From:Frances MowlingSent:5 Aug 2020 16:13:59 +1000To:Planning @ Meander Valley CouncilSubject:MEA-S20.0 Entally Lodge Specific Area Plan - Response to applicationAttachments:Entally Woodland2.pdf, bird\_mammal\_reptile\_list rutherglenroad\_25\_7\_2020.pdf

Jo Oliver, Senior Planner.

Ms Oliver, attached are two PDF documents relating to MEA-S20.0 Entally Lodge Specific Area Plan, this is my response.

I draw to your attention the

- list of fauna recorded over one hundred and seventeen months observation period by myself.
- the opportunity by the owner to gain an income from the Carbon Sequestration program funded by the Federal Government from taxes.
- Entally woodland has aesthetic value.

Please attach this email as a covering note to my response docs.

Thank you,

Frances.

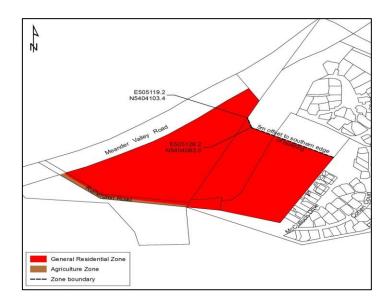
# 1. Entally Woodland

Entally Woodland (area approximately 2.5 ha) is comprised of mature and immature trees over grassland. Shrubs are extensively located on the boundary abutting the Retirement Village in an 'L' shape. Within the woodland area are some 253 individual plants.

The woodland is comprised of several mature and immature Eucalyptus species (136 individual plants) including E. globulus (13). Other plant species include Pandanus (13), Blackwood (Acacia melanoxylon 5), Acacia spp (19), Allocasuarina sp. (1), Melaleuca lanceolate (1). Total 175.

Both the native shrubs (1 - 3 m height) and trees provide habitat for a diversity of native bird species including foraging in litter and beneath bark, nesting, shelter, roosting, food – nectar and insects). Skinks, spiders, and insects (species not recorded) gain the same benefits and / or provide a source of food. Shrubs include 9 Casuarina, 10 Banksia, 27 Melaleuca, 4 Hakea, 13 Bursaria spinosa, 3 Eucalyptus species. 12 Acacia spp shrubs to 2 - 6 m height, provide nesting, food and shelter for birds, mammals, and skinks. Total number of shrubs 78.

Boobok owls circulate from the trees along the river to the woodland tall trees where their call resonates through the night. Musk loorikeets, Grey Currawong, Australian Magpie, and smaller birds roost overnight. The Magpie, Masked Lapwing, Grey Currawong, Grey Fantail, Little Corella, and Superb Blue Wren breed and raise young within the Woodland. Other more discreet bird species possibly breed in the dense cover that the shrubs provide.



### MEA-S20.0 Entally Lodge Specific Area Plan

Map 1 - parts of folios of the Register 127277/1, 111014/2, and 20627/2 and the adjoining portions of Rutherglen Road, Hadspen Source: MVC

# Response to Substantially modified part of the Meander Valley draft Local Entally proposed development FA Mowling

Echidna are frequent daily (seasonal) foragers in the soil of the woodland. Similarly, Wallabies graze on both sides of the shared access road – Rutherglen Village and Entally. Both species of snake are secure – Tiger and Copperhead, although loss of habitat has resulted in significant decline in numbers in some areas of Tasmania<sup>1</sup>.

Wedged Tailed Eagles are regularly observed soaring and swooping in the sky above the woodland and residential areas. When young accompany the parents, they call regularly to each other, this is a distinctive and characteristic sound.

Residents of Rutherglen Village and Rutherglen Residential Club, and visitors to Entally, regularly walk on the road or beneath the canopies of trees, pausing to observe birds (Kookaburra, Currawong, Superb Blue Wrens). They are particularly enchanted by Echidna activities and wallabies quietly browsing. The woodland is a well-used and valued resource because it provides valuable open space for passive observation and enjoyment of nature throughout each seasonal cycle.

