Acknowledgements

This booklet is a product of the University of New England project Best practice for on-ground property weed detection, funded by the Defeating the Weed Menace R&D program.

The Defeating the Weed Menace R&D is managed by Land & Water Australia on behalf of the Australian Government Department of Agriculture, Fisheries and Forestry and the Department of the Environment, Water, Heritage and the Arts.

We thank all the farmers and weeds inspectors who contributed ideas for this guide through our national surveys. We are also grateful for the assistance of Jef Cummings (Biosecurity Queensland), Catriona King (Victorian Department of Primary Industries), Stephen Johnson (New South Wales Department of Primary Industries), Mark Trotter (University of New England), John Virtue (Department of Water, Land and Biodiversity Conservation South Australia), Rohan Rainbow and John Sandow (Grains Research and Development Corporation), Rachel McFadyen (CRC for Australian Weed Management), Elisa Heylin (Australian Wool Innovation), Peter Gregg (Cotton Catchment Communities CRC) and James Browning (New England Weeds Authority).

All photographs used in this booklet are sourced from Brian Sindel, University of New England and the Institute for Rural Futures, University of New England.

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Disclaimers

Descriptions of herbicide use in this guide are not to be taken as recommendations. Herbicides must only be used in accordance with the recommendations provided on herbicide labels. Landholders are advised to consult with their State or Territory government departments regarding the legal requirements relating to weed control.
Introduction

Weeds constitute a significant cost to Australian agriculture each year, both in terms of control and lost productivity. However, weeds also cause problems for the owners of small ‘hobby’ or lifestyle farms. Extensive weed outbreaks on small farms:

- may cut significantly into niche-farming profits;
- detract from time better spent on other farm activities;
- make it more difficult to restore natural habitats on your land;
- may strain relationships with neighbours, particularly those managing a production farm; and
- detract from the natural beauty of your land.

The primary emphasis of this booklet is therefore on the importance of detecting and controlling weeds on your land before they have a chance to spread. It is also important to seek advice and assistance from your local weeds inspector, and, when necessary, to work with your neighbours to control weeds. In the longer term, effective and diligent weed control will make managing your farm easier and less time-consuming, and will allow you to focus on the enjoyable aspects of living in rural Australia.

In following pages we discuss the significance of weeds to small farms in Australia, and summarise best practice weed detection and control methods most appropriate to small farm owners. Much of this information is based on a 2008 national survey of weed inspectors and landholders.

It is important to understand the ‘principles’ of weed detection and control: what constitutes a weed, how weeds spread, where and when to look for weeds on your land, how to detect weeds and identify unknown species, and the best methods to control weed outbreaks quickly.

Considerable information, assistance and resources are available to help landholders control weeds on their properties. For small farm owners, however, external assistance can be expensive, difficult to access, or more appropriate to large-scale production agriculture.

Therefore, towards the end of this booklet, options for small farm owners seeking assistance with weed control are discussed. You will also find a list of contact details for relevant authorities in your State or Territory, and a list of useful references (weed identification booklets, brochures and websites).
What is a weed?

Weeds are plants that require some form of action to reduce their harmful effects on farmers’ livelihoods, the economy, environment, human health and amenity.

Around 28,000 plant species have been introduced into Australia since European settlement. More than 2,770 of these have become naturalised and weedy, of which around 65% are considered a problem for natural ecosystems and about 35% are considered a problem for agricultural systems.

In addition to plants not native to Australia, weeds may include native plants that are growing outside their known natural range.

Some weeds are declared under legislation as requiring control by all landholders. These are usually particularly harmful and have not yet spread far, and so it is in the wider community’s best interest if individual landholders are required by law to control these weeds on their land.

Other more widespread weeds may not be declared under legislation, but there is an economic and environmental imperative for individual landholders to manage such weeds.

Each weed species may pose a threat to different regions or parts of Australia, depending on factors such as climate and the extent to which the weed has taken hold in a region. Some species may be declared or prohibited at a State/Territory or Federal level, while others may only be prohibited at a regional level (for example a catchment or local government area).

To obtain a list of declared species for your region, contact your local weeds inspector, weeds authority, council/local government office, or your State or Territory department of agriculture or primary industries. A list of weed identification resources is also included on pages 22 and 23.
How do weeds spread?

There are many different causes of weed spread. In reality, anything that moves or is moved may cause weeds to spread. Seventeen ‘pathways’ of weed spread have been identified in Australia (Sindel et al. 2008b):

- **Deliberate spread by humans:** aquarium plant trade, fodder trade, food plant trade, medicinal plant trade, ornamental plant trade, revegetation and forestry.
- **Accidental spread by humans:** agricultural produce, construction and landscaping materials, human apparel and equipment, livestock movement, machinery and vehicles, research sites, waste disposal.
- **Natural spread:** birds, other animals, water, wind.

The pathways most likely to spread weeds on farms include birds, wind, water, machinery and vehicles, hay and fodder, and livestock.

