

DRAFT WEED MANAGEMENT PLAN

FOR

ST ALBANS COMMON TRUST

ST ALBANS NSW 2775



ST ALBANS
— COMMON —

SINCE 1824

Revisions

A	Preliminary Issue for input	October 2022
B	Draft issue for comment	January 2023
C	Draft issue for review	March 2023

1. INTRODUCTION

This weed management plan has been prepared to guide the St Albans Common Trust (the trust) in the management of weeds on the area of land known as the St Albans Common (the common).

The *Nature Conservancy Weed Management Plan template* from the University of California has been adapted for the purpose of creating this management plan. It is not intended to be a static plan as the management of weeds on the common will evolve and adapt to changes in weed occurrences and management practices.

In order to undertake the management of weed species in an adaptive manner the following is to occur:

1. Plan: to establish management goals and determine which if any species threaten the management goals and targets and determine which methods are best used to control weeds;
2. Act: to move conditions towards the management goals;
3. Check: assess the impacts of the weed management;
4. Review: adapt, alter or modify the goals and action where necessary;
5. Communicate: Keep good records of all activities and communicate outcomes.

The implementation of a weed management plan will help the Trust to:

- effectively control weeds on the common;
- comply with invasive plant control laws;
- coordinate control activities ensuring control activities are prioritised and resources are used at optimal times;
- monitor how well control activities are working;
- report progress to the Trust board.

The weed management plan has the following components

- a. background information on the Common and role of the Trust;
- b. how weeds interfere with the management goals of the site;
- c. an inventory of the most regularly occurring weeds to be controlled;
- d. priorities for weed control;
- e. goals and targets and how these are to be achieved;
- f. monitoring, assessment of actions and communications.

A. BACKGROUND OF THE ST ALBANS COMMON AND ITS MANAGEMENT

The land known as the St Albans Common was officially gazetted by Queen Victoria on March 4 1853.

Prior to the official gazetting it is recognized that the area was used for grazing animals as early as 1824. In that year, a petition from the free settlers to Governor Brisbane was successful and a reserve was surveyed and set aside for use as a common. It was determined that a common was needed in this area to allow land holders of small acreage, typically occupied by emancipated convicts, to have access to larger areas of land to graze cattle and horses.

The grant established by Queen Victoria comprises 2567 acres. The first set of St Albans Common Rules were gazetted on 7th November 1906 by the then Trustees. Subsequently in 1928 the first Common Regulations were published by the Lands Department.

Those people who hold the right to be a Commoner is defined by those who reside or inhabit land on the McDonald River or its tributaries.

The St Albans Common Trust is responsible for management of the common. The Trust is operated by a board of five Trustees who are appointed by the Commoners through an election process held every two years. The position of Trustee is a voluntary role.

Initially the Common was largely occupied by dairy breeds reflective of the large number of dairy farms in the 1940's and a large number of horses as they were the main form of transport. Previous permitted activities on the common have included the cutting of Eucalypts for oil extraction and the cutting of wattles, the bark of which was used to extract tannin for the tanning of hides.

Presently the Common herds consist of beef cattle and a small number of horses. The herds people assist commoners whose cattle are grazed by regularly inspecting the herds and controlling musters and recording stock movements.

The purpose of the St Albans Common Trust is to maintain the common for its intended agricultural use so as to allow the ongoing grazing of cattle and horses in a safe environment. The Trust will determine the number of cattle / horses allowed on common at any one time subject to current conditions i.e. numbers may be limited during times of drought.

To achieve this purpose and to allow for the continued grazing of cattle and horses on the common the trust must manage the land to ensure:

- Removal of weed species that are dangerous to the health of cattle;
- Removal of weed species that will replace pasture;
- Removal of weed species that will limit movement of cattle and herds people;
- Preservation of native tree species to creek embankments;
- Preservation of native canopy tree species (in defined areas) to provide shade for animals;
- Preservation of wooded slopes;

The major challenges in achieving these goals are:

1. Limited ability to use herbicides and maintain grazing
2. Availability of man power and equipment
3. Financial support

The Trustees rely on the volunteer support of the commoners in the management of the land with regular working bees held to maintain the common facilities (cattle yards and the like) as well as undertaking pastures management and weed removal activities.

