermint (*Eucalyptus radiata*), Blackwood (*Acacia melanoxylon*) and Silver Wattle (*Acacia dealbata*).

- It has been suggested that the Radiata Pines around the western dam may be cleared and replaced with native species (Matthew Allen pers. comm.). Although this would be of benefit in the long-term, the habitat values of this vegetation for Powerful Owl should be considered. There is plenty of other suitable roosting habitat for Powerful Owl in the local area, so if all of the pines are cleared this would be unlikely to negatively impact the species. However, if the landowners wish the Powerful Owl to continue to roost on the property, they should consider leaving an adequate patch of pines and only clearing and revegetating the area to the south.

3.0 CONCLUSION

A total of 66 flora species and 25 fauna species were recorded during the brief assessment, including several significant flora and fauna species. The property supports habitat for a variety of fauna, particularly around the existing dams.

Maintaining and enhancing the ecological values of the property will require controlling high threat weeds and potentially undertaking revegetation across the property.

Appendix 1 - Flora species recorded at 197 McGiffords Road, December 2021

Key to symbols	
*	Introduced species
#	Non-indigenous native species

Status	Scientific Name	Common Name	FFG Status
	<i>Acacia dealbata</i> subsp. <i>dealbata</i>	Silver Wattle	
	<i>Acacia melanoxylon</i>	Blackwood	
	<i>Acaena novae-zelandiae</i>	Bidgee-widgee	
*	<i>Acetosella vulgaris</i>	Sheep Sorrel	
*	<i>Aira elegantissima</i>	Delicate Hair-grass	
	<i>Amphibromus archeri</i>	Pointed Swamp Wallaby-grass	
	<i>Amphibromus neesii</i>	Southern Swamp Wallaby-grass	
*	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	
*	<i>Briza minor</i>	Lesser Quaking-grass	
*	<i>Callitriche stagnalis</i>	Common Water-starwort	
	<i>Carex inversa</i>	Knob Sedge	
	<i>Centella cordifolia</i>	Centella	
	<i>Centipeda elatinoides</i>	Elatine Sneezeweed	
	<i>Chiloglottis valida</i>	Common Bird-orchid	
*	<i>Cirsium vulgare</i>	Spear Thistle	
	<i>Crassula helmsii</i>	Swamp Crassula	
	<i>Drosera peltata</i> subsp. <i>peltata</i> spp. agg.	Pale Sundew	
	<i>Eleocharis acuta</i>	Common Spike-sedge	
	<i>Eleocharis sphacelata</i>	Tall Spike-sedge	
	<i>Eragrostis brownii</i>	Common Love-grass	
	<i>Eucalyptus ovata</i> subsp. <i>ovata</i>	Swamp Gum	
	<i>Eucalyptus radiata</i> subsp. <i>radiata</i>	Narrow-leaf Peppermint	
	<i>Eucalyptus viminalis</i> subsp. <i>viminalis</i>	Manna Gum	
	<i>Euchiton involucratus</i> s.s.	Star Cudweed	
	<i>Glossostigma elatinoides</i>	Small Mud-mat	
	<i>Hemarthria uncinata</i> var. <i>uncinata</i>	Mat Grass	
*	<i>Holcus lanatus</i>	Yorkshire Fog	
	<i>Hydrocotyle sibthorpioides</i>	Shining Pennywort	
*	<i>Hypochaeris radicata</i>	Flatweed	
	<i>Isolepis fluitans</i>	Floating Club-sedge	
	<i>Isolepis hookeriana</i>	Grassy Club-sedge	
*	<i>Isolepis levynsiana</i>	Tiny Flat-sedge	
	<i>Isolepis marginata</i>	Little Club-sedge	
	<i>Juncus amabilis</i>	Hollow Rush	

