

The Ecological Values of North Lawson



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Overview of ecological values

What?

- This is an overview of all the threatened fauna, flora and ecological communities and declining species recorded in or near North Lawson, ACT
- North Lawson has extensive grasslands and patches of woodland

Where?

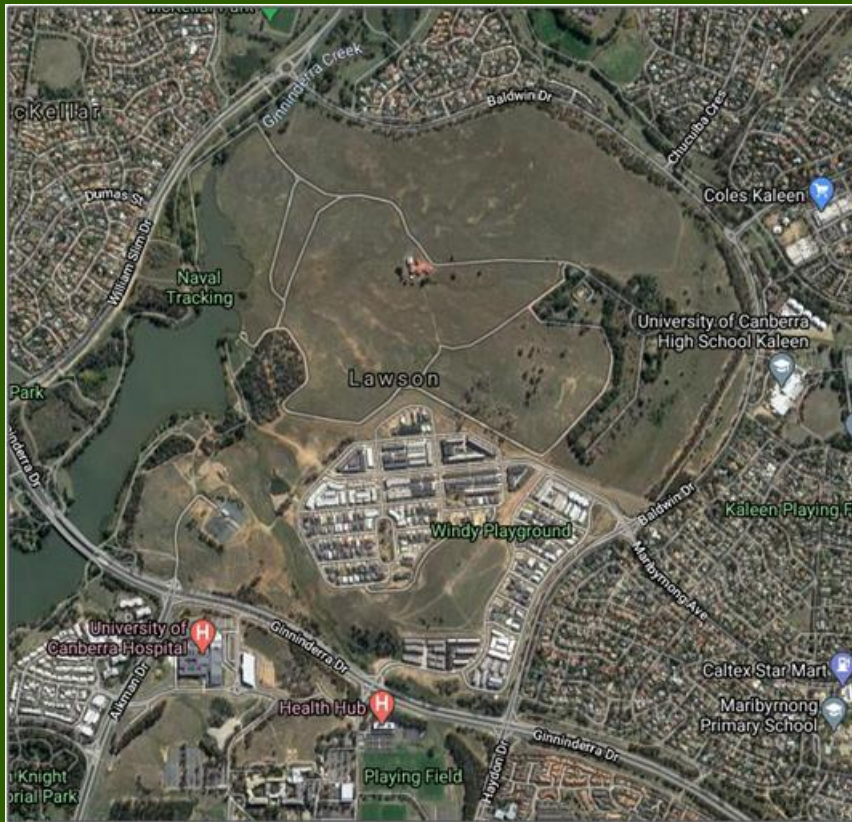
- Includes information from:
 - Former Belconnen Naval Station;
 - Defence Housing Australia land; and
 - The immediately adjacent established suburbs.



Note: all references to listings in this overview give the highest level listing only

Why?

- Part of this area is proposed to be developed as a suburb
- Two stages are proposed
- The development will have a major impact on ecological values



Areas A and B, above, is Stage 1, and parts of Area D and Area E are stage 2 of the proposed DHA development

Critically endangered ecological communities (CEECs)

Natural temperate grassland (NTG)

- Formerly occupied 0.5 million ha of SE NSW
- Now > 0.1 5 % is protected in conservation reserves
- Habitat for threatened fauna and flora and declining species
- Has been, and remains vulnerable to land clearing for agricultural, infrastructure and urban development

Why is North Lawson important?

- North Lawson has large areas of NTG
- Part of the Stage 1 will affect high-quality NTG
- Stage 2 will affect an even larger area of NTG



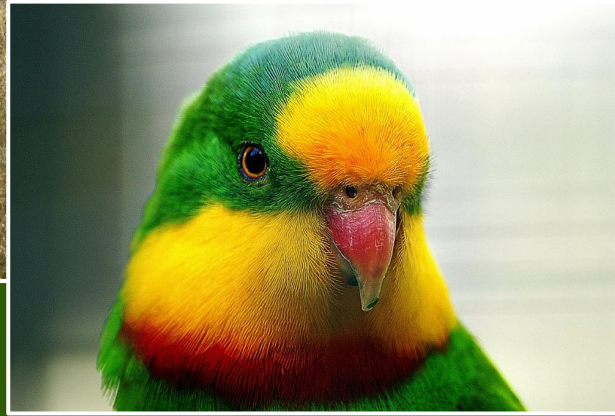
Critically endangered ecological communities (CEECs)

Box-Gum Grassy Woodland

- Formerly occupied extensive areas of land in SE Australia
- Very little of this formerly extensive community remains
- Has been, and remains vulnerable to land clearing for agricultural, infrastructure and urban development

Why is North Lawson important?

- Part of North Lawson has Box-Gum Grassy Woodland, including in its derived grassland form.
- Stage 2 of the development will impact Box-Gum Woodland
- Woodlands here have large hollow-bearing trees:
 - important for hollow-using birds and mammals
- The woodlands at North Lawson have diverse groundlayers
 - important under its EPBC Act listing



Invertebrates

Golden Sun Moth

- Critically endangered
- A day-flying moth of NTG, formerly widespread
- Unusual life history:
 - Long larval life-span underground
 - Just a few days spent as a non-feeding adult
 - A dietary specialist on the roots of wallaby-grasses and spear-grasses
 - Very extensive range-contraction

Why is North Lawson important?

