



Local Land  
Services  
South East

# Preparing a Whole of Property Weed Management Plan

A land managers guide





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Published by Local Land Services  
Preparing a Whole of Property Weed Management Plan  
First published October 2016  
ISBN 978-0-9925241-3-5  
[www.lls.nsw.gov.au](http://www.lls.nsw.gov.au)

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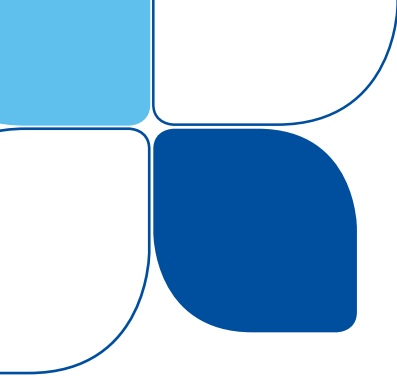


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# Table of contents

1.0 Introduction.....	3
2.0 Why plan?.....	3
3.0 Integrated weed management .....	4
3.1 What you need to know about your property .....	4
3.1.1 South East Local Land Services office locations.....	5
3.2 Useful information for preparing a weed management plan .....	6
3.2.1 Know your weed species .....	6
3.2.2 Skills in assessing your land .....	7
3.2.3 Management options for grassy weeds.....	10
3.2.4 Consider biosecurity.....	12
4.0 Developing the plan .....	13
4.1 Assess the site .....	14
4.1.2 Mapping .....	14
4.1.3 Photographic points.....	14
4.2 Review your management options .....	15
4.3 Prioritise your management options and objectives .....	15
4.4 Implement your plan.....	16
4.5 On-going maintenance .....	16
4.6 References.....	17

APPENDIX A - Calendar of growth cycle and control times for weeds of the Southern Tablelands

APPENDIX B - Recommended readings



# 1.0 Introduction

This guideline has been produced as a companion to the “Integrated Property Weed Management Plan” – a template to develop an integrated weed management plan for your property. It is intended to help you develop a plan that considers how weed management will fit in with your property management, considering the personal, financial, natural resource and production limits of your own circumstances.

This guide will assist you in completing the template provided in the associated booklet, a plan that you can adjust over time as your personal and property circumstances change.

# 2.0 Why plan?

Good weed management is about overall good land management. It is about putting in place activities that assist your property to resist further invasion of weeds, reduces the ability of weeds to establish, reduces your impact on your neighbours properties and strategically addresses a reduction in your weed density and distribution (where practical). This is true whether you are dealing with weeds that threaten agriculture, the environment or cultural heritage areas.

Consideration needs to be given to restoring and maintaining the productivity of agricultural land and natural ecosystems and protecting areas that are relatively weed free.

**Prevention is always better than cure, as it is far more cost effective to prevent weed problems than to control established weeds.**



*Image: Reducing the extent of weeds once they have established can be a very costly exercise, this photo shows scotch broom (Cytisus scoparius) invading a previously productive area.*

# 3.0 Integrated weed management

Integrated weed management (IWM) is the long term management of a weed using a combination of different management and control techniques that are most appropriate for your personal circumstances.

The techniques need to be individual, practical, economically sound and flexible. A key to IWM is to understand the behaviour of the weeds present on your property, the current density and the land use in which the weed occurs. Importantly IWM works to address the underlying causes of weed infestations. This is done by:

- Targeting the different stages of the weed's lifecycle;
- Undertaking measures that will prevent weed reproduction;
- Reducing germination of weed species;
- Reducing the store of seed within the soil;
- Minimising weed establishment by promoting more desirable vegetation.

Developing an IWM plan will increase your chances of success and is important because:

- You will identify the best times and methods to control weeds in carefully thought out action plans.
- You will prioritise the use of limited resources to control weeds in the most effective manner.
- You will improve the profitability and sustainability of your enterprise.

## 3.1 What you need to know about your property

Four considerations, that will assist you in the development of your IWM plan include:

- 1. Know Your Weed Species;**
- 2. Skills in Assessing your land - with consideration of soils and plants;**
- 3. Management Options for grassy weeds; and**
- 4. Biosecurity considerations.**

These four considerations will be discussed further within the following pages. The following pages have been prepared with a focus in the management of widespread grassy weeds for example African lovegrass, serrated tussock and Chilean needlegrass. However, these principles may be applied to the management of weed species across your whole property.

**A range of training opportunities that will offer skills development aimed at improving your ability to prepare your plan will be mentioned in the following pages.**

**For more information about these, or to express your interest in attending these workshops, contact your local South East Local Land Services Office.**

### 3.1.1 SOUTH EAST LOCAL LAND SERVICES OFFICE LOCATIONS

#### BEGA

Rooftop Level  
Sapphire Marketplace  
2/83 Upper Street  
BEGA NSW 2550  
Telephone: 02 6491 7800

#### BERRY

13 Scholfields Lane  
BERRY NSW 2535  
Telephone: 02 4464 6000

#### BOMBALA

106 Maybe Street  
BOMBALA NSW 2632  
Telephone: 02 6458 3055  
*No administrative and financial processing services available at this office.*

#### BOOROWA

Boorowa Council Chamber Building  
4-6 Market Street  
BOOROWA NSW 2586  
Telephone: 02 6385 1018  
*No administrative and financial processing services available at this office.*

#### BRAIDWOOD

42 Ryrie Street  
Braidwood NSW 2622  
Telephone: 02 4842 2594

#### COOMA

26 Soho Street  
COOMA NSW 2630  
Telephone: 02 6452 1455

#### GOULBURN

159 Auburn Street  
GOULBURN NSW 2580  
Telephone: 02 4824 1900

#### MOSS VALE

4/9 Clarence Street  
MOSS VALE NSW 2577  
Telephone: 02 4877 3211  
*No administrative and financial processing services available at this office.*

#### YASS

13 Mitchell Street  
YASS NSW 2582  
Telephone: 02 6118 7700



*Images: South East LLS staff providing training to local landholders.*



[www.lls.nsw.gov.au/southeast](http://www.lls.nsw.gov.au/southeast)

## 3.2 Useful information for preparing a weed management plan

### 3.2.1 KNOW YOUR WEED SPECIES

The first key step in developing your IWM plan is to be familiar with the weed species that are present in your region and are a management issue on your property. Refer to Appendix A for a summary of key weed species that are considered a management issue within the Palerang area, these being common to the Southern Tablelands.

All plants move through a specific lifecycle, with vulnerabilities and strengths throughout the lifecycle. It can be important to understand this plant lifecycle to assist you in identifying

opportunities to improve your management of undesirable species.