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B. HOW WEEDS INTERFERE WITH MANAGEMENT GOALS OF THE SITE.

The Collins dictionary defines a weed as :

A wild plant that grows in gardens or fields of crops and prevents the plants that you want from growing properly.

In the context of this management plan a weed is considered to be a plant growing out of place and impacts the management and operation of the common for the purpose of grazing cattle and horses.

The loss of pasture will occur if weed species are allowed to flourish. During recent drought events and the subsequent bushfires of 2019 and 2020 the common pasture lands were severely impacted and stripped in some areas of pasture cover. Subsequent rain and flood events in 2021 and 2022 has been followed by substantial new weed growth.

Of particular concern is the more recent establishment of African Love Grass - *Eragrostis curvula* due to its ability to crowd out and eliminate native pastures, its ease of spread and the difficulty for its removal.

Also of specific concern are those weed species that can create significant health issues for livestock, example Fireweed - *Senecio madagascariensis* the native Bracken Fern – *Pteridium esculentum*, Lantana - *Lantana camara* and the sudden death of livestock that can occur if Green Cestrum - *Cestrum parqui* is consumed.

Other weed species that will impact the quality of pasture include but are not limited to African Love Grass and include Blackberry - *Rubus fruticosus* sp, Bursaria - *Bursaria spinosa*, Paddy's Lucerne - *Sida rhombifolia*, Thistle varieties, and young saplings of Cabbage Gum - *Eucalyptus amplifolia*, Tea Tree - *Leptospermum* sp. and Wattle varieties.

It is desired that regenerative saplings of Cabbage Gum – *Eucalyptus amplifolia* along with Tea Tree *Leptospermum* sp. and Wattle *Acacia* sp be maintained in certain locations on the common. Those plants found immediately adjacent to and on creek embankments are to be preserved in order to maintain soil stability, provide shade for cattle and shade water bodies, reducing water evaporation.

C. INVENTORY OF WEED SPECIES

In July 2022 an inspection of the pasture areas of the Common was undertaken by Andrew Leuchars, Sherri McMahon and Ingrid Cullen, concentrating on the flood plain areas of the common. Access to some areas was limited due to recent flood events, creek levels and water logged ground conditions preventing access.

The following weed species were observed at the time. Please note this list is not intended to be a comprehensive list of all weed species on the common.

Common Name	Botanical Name
1. African Love Grass	<i>Eragrostis curvula</i>
2. Blackberry	<i>Rubus fruticosus</i> sp
3. Bracken	<i>Pteridium esculentum</i>
4. Bursaria	<i>Bursaria spinosa</i>
5. Fireweed	<i>Senecio madagascariensis</i>
6. Lantana	<i>Lantana camara</i>
7. Mother of Millions	<i>Bryophyllum species</i>
8. Paddy's Lucerne	<i>Sida rhombifolia</i>
9. Thistle	
10. Tobacco Bush	<i>Solanum mauritianum</i>
11. Black Willow	<i>Salix nigra</i>
12. Tree of Heaven	<i>Ailanthus altissima</i>
Native tree Saplings:	
13. Cabbage Gum	<i>Eucalyptus amplifolia</i>
14. Tea Tree	<i>Leptospermum</i> sp.
15. Wattle	<i>Acacia</i> sp.

Recently a single specimen of Green Cestrum *Cestrum parqui* was found at near the bottom yards and removed immediately.

The areas visited in the initial survey are described in the following 18 groups. This will be expanded as further inspections are undertaken. The groups described below start at the southern end of the Common, extending to the north and mainly follow Wollombi Road.

1. Bottom Yards to Common House

- Blackberry – in small areas mainly beside Wollombi Road
- African Love Grass
- Thistle
- Fireweed
- Tobacco Bush – some single examples ie not found in clumps
- Mother of Millions
- Paddy Lucerne
- Smart Weed

2. Common House Gully / Ridge to Rocking Rock

- Blackberry – mainly beside road
- African Love Grass
- Fireweed
- Mother of Millions – on rocky slope beside road leading to lake

3. Rocking Rock to Shahzada Gully

- Blackberry
- Fireweed

On ridge above, thick understorey of :