✓ Aesthetically the woodland contributes numerous scenic and cultural elements to tourists and residents transiting the corridor. For residents it denotes 'home.'

**Precautionary principles** 

- ✓ Significant proportions of the local landscape have been cleared of habitat to both the East and West of the South Esk River including tall mature Eucalyptus, and shrubs such as Acacia, Bursaria, and swards of Lomandra effusa and L. longifolia, Poa spp and Gorse.
- ✓ Gorse is a declared weed. Due to the depletion of natural habitat, Gorse provides protection and a food resource for a few native fauna including Tasmanian pademelon, Echidna, Southern brown bandicoot (Threatened<sup>2</sup>), Eastern Quoll, skinks, snakes, and other species not identified.
- ✓ **Tall trees** are vital resources within a habitat depleted landscape, they provide stepping-stones for the larger bird species. They are also meaningful sentinels for residents and tourists.
- ✓ **Islands of natural vegetation within a landscape** provide connectivity between natural features such as the meandering river system and associated network of numerous dendritic creeks and streams that drain into the South Esk, and the confluence of the Meander River at Hadspen.
- ✓ Maintaining biodiversity within the landscape necessitates providing linear connections of natural vegetation such as that located along roadsides, hills, wetlands, and islands of vegetation which provide steppingstones / islands for native fauna and plants and uncultivated soil types.
- ✓ Maintaining biodiversity within the landscapes that characterise the Travellers Rest, Hadspen, Carrick tourist corridor confers value in the form of maintaining cultural and visual integrity within the landscape.
- ✓ By extension, there is merit in consistency in maintaining the existing scenic road corridor area overlay from Travellers Rest ↔ Hadspen ↔ Carrick.

<sup>&</sup>lt;sup>1</sup> <u>https://dpipwe.tas.gov.au/conservation/threatened-species-and-communities/lists-of-threatened-species/threatened-species-vertebrates</u>

<sup>&</sup>lt;sup>2</sup> <u>https://dpipwe.tas.gov.au/conservation/threatened-species-and-communities/lists-of-threatened-species/threatened-species-vertebrates</u>

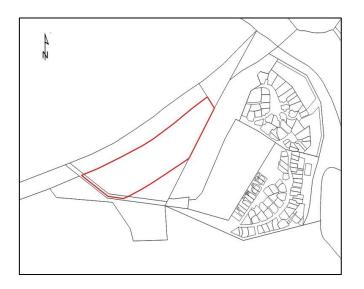
The number of tourists that stop and get out of their vehicles to view the Echidna and Pademelon foraging for food, from personal observation, is significant. This fascination occurs across many cultures including Japanese, German, American, NZ, Irish, English, Chinese, to name a few.

### Carbon sequestration

Entally woodland with 250+ individual mixed age plants, particularly the mature Eucalypts and Acacia, are carbon rich time capsules. Each tall tree and shrub continue extracting carbon dioxide from the atmosphere and storing carbon through the process of photosynthesis. Undisturbed soils also store carbon.