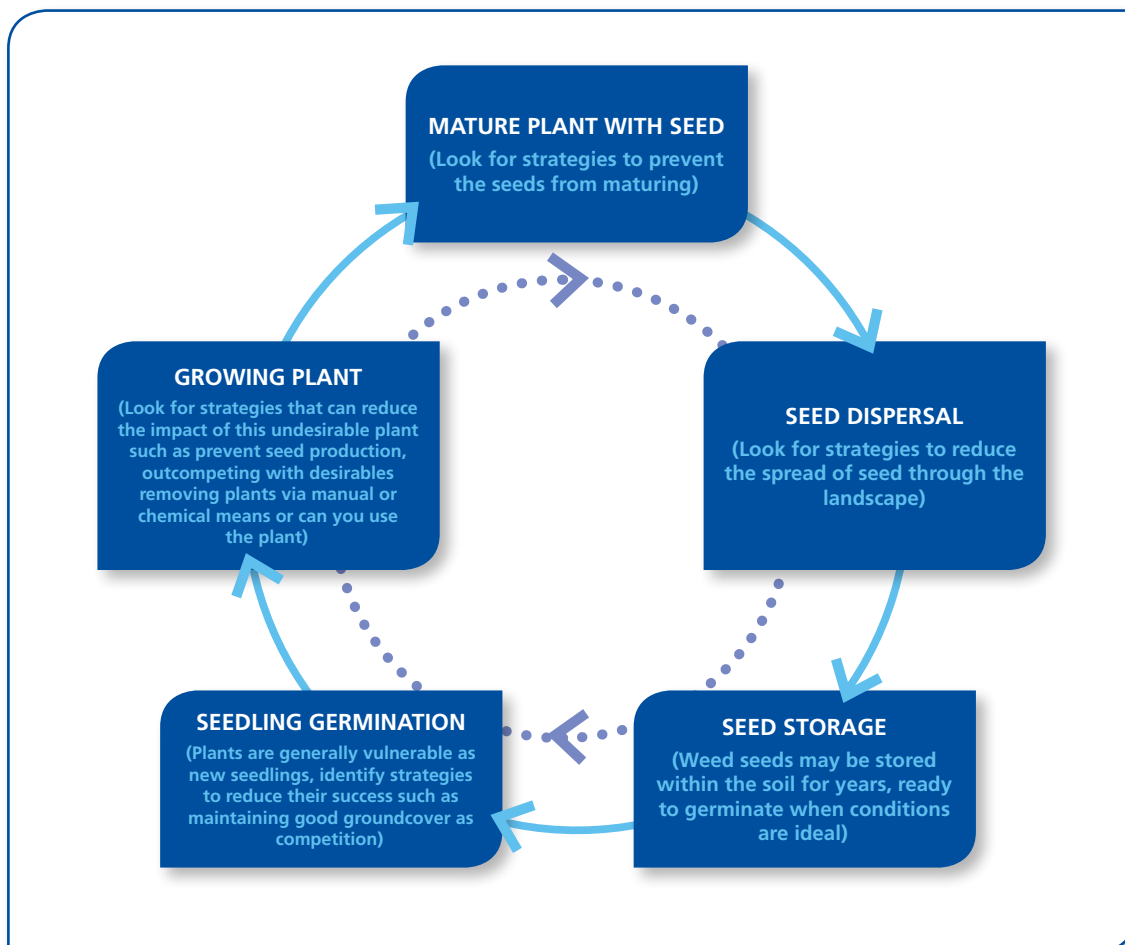
There are many resources available to assist you in understanding how to identify and understand the behaviour of a range of weed species, refer to Appendix B for recommended resources.

Figure 1 outlines the key phases in a plant lifecycle and considerations for their suppression.

If you are not confident in the identification of your paddock plants and common grassy weeds, you may find some benefit from attending a short workshop that will provide you with guidance on their identification.

**Potential workshops include:**

- Paddock plants
- Identifying weeds
- Recognising grasses.



**Figure 1** - Key phases in a plant lifecycle and considerations for their suppression.



### 3.2.2 SKILLS IN ASSESSING YOUR LAND

To be able to prepare a property wide weed management plan, there are a range of skills that you will find useful to be able to define management zones, describe the current extent of weeds and identify key land management practices.

#### Estimating weed density

Estimating the density of the weed infestation will help you decide appropriate control measures and their priority for treatment.

Another consideration is the ratio of adult to juvenile plants or seedlings and whether there

is evidence of mature seed heads. This helps to provide information on the age of the infestation and whether it is well established or a relatively new incursion. This information then helps to identify the best mix of control measures especially in regards to seed bank management.

Visual assessment is a simple way to determine weed density. Provided in Figure 2 is a general guide to visually assessing grassy weeds as a percentage groundcover. You may wish to use this scale or determine your own way of assessing density, however the key is to consistently apply the same rules each time you monitor the area.