- Wattle
- Bursaria
- Rice Bush

4. Fishermans Gully / Lake

- Blackberry
- Fireweed
- Wattle saplings

5. Cosy Nook / Mols Bite

- Blackberry
- African Love Grass near Lens
- Tobacco Bush
- Eucalypt and Wattle saplings
- Smart Weed

6. Cosy Nook to Mogo Creek

- Fireweed
- Thistle
- Blackberry

On hillside :

- Tobacco Bush
- Lantana

7. Mayla Fram and Weaning Paddock

- African Love Grass
- Thistle
- Blackberry
- Saplings

8. Lone Tree Paddock

- African Love Grass
- Fireweed
- Saplings

9. Long Paddock

- African Love Grass – less at southern end (Cost Nook) more towards Bunya Farm
- Smart Weed
- Fireweed
- Blackberry
- Thistle
- Saplings

10. Bunya Farm to Boot Paddock

- African Love Grass
- Fireweed
- Bracken

11. Bunya Farm to Black Water beside road

- African Love Grass
- Fireweed
- Thistle
- Blackberry
- Bracken
- Saplings

12. Black Water to Dead Tree Paddock

- African Love Grass
- Fireweed (in clumps on slopes)
- Tobacco Plant (on slopes)

13. Perrys to Antonias

- African Love Grass
- Fireweed
- Lantana – small amount

14. Paddock opposite Antonias up to Matt Pikes

- African Love Grass - predominantly

15. Gas Coin Paddock up to Perrys

- African Love Grass
- Eucalyptus saplings
- Fireweed

16. Paddock in front of Touch the Earth (including gullys east of Wollombi Road)

- African Love Grass
- Fireweed
- Eucalyptus saplings
- Acacia saplings

17. Mogo Creek from Touch the Earth to Causeway

- African Love Grass
- Fireweed
- Thistle
- Bracken
- Saplings

18. Causeway to Top Yards

- African Love Grass
- Fireweed
- Saplings

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D. PRIORITIES FOR WEED CONTROL

Priority species to be controlled are those that are most toxic or have potential to cause harm to the cattle and horses, these include:

- Cestrum
- Fireweed
- Bracken
- Lantana

Other species to be controlled include those that if left un-checked have the ability to spread rapidly, therefore reducing area for pasture and possibly limiting the movement of livestock ie

- African Love Grass
- Thistle
- Wattle
- Eucalypt

Slower growing species mainly located beside road ways and not impacting pastures are a lesser priority

- Blackberry
- Tobacco Bush
- Tree of Heaven

E. GOALS AND TARGETS FOR WEED CONTROL

Goals

The Common is to be managed so that pastures can be maintained in order to sustain livestock in a safe and practical manner.

The Common is to be kept free of the most toxic of weed species at all times.

The incidence of African Love Grass on the Common is to be reduced and new pasture encouraged to recolonise.

The removal of bracken and native saplings as a priority as these are “pioneer” species to native regrowth that will if left unchecked quickly reduce useable pasture land.

Targets

Year 1

1. Sapling removal (keeping large open areas of paddock clear of saplings)
2. Commence Love Grass removal
3. XX

Year 2

1. Sapling removal to more inaccessible paddock areas
2. Continue Love Grass removal
3. Commence Lantana removal

Year 3

1. Continue Love Grass removal
2. Commence Blackberry removal
3. XX

Year 4

1. XX
2. XX
3. XX

Year 5

1. XX
2. XX
3. XX

Schedule of Activities / Resources and Projected Costs

A schedule of Working Bees will utilise the resources and equipment of volunteers and that of equipment owned by the Trust.

Subject to weather and conditions the trust will attempt to complete six working bees annually. These working bees are to occur on a Saturday commencing at 10:00 am and concluding around 1:00 pm.

Current working bee dates for 2023 are:

1. 11th March
2. 20th May
3. 15th July
4. 9th September
5. 4th November

Volunteers at these working bees will be instructed on which areas are to be target for weed removal.