Status	Scientific Name	Common Name	FFG Status
*	<i>Juncus articulatus</i> subsp. <i>articulatus</i>	Jointed Rush	
	<i>Juncus bufonius</i>	Toad Rush	
	<i>Juncus gregiflorus</i>	Green Rush	
	<i>Juncus pallidus</i>	Pale Rush	
	<i>Juncus planifolius</i>	Broad-leaf Rush	
	<i>Juncus sarophorus</i>	Broom Rush	
	<i>Juncus subsecundus</i>	Finger Rush	
	<i>Lachnagrostis filiformis</i> s.s.	Common Blown-grass	
*	<i>Leontodon saxatilis</i> subsp. <i>saxatilis</i>	Hairy Hawkbit	
	<i>Leptospermum continentale</i>	Prickly Tea-tree	
	<i>Lobelia pedunculata</i> s.s.	Matted Pratia	
*	<i>Lolium perenne</i>	Perennial Rye-grass	
	<i>Lythrum hyssopifolia</i>	Small Loosestrife	
p	<i>Melaleuca ericifolia</i>	Swamp Paperbark	
	<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass	
	<i>Montia australasica</i>	White Purslane	
*	<i>Paspalum distichum</i>	Water Couch	
*	<i>Pinus radiata</i>	Radiata Pine	
	<i>Potamogeton cheesemanii</i>	Red Pondweed	
	<i>Pteridium esculentum</i> subsp. <i>esculentum</i>	Austral Bracken	
	<i>Ranunculus amphitrichus</i>	Small River Buttercup	
	<i>Ranunculus glabrifolius</i>	Shining Buttercup	
*	<i>Rubus anglocandicans</i>	Common Blackberry	
	<i>Rumex brownii</i>	Slender Dock	
	<i>Rytidosperma laeve</i>	Smooth Wallaby-grass	
	<i>Rytidosperma semiannulare</i>	Wetland Wallaby-grass	
	<i>Rytidosperma</i> spp.	Wallaby Grass	
	<i>Schoenus apogon</i>	Common Bog-sedge	
*	<i>Stellaria media</i>	Chickweed	
*	<i>Trifolium dubium</i>	Suckling Clover	
	<i>Trifolium striatum</i>	Knotted Clover	
*	<i>Trifolium subterraneum</i>	Subterranean Clover	

Appendix 2 - - Fauna species recorded at 197 McGiffords Road, December 2021

Key to symbols	
*	Introduced species
L	Recorded previously by the landowner

Status	Common name	Scientific Name	Type	FFG Status	EPBC
	Australasian Grebe	<i>Tachybaptus novaehollandiae</i>	Bird		
	Australian Magpie	<i>Cracticus tibicen</i>	Bird		
	Australian White Ibis	<i>Threskiornis molucca</i>	Bird		
	Australian Wood Duck	<i>Chenonetta jubata</i>	Bird		
	Banjo Frog	<i>Limnodynastes dumerilii</i>	Frog		
	Brown Thornbill	<i>Acanthiza pusilla</i>	Bird		
	Common Froglet	<i>Crinia signifera</i>	Frog		
	Crimson Rosella	<i>Platycercus elegans</i>	Bird		
	Eastern Grey Kangaroo	<i>Macropus giganteus</i>	Mammal		
*	Eurasian Skylark	<i>Alauda arvensis</i>	Bird		
	European Hare	<i>Lepus europaeus</i>	Mammal		
	Grey Fantail	<i>Rhipidura albiscapa</i>	Bird		
	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	Bird		
	Latham's Snipe	<i>Gallinago hardwickii</i>	Bird		Migratory
	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	Bird		
	Little Pied Cormorant	<i>Microcarbo melanoleucos</i>	Bird		
	Little Raven	<i>Corvus mellori</i>	Bird		
	Pacific Black Duck	<i>Anas superciliosa</i>	Bird		
L	Powerful Owl	<i>Ninox strenua</i>	Bird	Vulnerable	
	Purple Swamphen	<i>Porphyrio porphyrio</i>	Bird		
	Red Wattlebird	<i>Anthochaera carunculata</i>	Bird		
	Stubble Quail	<i>Coturnix pectoralis</i>	Bird		
	Superb Fairy-wren	<i>Malurus cyaneus</i>	Bird		
	Welcome Swallow	<i>Hirundo neoxena</i>	Bird		
	White-faced Heron	<i>Egretta novaehollandiae</i>	Bird		
	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	Bird		