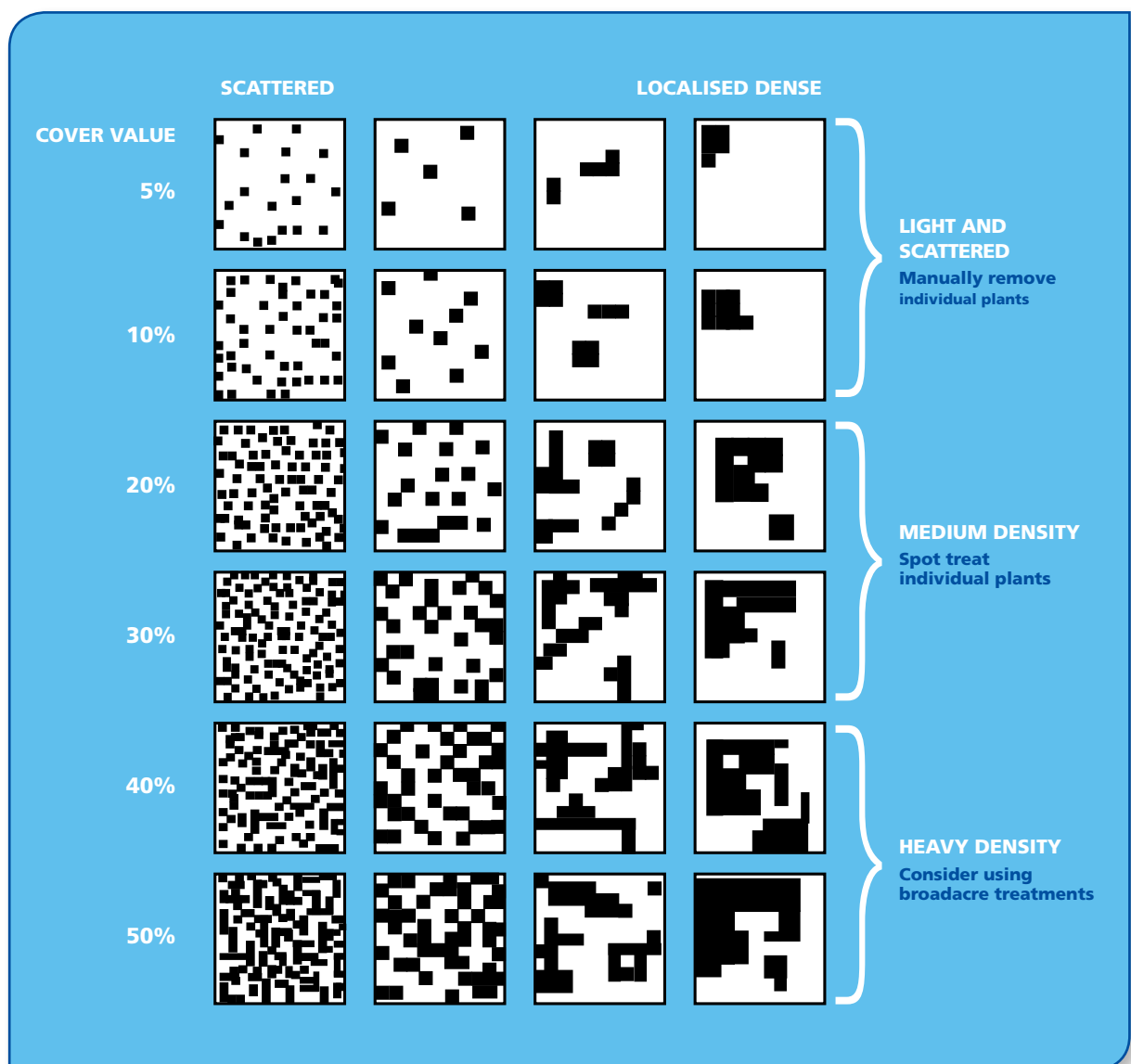


Figure 2 - A guide to visually estimate grassy weeds as a percentage of groundcover.

Source: Adapted from Osmond et al. (2008).

## Estimating existing groundcover

A key strategy in the prevention of grassy weed establishment is to maintain a high level of groundcover, with an aim of 70% groundcover of living vegetation. Levels of groundcover higher than 70% are desirable during periods when problem weeds are known to germinate as this may prevent successful growth of young weed seedlings.

To assist you in developing an IWM plan, it is useful to assess and record existing groundcover across your property at different times of the year. A simple guide to assist you in estimating groundcover is to stand in a representative part of your paddock and picture or measure and mark out a 50 cm square in front of you. Looking vertically into the pasture, estimate the percentage of area covered and therefore the percentage of area that is bare ground (Figure 3).

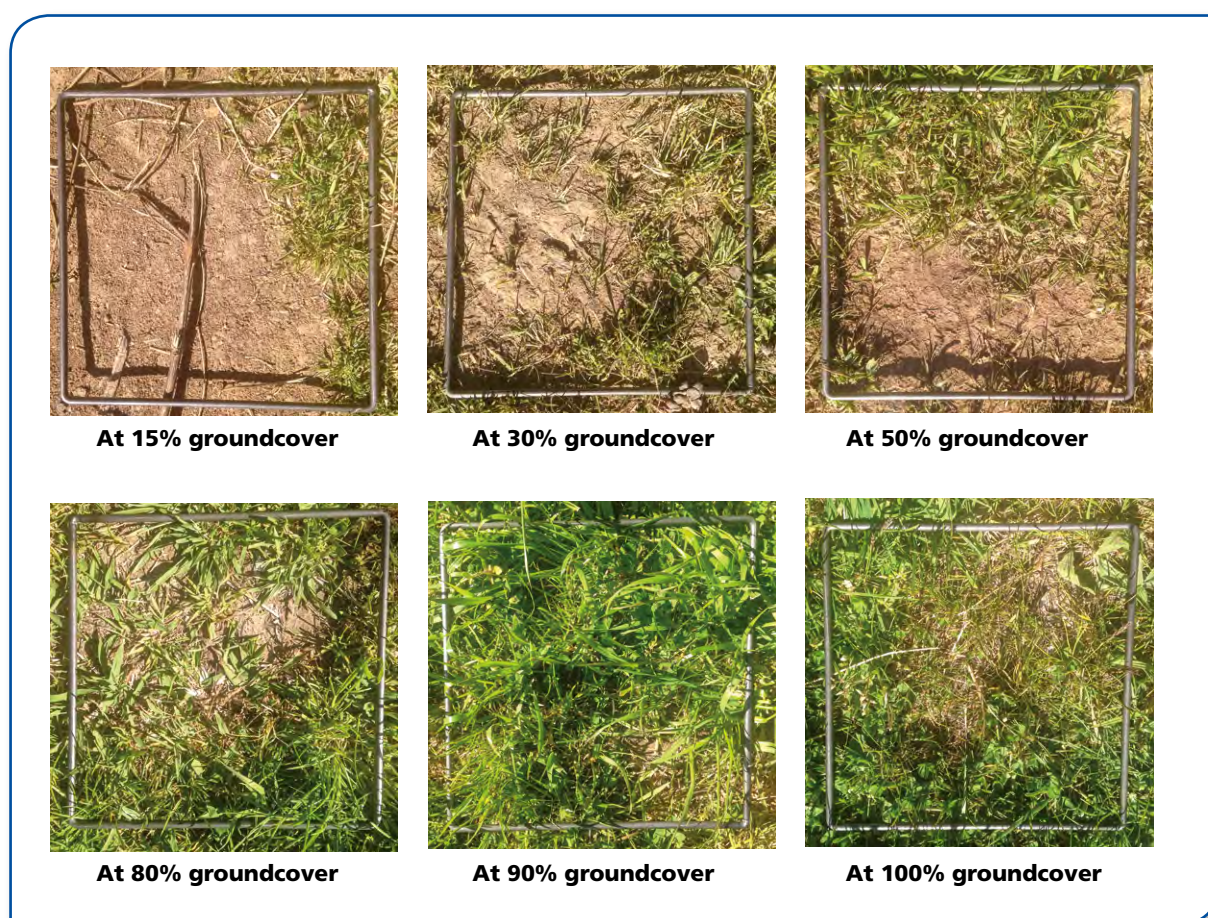
## Identifying dominant species

Understanding your dominant groundcover species is another useful piece of information. Each species may have a different growth cycle and respond to land use and management decisions in different ways. Understanding the behaviour of your existing groundcover species will assist you in identifying suitable weed management strategies.