Resources - volunteers

1. Commoners
2. Herdspeople
3. Friends and relatives of Commoners

Equipment

1. Common owned tractor and slasher
2. Common owned sprayer ??
3. Commoners own equipment
 - a. Tractors and slashers
 - b. Brush cutters and Whipper Snippers
 - c. Hand tools

Costs:

1. Fuel
2. Herbicide
3. Equipment – hand tools, wiper sniper wire, etc
4. Food and drinks for volunteers

Methods for Weed removal

A variety of weed removal methods are to be employed in reaction to the weed type and its location on the Common. These methods will include:

1. Slashing
2. Hand removal (chipping and digging out)
3. Organic herbicide (cattle friendly)
4. Non organic herbicide (highly targeted use i.e. cut and paint or spot spraying)
5. Burning

The main form of removal will be by slashing and chipping.

The Trust wishes to minimise the use of poisons and will avoid broad area spraying.

Generally the following practices for weed removal are to be used:

WEED TYPE	REMOVAL METHOD
African Love Grass	Slash or burn (depending on fire season) then spot spray
Blackberry	Slash, brush cut, poison, brush cut small areas
Bracken	Slash or burn depending on fire season, brush cut small areas
Bursaria	Slash, brush cut, chip
Cestrum	Remove by hand and carefully bag all foliage and roots
Eucalyptus	Slash, chainsaw, chip
Fireweed	Chip / hand pull
Lantana	Chip small specimens, larger plants to be cut and stem painted with poison
Mother of Millions	Remove by hand and carefully bag all foliage and roots
Thistle	Chip small infestations, slash larger areas
Tobacco Bush	Chip small specimens, larger plants to be cut and stem painted with poison
Wattle	Slash, chainsaw, chip

Weed Disposal

Care is to be taken when removing weeds that can readily reproduce from either dropped foliage or disturbed root systems, seed heads or flowers. For example Cestrum, Fireweed and Mother of Millions. These weeds are to be carefully bagged for disposal away from the Common or in an area for controlled burning.

Timing

Where possible weed removal activities are to occur when plants are not in flower or seed.

Species Monitoring

The Herdspeople inspect the Common twice a week and are to advise of new weed occurrence, spread of existing weeds, reduction in weeds following activities.

Monitoring of weeds is to occur quarterly during mustering activities.

Monitoring of weeds is to occur prior to and after working bee activities.

MONITORING, ASSESSMENT OF ACTIONS AND COMMUNICATIONS

An annual assessment will be undertaken to evaluate the effectiveness of the weed removal methods in light of the site goals.

The assessment will involve a physical inspection of the Common and discussion with those participating in the removal of weeds.

The results of this assessment will be used, where required, to modify and improve control priorities, methods and plans.

The assessment and modifications to the weed management plan will then be communicated to the Trust and a new annual cycle will be commenced based on the agreed new / modified goals and activities.

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APPENDICES

Appendix 1.

Overall Map Of St Albans Common Indicating Location Of Identified Weed Zones

This map identifies the weed zones described in the management plan across areas of the common.

Appendix 2.

Detailed Map of weed zones

These maps provide more detail to individual or grouped zones and are to be used when documenting weed activities

Appendix 3.

Forms Used In Collecting Inventory And Monitoring Data

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Appendix 4.**Herbicide Use Protocols**

After noting which herbicide(s) will be used and roughly how much will be used, outline any state and local requirements for applicator licensing and/or posting of treated areas. Then, BRIEFLY describe how the herbicide(s) will be stored, mixed and transported. Describe how excess herbicide and any equipment or clothing that has become contaminated will be disposed of. Describe emergency first aid procedures and plans for responding to spills or contamination. List who may apply the herbicide(s), and what protective gear will be available for them.

Appendix 5.**Herbicide Use Record Forms**

When using herbicides it is critical (and, in many cases, required by law) to keep detailed records of all relevant information. Ideally, records would include data on the condition of the site prior to herbicide application, the type of species present, and percent cover of invasive and native species prior to application. This information will be valuable in evaluating the effectiveness of the herbicide. At the time of application, take detailed notes of the type and concentration of the herbicide, the amount, location, and method of application, weather conditions, and any other observations made during the course of application. This information is important in evaluating the project's success, improving methodology, and identifying mistakes. In addition, it documents the procedure for future site managers and biologists

Appendix 6.**Herbicide Labels**

Attach copies of the herbicide label(s) here.

REFERENCES

Template adapted from *The Nature Conservancy Site Weed Management Plan Template for Knoweeds Project*

NSW Department of Primary Industries Weed Wise web site. <https://weeds.dpi.nsw.gov.au/>

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