- ✓ Prudent land management practices can enhance the capture and storage of carbon and extract carbon dioxide from the atmosphere.
- ✓ Retaining open spaces and planting a mixed structure of tall to medium sized plants serves several functions:
  - Carbon sequestration in undisturbed soils (cultivation and fire liberate stored carbon which is transformed into carbon dioxide. C0<sub>2</sub> contributes to greenhouse gas in the atmosphere).
  - Tall trees and shrubs extract and store C0<sub>2</sub>.
  - ➤ Provides vital biodiversity to the landscape in the form of connectivity between remnant islands of natural vegetation. In the example of Entally woodland it provides connectivity in the form of a stepping-stone between the Liffey ↔ Meander ↔ South Esk ↔ river corridors ↔ roadside vegetation ↔ paddock boundaries and sentinel trees ↔ garden trees and shrubs.
  - Observations of seasonal movements of bird species encompassing 3,530+ days on the South Esk river system and Meander Valley by Mowling has generated observations that during drought and protracted rough weather conditions some species migrate from the high country and plateau. Then return when conditions improve.
  - Depletion of landscape diversity significantly reduces resilience within the natural systems to 'rebound'. Soil structure is lost following sustained cultivation, thus the abundance and diversity of native microorganisms, worms, and soil burrowing fauna including insects' declines.
  - ➤ Maintains aesthetic values along the Liffey ↔ Meander ↔ South Esk ↔ river corridors ↔ roadside vegetation which deeply satisfies domestic residents and tourists.
  - ✓ There are financial incentives directed at farmers / landowners that enable them to sequester carbon. Such incentives are supported by Australian Government, at <u>https://www.agriculture.gov.au/ag-farm-food/climatechange/cfi</u>

# 2 Area located between Meander Valley Road and Entally woodland.



Source: Figure 8 – deleted portion of the scenic road corridor area overlay

To my knowledge, within the State and MVC Planning Schemes (existing and new proposed modified) there is / are clauses that exclude building in, covering to obstruct natural flow / drainage of water in an existing natural landform feature such as dendritic creeks.

The landform of the existing paddock – located between the Meander Valley Road and the Entally Woodland – is characterised by a shallow broad drainage system which rises in the SW area of Entally woodland and flows towards a formed  $\approx 2$  m high barrier of the Meander Valley road. There is a 'soak' or area subject to inundation which drains through a culvert pipe. The 'soak' may be partially due to an accumulation of sediment falling out of suspension as flow is impeded by the culvert.

An example of natural drainage that has been impeded is located on the access road for Entally / Rutherglen Village residents. The bitumen regularly fails at the drainage focal point.

Dr FA Mowling (PhD) PO Box 38, Hadspen 7290. Tas. 03 6393 7388 or 0427645552

Fauna – Σ species recorded							
Location	Birds	Mammals	Reptiles	Frogs	Species cited on List of Threatened Species & <mark>Endemics</mark>	Exotics	TOTAL
Rutherglen	55	7	5	2	10	11	80
Entally Woodland	50	2	4	2	8	11	69

bird ID from Pizzey G & Knight F; The Field Guide to the Birds of Australia 8<sup>th</sup> edition.

Reptiles, Frogs, mammals from https://dpipwe.tas.gov.au/wildlife-management/fauna-of-tasmania/reptiles-and-frogs/.

## GARDEN (ABUTS SOUTH ESK RIVER):

Black Headed Honey Eater Endemic Yellow Throated Honey Eater Endemic **Crescent Honey Eater** New Holland Honey Eater Yellow Wattle Bird Endemic Little Wattle Bird Strong-billed Honeyeater Endemic Common Bronzewing Yellow Rumped Thornbill Brown Thornbill Tasmanian Thornbill (i.d. by Margie Latona) Endemic Striated Pardalote Spotted Pardalote (nesting + raised young 4 yrs running) Superb Blue Wren Laughing Kookaburra Goshawk white form (pair in Eucalypt + on clothesline) Endangered Green Rosella Endemic Silvereye Forest Raven Grey Currawong (raised their young) Grey Fantail Grey Shrike Thrush Golden Whistler Olive Whistler Scarlet Robin Eastern Spinebill Black Faced Cuckoo Shrike Grey Butcher Bird Yellow Tailed Black Cockatoo Fan-Tailed Cuckoo (immature) + mature calling

(30 spp)

### FLYING OVER OR CALLING FROM ADJACENT TALL TREES ABUTTING GARDEN / RIVER

Tawny Frogmouth (calling locally) Southern Boobook (calling locally) Masked Lapwing Tasmanian Native Hen (river – calling + sighting) Purple Swamp Hen Purple Swamphen (ditto) Sulphur Crested Corella Tree Martin Welcome Swallow Pallid Cuckoo: arrives early to mid-September, not heard after late Feb early March. Australian Magpie Dusky Wood Swallow Common Bronzewing Swamp Harrier White Breasted Sea Eagle Vulnerable Tasmanian Wedge Tailed Eagle *Aquila audax subsp. Fleayi* Status: Threatened Species Protection Act 1995: endangered. Endemic.