If you are not confident in the identification of your paddock plants and common grassy weeds, you may find some benefit from attending a short workshop that will provide you with guidance on their identification.

### Potential workshops include:

- Paddock plants;
- Identifying weeds;
- Recognising grasses;
- Identifying dominant species.



**Figure 3** - Guide to assist in visually estimating the existing percentage groundcover within your paddock.

*Image source: Rebecca Bradley.*



Land class	Land use options
Class 1 – 2	<ul style="list-style-type: none"> <li>• Land with few, if any, limitations – many options available;</li> <li>• Arable land suitable for regular cultivation for crops, and/or high input introduced pastures</li> </ul>
Class 3 – 4	<ul style="list-style-type: none"> <li>• Grazing land well suited to introduced pastures</li> <li>• It may be cultivated or cropped in rotation with pasture</li> <li>• Preferable use direct drill techniques</li> </ul>
Class 5 – 6	<ul style="list-style-type: none"> <li>• Class 5 is non-arable by class 6 is often non-trafficable</li> <li>• Land suitable for grazing but not for cultivation</li> <li>• Manage to maintain or improve perennial pastures and preserve ground cover.</li> <li>• Direct drilling exotic pastures is only an option on suitable soil</li> </ul>
Class 7 & 8	<ul style="list-style-type: none"> <li>• Land not generally suitable for agriculture or at best suited to light grazing.</li> <li>• Possible retire from agriculture for conservation purposes.</li> </ul>

**Figure 4** - Land classes, 8 class soil conservation service system based on slope and erodibility.

Source: Adapted from Clements et. al. (2002).

### Understand the capability of your land

Land capability refers to the capacity of the land and its soil to sustain a range of land uses and management practices for the long term. Land capability classes provide some advice on suitable activities to be undertaken within each area of land without causing permanent damage to an area (Figure 4).

Understanding the land capability of your land will assist you in understanding the natural fertility of areas of your property and help to identify suitable management options for grassy weeds (i.e. will your land sustain an introduced pasture to compete with grassy weeds or is your land low in land capability and vulnerable to exposed bare ground?).

We recommend that you identify different land capability classes within your property as these may form useful management zones within your property plan.

If you are not confident in your land assessment skills, there are a range of workshops and training courses that may assist you.

#### Potential workshops include:

- Paddock plants;
- Recognising grasses;
- Identifying weeds;
- Land capability assessment skills;
- Skills in pasture assessment.



Image: Fireweed (*Senecio madagascariensis*).

### 3.2.3 MANAGEMENT OPTIONS FOR GRASSY WEEDS

Once you have identified the various management zones within your property, existing groundcover, main groundcover and weed species present and their density; another key skill in developing a property wide management plan for weed management is to understand suitable management options for different situations.

An excellent summary of these options is provided in National Best Practice Manual for Serrated Tussock. Table 1 summarises suitable management options for different situations and is best used when considering the management of grassy weeds. Further information can be found on each situation within the manual.

If you do not feel confident about these various management options, you might like to express your interest in attending a short workshop that discusses these options for local situations.

#### Potential workshops include:

- Management options for grassy weeds;
- Recognising grasses;
- Identifying weeds.

Weed densities can vary across your landscape, it will help you to divide your property into areas, often based on land classes to assist in identifying the most suitable management strategy in each location.



**Image:** Serrated tussock (*Nasella trichotoma*) infestations across a paddock.  
Source: Luke Pope.



### 3.2.4 CONSIDER BIOSECURITY

Farm biosecurity is a set of measures designed to protect a farm from the entry and spread of pests and diseases. Farm biosecurity is the responsibility of every person visiting or working on a farm. Farm biosecurity cannot be emphasised enough as it helps to limit the entry and further expansion of weeds within your property and across the landscape. Suggestions are:

#### 1. Protect your property from the input of new weed seed via the control of vehicle, grazing animals and people movements on to your property;

- Ensure that visiting vehicles are clean before entering the property or have a dedicated parking area and use your own farm vehicle instead;
- Provide a designated wash-down or cleaning area for vehicles and equipment;
- Ensure seed and fodder you bring to your property are free of weeds, or have a dedicated paddock for feeding livestock;



*Images:  
(Top) Landholders planting native tree seedlings to reduce the spread of weed seeds;  
(Bottom) Establishing windbreaks in your paddocks can assist in reducing the spread of weed seeds.*



- Manage feral animals to reduce their contributions to introducing seed;
- Check that tools, equipment, machinery, vehicles, pets and clothing are free of soil or seeds; and
- Keep livestock in a holding paddock when they arrive or before moving them into another paddock where needed to reduce the spread of weeds within your own property.

#### 2. Be strategic in your property management to reduce the spread of weed seed;

- Reduce seeding capability of all weed species e.g. slash or burn before seed maturation;
- Work from top to bottom of hills, catchments, creeks etc.
- Temporarily or permanently fence environmentally sensitive or highly productive areas to enable effective management of each area;
- Establish barriers e.g. windbreaks to reduce wind speed and prevent seeds from spreading, with a particular focus on reducing prevailing winds common during seed production; and
- Allow preferred groundcover species to set seed.

#### 3. Be a good neighbour;

- Establish barriers, e.g. windbreaks to prevent seeds from spreading to neighbouring properties;
- Manage seeds adjacent to waterways that may have a direct influence on your neighbours;
- Manage weeds along your boundaries as a priority; and
- Try to work together with your neighbours when selecting your approach and timing to weed management and feral animal control to have a more positive impact in your landscape.

# 4.0 Developing the plan

We advise a 5 step process to developing your IWM plan.

**STEP 1: Assess your property.**

**STEP 2: Review your management options for the various zones within your property and identify different management options.**

**STEP 3: Prioritise your management options, to ensure greatest impact within your available resources.**

**STEP 4: Implement the plan.**

**STEP 5: Monitor and review.**

It is important to realise at the outset that the plan will need to change as you progress and these changes are based on evidence gained while monitoring your results. These steps will also need to be repeated over time as weed management is an ongoing process (Figure 5).