- An iconic, flagship species of SE Australian NTG
- An indicator species of undisturbed grassland
- The site contains extensive interconnected suitable habitat, with one of the larger remaining populations in the ACT
- A maximum of 500 individuals counted over an area of about 120 ha



Invertebrates

Perunga Grasshopper

- Vulnerable – ACT
- A restricted grassland specialist
- Recorded at North Lawson



Canberra Raspy Cricket

- Nominated as endangered – ACT
- A restricted grassland specialist
- Recorded at North Lawson



Others:

- Key's Matchstick
 - Endangered - NSW
 - A restricted grassland specialist
 - Highly likely to occur

Reptiles

Striped Legless Lizard

- Vulnerable
- Limited surveys at North Lawson, with two records from there



Canberra Grassland Earless Dragon

- A newly recognised species
- Qualifies for listing as critically endangered
- Endangered under its current taxonomy
- Not known from North Lawson
- North Lawson has been flagged as a potential release site for the establishment of a new population

Birds

Superb Parrot

- Vulnerable
- Woodland dependent
- Has recently extended its range to Canberra
- Records from North Lawson and the nearby suburbs



Latham's Snipe

- A migratory species
- Breeds in the N Hemisphere
- A non-breeding visitor
- Potential habitat exists
- Records from Lawson and nearby suburbs



Birds

Other threatened birds

- Gang-gang Cockatoo
 - Vulnerable – NSW
 - An iconic ACT breeding resident
 - Suitable foraging and breeding habitat may occur
 - Recorded at North Lawson and nearby suburbs
- Little Eagle - vulnerable – ACT
 - A small population remains in ACT
 - Suitable foraging habitat exists at North Lawson
 - Recorded at North Lawson and in nearby suburbs
- Scarlet Robin – vulnerable – ACT
 - An iconic insectivorous woodland breeding resident
 - Suitable foraging habitat exists at North Lawson
 - Recorded at North Lawson and in nearby suburbs



Birds

Other threatened birds

- White-winged Triller
 - Vulnerable ACT
 - A migratory species
 - A small population breeds in the ACT
 - Suitable foraging and breeding habitat exists at North Lawson
 - Recorded at North Lawson and in nearby suburbs
- Dusky Woodswallow – vulnerable NSW
 - A nomadic insectivore; breeds in the ACT
 - Suitable foraging habitat exists at North Lawson
 - Recorded at North Lawson and in nearby suburbs
- White-fronted Chat – vulnerable NSW
 - A nomadic terrestrial honeyeater, a regular visitor
 - Suitable foraging habitat exists at North Lawson
 - Recorded in nearby suburbs



Birds

Declining birds

- Many woodland species
- Recorded either at North Lawson, or in the surrounding suburbs

Pallid Cuckoo

Fan-tailed Cuckoo

Brush Cuckoo

Southern Whiteface

Western Gerygone

White-throated Gerygone

Rufous Whistler

Restless Flycatcher

Leaden Flycatcher

Double-barred Finch



Flame Robin

Red-capped Robin

Red-browed Finch

Threatened flora

Ginninderra Peppercross

- Endangered
- Rosette-forming perennial forb with small, greenish flowers



Why is North Lawson important?

- A highly significant species
 - this is the site of its first discovery
 - North Lawson is the species' "type locality"
- Still only four known populations
 - All are found within the ACT
- Highly likely to be overlooked in surveys
 - It's possible that plants may occur in the development envelope, or as a dormant seed-store

Note: The photo is of the related Aromatic Peppercross, also endangered

Threatened flora

Small Purple Pea

- Endangered
- Limited to a few small populations in NSW and ACT
- A new population was found at Lake Ginninderra - 2020
- Likely to occur at North Lawson



Hoary Sunray

- Endangered
- Widespread, but sensitive to disturbance
- Occurs on Reservoir Hill in nearby suburb



Declining flora

- The grassland and grassy woodland groundlayers at Lawson host a diversity of flora species
- Some of these are termed "decliners"
 - they are now rare due to the same threats that operate on the CEECs that they occur in
- Declining flora species include:



Nodding Chocolate-lily
Common Bulbine-lily
Blue Devil
Emu-foot
Heathy Bush-pea

Early Nancy
Creamy Candles
Lemon Beautyheads
Scrambled Eggs
Austral Sunray



Photo credits

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P.2 Blue Devil: Maryke Booth

P.3 Google Maps

P.3 Defence Housing website:

<https://www.dha.gov.au/development/residential/lawson-act>

P.6 Superb Parrot: Creative Commons

P.9 Golden Sun Moth: Annet Richter

P.9 Golden Sun Moth: Lesley Peden

P.10 Perunga Grasshopper: Geoff Robertson

P.11 Striped Legless Lizard: Will Osborne

P.12 Superb Parrot: Creative Commons

P.12 Latham's Snipe: Creative Commons

P.13 Gang-gang Cockatoo: Creative Commons

P.14 Dusky Woodswallow : Creative Commons

P.15 Flame Robin : Creative Commons

P.17 Aromatic Peppercross: Stuart Cohen