On small farm blocks, other pathways including ornamental plant trade (gardens and exotic tree plantings), food plant trade (orchards and vegetable gardens) and landscaping materials (mulches, gravel and topsoils) will also be important.
Minimising weed spread on your property

By identifying the potential ways in which weeds may spread onto your property, you may be able to implement some simple measures to reduce the appearance of new weeds in your paddocks or garden, or minimise the spread of weeds from one area of your property to another.

The best way to minimise weed spread onto other parts of your property, or onto neighbouring properties, is to eradicate the weeds at the source as soon as possible. In the longer term, you will have less weeds to remove, and will generally have to remove them from fewer locations.

Some reduction in the spread of weeds on your farm can be achieved by restricting the movement of newly acquired livestock, in case they are carrying weed seeds (inside or outside). It is also worth restricting the areas where off-farm fodder is fed to livestock, in case it is contaminated.

Other measures to prevent weeds spreading onto your land may include ensuring that potential weed species are not planted in the garden, removing garden plants that appear to be spreading into the paddocks, purchasing stock fodder that has been certified weed-free, ensuring your vehicle does not carry weed seeds onto your property from another property you have recently visited, or ensuring that seed attached to your clothing is removed and destroyed.

When you have determined which weed species are prevalent on your land or in your district, it is worth seeking advice from your local weeds inspector to determine what can be done to limit the spread of these particular species.
Why is it important to control weeds on small farms?

Given the estimated cost of weeds to Australian agriculture of $4 billion annually (Sinden et al. 2004), the focus of weeds professionals and agencies is largely on the economic benefits of controlling weeds to maximise farm profits, on the legal requirements of controlling prohibited or declared species, or on biosecurity.

However, most small farm owners have purchased land not to make a profit, but to achieve a variety of non-economic ‘lifestyle’ goals, including habitat restoration, self-sufficiency, family well-being, involvement in a rural community, and/or small-scale hobby farming (Hollier and Reid 2007).

Many small farm managers in Australia are keen to do more to control weeds on their land. Where small farm managers are unable to control weeds effectively, it is mostly due to lack of time, knowledge, or equipment, rather than lack of motivation (Low Choy and Harding 2008).

Early weed detection and on-going control is vital to effective land management on a small farm, and may prevent costly economic, environmental and human health and amenity impacts in the future. It is essential to find and eradicate new weeds before they become troublesome. Early detection and prevention is better than cure!

Keeping the weeds on your land under control will help you to enjoy your farm and get the most out of it. An extensive weed outbreak on your property will be expensive and time-consuming to control, may strain relationships with your neighbours, and will make it difficult to achieve other goals such as hobby farming or habitat restoration.

Being diligent in detecting and controlling weeds will minimise the chance of a large outbreak, will save you time and money, and will help you to enjoy the benefits of a rural lifestyle.

The first step in controlling weeds is successful detection. In the next few pages we summarise ‘best practice’ principles for detecting weeds on your farm.
What are the principles of weed detection?

Where should I look for weeds on my farm?

- Near and downwind of previous weed infestation areas
- Watered areas (water courses and dams)
- Roadways and traffic areas
- Boundaries with neighbours and along fencelines
- Livestock camps and feeding areas
- Cultivated paddocks
- In remote or relatively inaccessible areas (such as remnant bushland)
- Near sheds, tanks, stock yards and other structures
- Revegetation areas (e.g. tree plantings) and gardens (particularly new gardens where mulch or topsoil has been used)

When determining where on your property to check for weeds, consider:

- Those areas that have yielded weed infestations in previous seasons. *Seeds can persist in the soil for several years.*
- Focusing on areas on your property that may be particularly vulnerable to new weed infestations, such as those listed above. *Identify these areas and inspect them for weeds on a regular basis.*

Relatively inaccessible areas on your property (such as areas of dense vegetation, remote areas, steep and/or rocky country) may be difficult to check for weeds. However, it is these areas which often yield new weed infestations, for example, those spread by birds. On a small farm, it may be more practical to inspect difficult areas on foot, horseback, motorbike or quad bike, and to inspect other areas using a vehicle.

If you are new to your property or are not certain which areas may be most vulnerable to weeds, you should ask your neighbours, local agronomist or local weeds inspector for advice. The parts of a property where weeds are most likely to be found varies across Australia.
When should I look for weeds?

Weed detection becomes a more important issue at certain times of year. The best time or times of year to look for weeds on your property will depend on the climate, the species of weeds prevalent in the district, and on the type of farm you own (for example, grazing or horticulture). The best approach is to check your property for weeds while doing other jobs, but also undertake regular specific paddock inspections.

In some parts of Australia, time of year is less important, possibly due to the relative importance of year-round species. However, farmers in other regions will check for weeds at certain times of year, such as after the start of the autumn break (in rainfall), or in early spring when there is still sufficient soil moisture from winter rains and warmer temperatures for weed growth.

Why is time of year important for weed detection?

- Each weed species has a particular life-cycle, and time of year when it is flowering or otherwise producing seed. It is important to detect and control weeds early in their life-cycle, before they produce seed (“one year’s seeding is 7 years weeding!”).
- Some weed species are more noticeable at certain times of year.
- Often you will have the best chance of killing or controlling weeds, at least with herbicides, when they are young and actively growing.
- Seasonal and climatic conditions, such as after rainfall, influence the time of year when weeds are most likely to grow quickly.
- Likewise, major disturbances that create bare ground, such as floods, fire, cyclones, drought and overgrazing, and even weed control activity (such as spraying) can lead to weed infestation.