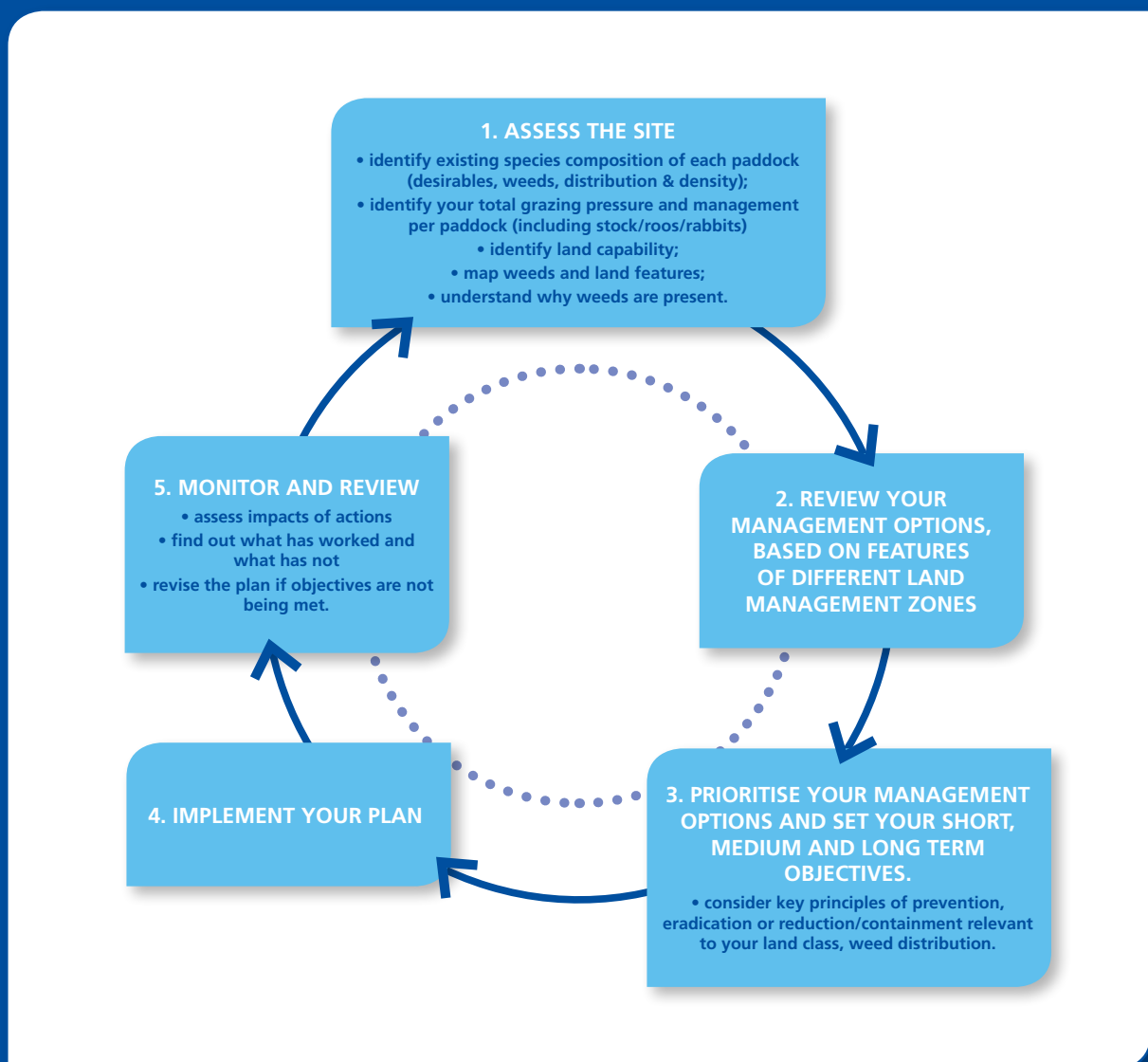


Figure 5 - The 5 step process to developing your IWM plan.

## 4.1 STEP 1: Assess the site

Assessing your site requires taking the time to collect relevant information on all aspects of your property from basic property information to mapping, refer to the previous section as a guide to the information required. Key questions to ask may include:

- **Species** present, density, life stage and condition;
- **What is the land capable of** - which land class applies?;
- **How am I currently using my land?** What is your current land use?;
- **What is the terrain like** – steep/rocky and is it accessible?;
- **What animals are present** – livestock, feral and native animals?;
- **What are the high risk areas?** e.g. vehicle tracks, fence lines bordering neighbours/roadsides, stock holding paddocks, areas where hay, grain or soil have been used from outside the property etc; and
- **Others** - are there areas of cultural value or risk?

### 4.1.2 MAPPING

The next important step in assessing your property is to map what you find. This may be done using aerial photography, topographic maps or a hand drawn map – ensure in all cases the scale of the map is known. You may wish to map all weeds on the one map or have overlays with different information on each one.

Mapping is very important as it helps to:

- accurately target and prioritise weed infestation areas;
- visually combines all the information you have gathered;
- enable budgeting of costs and time required to implement control techniques by providing information about the size and extent of weed infestation areas;
- locate areas at high risk of invasion such as fence lines, gullies, roadsides, riverbanks, vehicle tracks and clean-down areas; and
- review progress, measure success and adapt your activities to changing conditions, you can map changes over time.

### 4.1.3 PHOTOGRAPHIC POINTS

Establishing photographic points is another excellent way to keep a record and can be used for regular monitoring. This is done by marking out reference points on the ground to obtain a photo of the same area over the seasons and years to determine what changes have occurred as a result of active management. Some tips in setting up and using photographic points are:

- Use a picket or tin lid fixed securely to the ground and mark the position on the map.
- Always face the same direction when taking the photo.
- If possible align the photo direction north – south to avoid excessive sun or shadow.
- Take the photo at the same time each year to allow comparisons to be made including before and after treatment.



*Image: An example of a property plan, assisting these landholders in their decision making.*



## 4.2 STEP 2: Review your management options

Determining weed management priorities should be based on an assessment of the significance of impact of each weed present within each land management zone (zones based on land capability, soil and/or land use) and the practical options for their management.

Practical options for the management of each weed will vary depending on their location, distribution and density. Refer to Table 1 for suitable management options for a range of grassy weeds.

## 4.3 STEP 3: Prioritise your management options and objectives

Given the nature of widespread grassy weeds, complete control is not likely a realistic outcome for your property. Once suitable control methods have been considered for each management zone within your property, you will now need to consider prioritising these options to formulate a plan that is realistic within the resources you have available to you such as time and money.

Some potential high priority areas for you to consider when setting priorities:

- **Eradicate new, small and outlying infestations**, where practical, to stop a seed bank from developing and reduce the likelihood of a large infestation developing.
- **Control areas with high risk of spread** to limit further weed spread and reduce the chance of new infestations developing. Such areas include stockyards, boundary fence lines, creek and riverbanks, hill tops, rocky, steep or inaccessible areas, and roadsides.
- **High value assets** where infestations are already established. Such assets may include areas of productive pasture, high value native grassland or sites of community or cultural importance.