White Faced Heron Little Pied Cormorant Little Black Cormorant Wood Duck Galah Little Corella Long-Billed Corella Musk Lorikeet Sulphur Crested Corella

25 species

#### EXOTIC SPECIES (GARDEN OR FLYING OVER)

Common Starling Common blackbird Bassian thrush European Goldfinch Common Goldfinch House Sparrow Blackbird Spotted Turtle Dove

(8 spp)

Total as at 25.7.2020 = 63

#### SPECIES SITED IN/ABOVE TREES – ENTALLY SUPPLEMENTARY

Many of the species listed above occupy or transit through the trees and shrubs (boundary). Shrubs were cleared from beneath the canopies of the trees within the preceding three years reducing habitat. The resulting species were observed flying above canopies or feeding or roosting. See status of species in preceding list above.

Eastern Rosella Galah Little Corella Long-Billed Corella Sulphur Crested Corella Musk Lorikeet White Breasted Sea Eagle Tasmanian Wedge Tailed Eagle (mature couple + young) *Aquila audax subsp. Fleayi* Status: Threatened Species Protection Act 1995: endangered. Endemic.

Status: Th

Superb Blue Wren Laughing Kookaburra Green Rosella Silvereye Australian Magpie Grey Currawong Dusky Wood Swallow Welcome Swallow Wood Duck (roosting)

EXOTIC SPECIES

Refer to list above.

## MAMMALS

Tasmanian pademelon Echidna (breeding pairs) Southern brown bandicoot Threatened (see 'Threatened Species' below) Eastern Quoll (dead on road) Brushtail possum Platypus (river) Water Rat, *Hydromys chrysogaster* 7 species

### EXOTIC SPECIES

Feral and stray (released domestic) cats Rat *Rattus rattus* Mouse *Mus musculus* 

### REPTILES

Southern Grass skink (*Pseudemoia entrecasteauxii*) Metallic skink (*Niveoscincus metallicus*) Blotched Blue Tongued lizard Tiger snake Lowland Copperhead 5 species

## FROGS

Brown Tree frog (*Litoria ewingi*) Common Froglet (*Crinia signifera*) 2 species

# THREATENED SPECIES

Source: https://www.threatenedspecieslink.tas.gov.au/pages/eastern-barred-bandicoot.aspx

https://dpipwe.tas.gov.au/conservation/threatened-species-and-communities/lists-of-threatened-species/threatened-species-vertebrates

1) The Eastern Barred Bandicoot (*Perameles gunnii gunnii*) is a subspecies of *P. gunnii* which is found only in Tasmania. The Eastern Barred Bandicoot originally occurred in native grasslands and grassy woodlands in Tasmania's Midlands. However, it is now rare in the Midlands where most of its habitat has been cleared. Since European settlement the Eastern Barred Bandicoot has spread into (originally heavily forested) agricultural areas in the state's south-east, north-east and north-west. In these areas, the Eastern Barred Bandicoot occurs in mosaic habitats of pasture and remnant native forest, often with a significant amount of cover provided by weeds such as gorse and blackberry. The main threats to the Eastern Barred Bandicoot include blanket removal of native and weed cover in agricultural areas, and severe population declines during extended dry periods.

## **KEY POINTS**

- **Important:** Is this species in your area? Do you need a permit? Ensure you've covered all the issues by checking the <u>Planning Ahead</u> page.
- **Important:** Different threatened species may have different requirements. For any activity you are considering, read the <u>Activity Advice</u> pages for background information and important advice about managing around the needs of multiple threatened species.