From the information that has been collected from assessing your site and having determined weed priorities for the property an informed decisions can now be made to determine the objectives of the IWM plan.

Examples of short, medium and long term objectives are:

- **Short term:** stop the weed from seeding, reduce the weed seed bank, prevent weed seed from spreading through the property by considering animal, feed and machinery hygiene.
- **Medium term:** decrease the amount of bare ground, increase the level and vigour of desirable pasture species, increase stocking rates.
- **Long term:** restore steep, inaccessible or marginal areas to native vegetation, remove or contain mother lode infestations so it no longer a seed source into productive land or neighbouring properties.

The objectives will aim to actively manage existing weed infestations and minimise the entry of new weeds. Objectives should also reflect the focus on what is to be protected or restored not just on weed management alone.



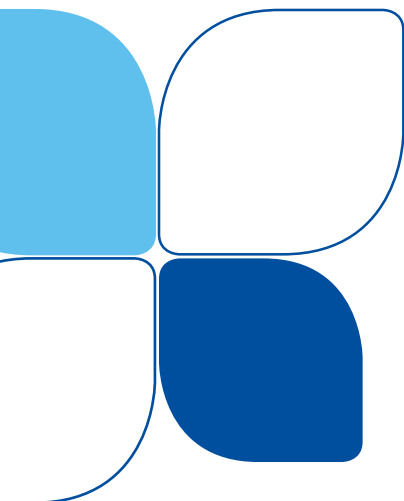
*Image: Paterson's curse (Echium plantagineum).*

When determining the plan's objectives also consider the main management principles of:

- **Prevention:** Where no weeds exist, prevent the weed from entering the land. Prioritise hygiene practices and maintain a healthy ground cover of vegetation and be vigilant.
- **Eradication:** Where early stage invasion or small isolated infestations exist high priority should be given to eradication. Ongoing maintenance at the site will be vital for the life of any seed bank that may have established.
- **Reduction or containment:** Where the weeds are established or widespread, it may be unrealistic to immediately eradicate the weed. Limit the impact of the weed by progressively decreasing the infestation size paying particular attention to outlying infestation(s), restricting its spread, reducing the seed bank and reducing or preventing seed set. There may also be good reasons for retaining weeds in some situations where the plants may be providing protection from erosion for example.

Identify the most appropriate combination of control methods for the weed(s).

- Consider the weed's life cycle and vulnerabilities to determine timing of different treatments;
- Schedule activities on a calendar
- Specify what is going to be done, where, when and by whom; and
- Consider your time and resources (equipment, labour and finances) available.



## 4.4 STEP FOUR: Implement your plan

The implementation of the main part of the plan, namely the action plan(s), is the critical step which brings together the objectives, physical environment and suitable control techniques. It is important to:

- Plan to integrate weed management into your everyday farm activities;
- Mark key weed management times on your farm calendar;
- Know the lifecycle of your weeds and desirable pasture species, particularly flowering and seeding;
- Work on the most productive areas, to ensure income and then consider less productive areas; and
- Usually work from the best areas to the worst – property hygiene

## 4.5 STEP FIVE: Monitor and review

It is vital to include in the action plan ongoing maintenance. This is especially important where initial control techniques on large scale infestations are carried out.

**If ongoing maintenance is NOT considered the weed infestation may return at greater densities than before or new weeds may appear leading to more expensive control!**

### 4.5.1 DETERMINE MONITORING METHODS

Monitoring is a vital part of the weed management cycle as it detects changes over time. Monitoring allows you to identify how well control measures are working, the rate of spread of weeds or the establishment of desirable vegetation, new threats to the area, and any other factors that may arise that will affect your program.

Some suggestions on monitoring methods include:

- Photographic points. Returning to the same spot yearly or seasonal and take a photograph. Refer to page 14;
- Accurately mapping infestation;
- Measure densities of infestations; and
- State the current situation for your nominated objectives e.g. current stocking rates, pasture ground cover or pasture health.

Once you begin implementing the IWM plan continue monitoring and use the collected information to evaluate how successfully you have been in meeting the plan's objectives. This enables you to review your plan and modify or incorporate any necessary changes. An IWM plan is a living document, implement each stage, monitor, review and keep going!!

Other questions to consider during the evaluation and review process may include:

- Was the plan implemented? If not why not e.g. lack of time, money, resources, weather patterns?
- Did the planned activities achieve the objectives? If not why not e.g. drought, failed chemical application due to poor application, timing?
- What were the actual costs?
- Were these under or over budget?
- Can the money be better spent next time?
- Were there any positive or negative changes in the condition of the property as a result of the management task? E.g. increased pasture on heavily infested area.

## 4.6 References

CLEMENTS B., GLOVER, S., KEYS, M., SCHUUMANN B., 2002, *Landscan - Landscape and Soil Test Interpretation for Sustainable Farm Management Course Manual*, NSW Department of Primary Industries.

CRAWFORD C., 2012, *Guidelines for Preparing an Integrated Weed Management Plan*, Goulburn Mulwaree Council

LODGE, G., *Making more from sheep*, NSW Department of Primary Industries ([http://www.makingmorefromsheep.com.au/healthy-soils/tool\\_6.2.htm](http://www.makingmorefromsheep.com.au/healthy-soils/tool_6.2.htm))

OSMOND R, VEEBEEK, M., MCLAREN, D.A., MICHELMORE, M., WICKS, B., GRECH, C.J AND FULLERTON, P. (2008) *Serrated Tussock – National best practice manual*. Victorian Department of Primary Industries.









Image: Scotch broom (*Cytisus scoparius*).

# APPENDIX A - Calendar of growth cycle and control times for weeds of the Southern Tablelands.

NSW DPI

## CALENDAR OF GROWTH CYCLE & CONTROL TIMES FOR WEEDS OF THE SOUTHERN TABLELANDS

Note: this indicates *general* growth cycle and control time patterns for the specified weeds. These times may vary with weather conditions and with the specifications of chemical labels and permits.

SEASON	SUMMER			AUTUMN			WINTER			SPRING		
	MONTH	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
<b>SERRATED TUSSOCK <i>Nassella trichotoma</i></b> <span style="float: right;">NOXIOUS (4)</span>												
	GERMINATION											
	FLOWERING											
	SEED FORMATION											
	SEED DROP											
	HERBICIDE	FLUPROPANATE: SPOT/BROADACRE										
	OTHER CONTROL	CHIP; COMPETITIVE VEGETATION COVER; SPOT SPRAY GLYPHOSATE WHEN ACTIVELY GROWING										
<b>CHILEAN NEEDLE GRASS <i>Nassella neesiana</i></b> <span style="float: right;">NOXIOUS (4)</span>												
	GERMINATION											
	FLOWERING											
	SEED FORMATION											
	SEED DROP											
	HERBICIDE	SPOT SPRAY/BROADACRE										
	OTHER CONTROL	STRONG COMPETITIVE PASTURE; SHORT DURATION ROTATIONAL GRAZING										
<b>AFRICAN LOVEGRASS <i>Eragrostis curvula</i></b> <span style="float: right;">NOXIOUS (4)</span>												
	GERMINATION											
	FLOWERING											
	SEED DROP											
	HERBICIDE	SPOT SPRAY/BROADACRE								SPOT SPRAY/BROADACRE		
	OTHER CONTROL	STRONG COMPETITIVE PASTURE; CHIP										
<b>WINTER GRASSES <i>Vulpia</i> spp., barley grass</b> <span style="float: right;">NOT DECLARED</span>												
	GERMINATION											
	PLANTS GROWING											
	SEED DROP											
	HERBICIDE	BROADACRE										
	OTHER CONTROL	STRONG COMPETITIVE PASTURES; GRAZE										
<b>BLACKBERRY <i>Rubus fruticosus</i></b> <span style="float: right;">NOXIOUS (4)</span>												
	GERMINATION											
	NEW CANES											
	FLOWERING											
	FRUITING											
	HERBICIDE	SPOT SPRAY/BROADACRE										SPOT SPRAY/BROADACRE
	OTHER CONTROL	MECHANICAL; HAND WEEDING; SLASHING; GRAZE GOATS; BIOLOGICAL CONTROL										
<b>SCOTCH BROOM <i>Cytisus scoparius</i></b> <span style="float: right;">NOXIOUS (4)</span>												
	GERMINATION											
	FLOWERING											
	SEED DROP											
	HERBICIDE	SPOT SPRAY										SPOT SPRAY
	OTHER CONTROL	GRAZE SHEEP/GOATS; CUT AND PAINT; MECHANICAL										

CALENDAR OF GROWTH CYCLE & CONTROL TIMES FOR WEEDS OF THE SOUTHERN TABLELANDS

SEASON	SUMMER			AUTUMN			WINTER			SPRING		
MONTH	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV

**PATERSON'S CURSE *Echium plantagineum*** NOXIOUS (4)



GERMINATION												
ROSETTE FORMATION												
FLOWERING												
SEED DROP												
HERBICIDE												
OTHER CONTROL												

**ST JOHN'S WORT *Hypericum perforatum*** NOXIOUS (3/4)



GERMINATION												
FLOWERING												
SEED DROP												
HERBICIDE												
OTHER CONTROL												

**FIREWEED *Senecio madagascariensis*** NOXIOUS (3)



GERMINATION												
FLOWERING/SEEDING												
HERBICIDE												
OTHER CONTROL												

**NODDING THISTLE *Carduus nutans*** NOXIOUS (4)



GERMINATION												
FLOWERING/SEEDING												
HERBICIDE												
OTHER CONTROL												

Note: At the time of publication, only some of these weeds are declared noxious, as indicated.

For more information contact your local council or NSW DPI Goulburn on (02) 4828 6600.

**NOXIOUS WEEDS ACT 1993 – CLASSES**

**CLASS 1, STATE PROHIBITED WEEDS**

**Class characteristics** – Class 1 noxious weeds are plants that pose a potentially serious threat to primary production or the environment and are not present in the State or are present only to a limited extent.  
**Control objective** – to prevent the introduction and establishment of those plants in NSW.  
**Control measures** – The plant must be eradicated from the land and the land must be kept free of the plant.

**Examples**

- a) absent Statewide: kochia, broomrapes, karoo thorn, siam weed
- b) present in NSW: parthenium weed, horsetail

**CLASS 2, REGIONALLY PROHIBITED WEEDS**

**Class characteristics** – Class 2 noxious weeds are plants that pose a potentially serious threat to primary production or the environment of a region to which the order applies and are not present in the region or are present only to a limited extent.  
**Control objective** – to prevent the introduction and establishment of those plants in parts of NSW.  
**Control measures** – The plant must be eradicated from the land and the land must be kept free of the plant.

**Examples**

- a) alligator weed, b) salvinia

**CLASS 3, REGIONALLY CONTROLLED WEEDS**

**Class characteristics** – Class 3 noxious weeds are plants that pose a serious threat to primary production or the environment of an area to which the order applies, are not widely distributed in the area and are likely to spread in the area or to another area.  
**Control objective** – to reduce the area and the impact of those plants in parts of NSW.  
**Control measures** – The plant must be fully and continuously suppressed and destroyed, or

The plant must be fully and continuously suppressed and destroyed and the plant must not be sold, propagated or knowingly distributed.

**Examples**  
 a) giant Parramatta grass, b) gorse, St John's wort in some areas

**Control measures** – a) The plant must be fully and continuously suppressed and destroyed, or

The plant must be fully and continuously suppressed and destroyed and the plant must not be sold, propagated or knowingly distributed.

**CLASS 4, LOCALLY CONTROLLED WEEDS**

**Class characteristics** – Class 4 noxious weeds are plants that pose a threat to primary production, the environment or human health, are widely distributed in an area to which the order applies and are likely to spread in the area or to another area.  
**Control objective** – to minimise the negative impact of those plants on the economy, community or environment of NSW.  
**Control measures** – a) The growth and spread of the plant must be

controlled according to the measures specified in a management plan published by the local control authority.

**Examples**  
 African lovegrass, fireweed, St John's wort, Paterson's curse, scotch and nodding thistle in some areas, or

b) The growth and spread of the plant must be controlled according to the measures specified in a management plan published by the local, control authority. The plant must not be sold or deliberately distributed.

**Examples**  
 Blackberry, Chilean needle grass, serrated tussock

controlled according to the measures specified in a management plan published by the local control authority.

**Examples**

African lovegrass, fireweed, St John's wort, Paterson's curse, scotch and nodding thistle in some areas, or

b) The growth and spread of the plant must be controlled according to the measures specified in a management plan published by the local, control authority. The plant must not be sold or deliberately distributed.

**Examples**

Blackberry, Chilean needle grass, serrated tussock

**CLASS 5, RESTRICTED PLANTS**

**Class characteristics** – Class 5 noxious weeds are plants that are likely, by their sale or the sale of their seeds or movement within the State or an area of the State, to spread in the State or outside the State.  
**Control objective** – to prevent the introduction of those plants into NSW, the spread of those plants within NSW or from NSW to another jurisdiction.  
**Control measures** – The requirements in the Noxious Weeds Act 1993 for a notifiable weed must be complied with.

**Examples**  
 a) wild artichoke, bridal creeper, willows, thistle and esparrillo

**Control objective** – to prevent the introduction of those plants into NSW, the spread of those plants within NSW or from NSW to another jurisdiction.

**Control measures** – The requirements in the Noxious Weeds Act 1993 for a notifiable weed must be complied with.

**Examples**

a) wild artichoke, bridal creeper, willows, thistle and esparrillo

**Disclaimer:** The information contained in this publication is based on knowledge and understanding at the time of writing August 2006. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent advisor.

Prepared by Cathy Crawford

All photos by Lori McWhirter except serrated tussock by Michael Michelmore



# APPENDIX B – Recommended reading

The internet provides access to an overwhelming amount of information, including farm weed management. Many useful brochures and fact sheets are available on-line and the following are considered to be useful for the purpose of preparing a property weed management plan.

## Weed detection

- Weed Detection and Control on Small Farms – A Guide for owners (this guide provides guidance to landholders in detecting weed management issues on your property).  
[http://www.une.edu.au/\\_\\_data/assets/pdf\\_file/0005/52367/2010.-Weed-Detection-and-Control-on-Small-Farms.pdf](http://www.une.edu.au/__data/assets/pdf_file/0005/52367/2010.-Weed-Detection-and-Control-on-Small-Farms.pdf)

## Best practice guides

- Australian weed management guidelines (best practice guides for weed species).  
<http://www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/publications/weeds-crc-pubs>
- Best practice guide for over 300 noxious weeds including the profile, control options and legal requirements.  
<http://weeds.dpi.nsw.gov.au/>

## Weeds of national significance (including serrated tussock, Chilean needlegrass & blackberry)

- Weeds of National Significance – information to assist you identify and manage 32 Nationally listed weeds.  
<https://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html>
- Weeds of National Significance – weed management guide (2003) – this link provides access to the Weed Management Guides produced for Weeds of National Significance, including information on the identification and management options of each weed.  
<https://www.environment.gov.au/biodiversity/invasive/weeds/publications/index.html>

## Various organisations/committees engaged in weed management

- Southern Tablelands and South Coast Noxious Plants Committee.
- With an aim “To provide leadership in the best practice management of weeds and in so doing protect agricultural, community and environmental sustainability throughout the south east region of NSW.” This committee website provides links to useful resources and information relevant to south east NSW.  
<http://www.southeastweeds.org.au>
- Your local government website contains a range of useful information in relation to the management of noxious weeds.
- Weeds Australia - Australian Weeds Committee National Initiative. This website provides tools to assist in the identification and management of weeds.  
[www.weeds.org.au](http://www.weeds.org.au)
- The Livestock Biosecurity Network (LBN) is a service that provides advice and assistance to farmers in reducing their biosecurity risks. The LBN has produced two important tools to help livestock producers develop biosecurity plans for their properties, which include weed management considerations. For more information, refer to their website:  
<http://www.lbn.org.au>

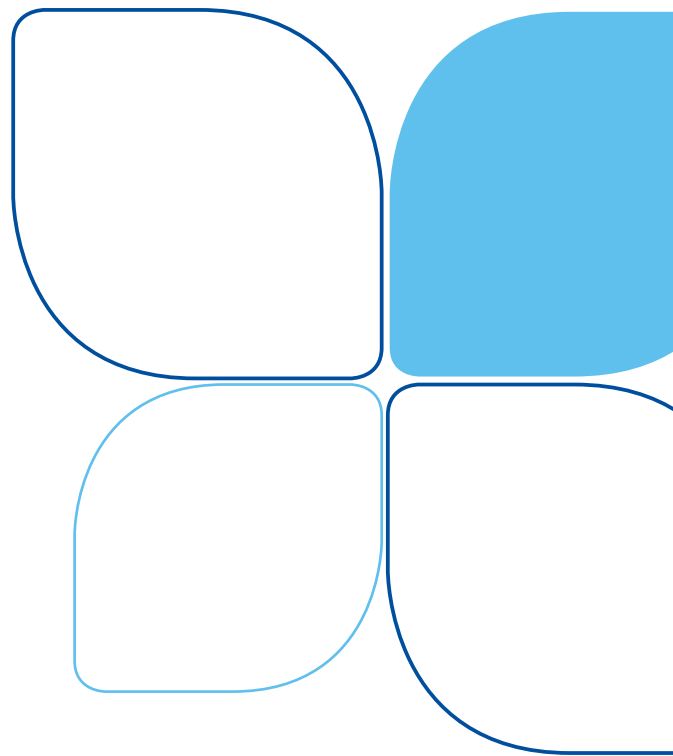
## Databases and mobile apps

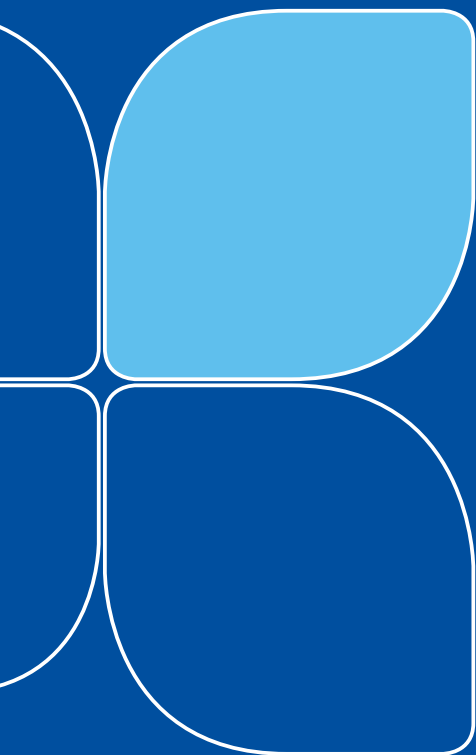
- There is a handy NSW Department of Primary Industries database that profiles over 300 weeds, describing their legal requirements under the *Noxious Weeds Act 1993*, control information and registered herbicide options.



You can search the database on their website or download the NSW WeedWise mobile app from the Apple App Store® or Google Play®.

<http://weeds.dpi.nsw.gov.au/>





**BRAIDWOOD**

02 4842 2594

**BERRY**

02 4464 6000

**BEGA**

02 6491 7800

**GOULBURN**

02 4824 1900

**YASS**

02 6118 7700

**COOMA**

02 6452 1455



Local Land  
Services  
South East

[www.lls.nsw.gov.au/southeast](http://www.lls.nsw.gov.au/southeast)