It is important to know which weed species are most likely to grow on your land, and be aware of how the factors above will affect the behaviour of these species. A list of weed identification resources is provided at the end of this booklet. Your State department of agriculture or primary industries, or weeds inspector may also be able to provide fact sheets or further information on when specific weed species are likely to grow.
How do I identify an unknown weed or unusual plant?

Landholders may undertake a variety of measures when they find an unknown or unusual plant on their property, including:

• asking a local professional such as an agronomist or weeds inspector for advice (see the section Where can I get further information?);
• looking the plant up in a weed identification book, a web site, or other reference materials (a list of useful materials is provided at the end of this booklet); and
• asking a neighbour (particularly one who is an experienced farm manager), other landholder or Landcare member for advice.

It is important to identify an unknown or previously unseen plant on your land as soon as possible, to determine whether it is a weed and how to control it. If the plant is a weed, early identification and removal will give you the best chance at controlling the weed before it has a chance to spread and become a larger problem next season.

Why should I seek advice on unknown plants?

In the event that you find an unknown plant, it is highly recommended that you contact your local weeds inspector or local government office for immediate advice. Weeds inspectors receive training in weed identification, and have access to other weed identification services including government agencies, agronomists, botanists, and herbaria. They can also provide you with information on high priority weeds for which you should be looking.

A list of contacts is provided in the section Where can I get further information?
How do I collect and preserve a weed specimen for identification?

For proper identification, a flower or other reproductive structure, such as a seed head or fruit, is almost always required. You should therefore aim to collect one or two plants that have these structures on them to take to your local weeds professional for identification. For large weeds, only part of the plant needs to be collected, as long as it contains all the types of structures of the plant. Storing it in a sealed plastic bag will keep it fresh for a day or two for ease of identification.

Where the time between collection and identification is likely to be longer than a day, plants may need to be preserved in their original state by immediately pressing and drying them between sheets of newspaper (4 or 5 at least on each side), with a heavy object on top. It is important to change the newspaper every couple of days until the specimen is dried. The flattened and dried specimen can then be taken for identification as is, or taped to a piece of stiff paper or cardboard for easier display.

Digital photographs can also be taken of your unknown plant and shown or emailed to your weeds inspector for identification. However, these need to include close-ups of all the parts as well as images of the whole plant.
What should I do when I find a new weed outbreak?

When farmers detect new weeds on their property, they are often marked (for example, with a stick, pole, or pile of rocks), or recorded in a farm note book or paddock diary if they have one.

Again, it is important to notify your local weeds inspector of the outbreak. They will also record the location of the outbreak, and seek to manage the spread of the weed at the regional level.

The aim in marking and recording a weed ‘find’ is to be able to come back and regularly check the location. It is likely that if one weed is found, more plants will be found at that site in the future, particularly if that plant or another has set seed. The weeds seen above ground may only be 5% of what is there in total. Up to 95% may be seeds on and in the ground.

The time over which weed seeds will persist in the soil varies greatly between species, and so once a new weed is found, the location needs to be marked or recorded in some way and then checked regularly for a period of up to 5 years for new outbreaks, assuming no more seeds arrive at that site in the mean time.

The most important action to take when finding a new weed outbreak on your property is to control the weeds as soon as possible. In the next section of this booklet we discuss appropriate weed control methods for small farm owners.
Controlling weed outbreaks on your farm

What are my weed control responsibilities?

As has been discussed earlier in the section Why is it important to control weeds on small farms?, controlling weeds has many benefits for managers of small farms.

However, land managers also have certain responsibilities to control weeds. You may be required by law to inform neighbours or authorities before undertaking certain control activities, particularly large-scale spraying or burning.

You will also be legally bound to control particular weed species (declared or prohibited weed lists vary across Australia).

If you are unsure of your weed control responsibilities, please seek advice from your local weeds inspector. Legal responsibilities may vary between States, Territories and local government areas.
Which control methods are suitable for small farm owners?

There are two primary methods used by the majority of small farm owners to control new weed outbreaks:

• digging or pulling the weed out; and
• spraying the weed.

However, the control method used depends on the type or types of weeds you are seeking to control, and the time of year. Before starting, it is worth quickly finding out the best way to control particular weed species, and the potential cost involved, as the most appropriate control strategy varies between species. For example, it may be best to dig out a small number of thistle plants or slash larger numbers, to spray a large outbreak of perennial grass weeds, to cut larger woody weeds at ground level and immediately apply undiluted herbicide to the cut stem, or to burn a large outbreak of blackberry during the cool months of the year.

The CRC for Australian Weed Management has produced a series of Weed Management Guides for particular species, available for free download from www.weedscrc.org.au. Your local weeds inspector or district agronomist will also be able to advise you on the best way to manage particular species in your region.

Digging or pulling weeds out, or spot-spraying weeds using a backpack or handheld spray applicator are frequently the quickest and most economic methods to control most weed species for small farm owners, given the small scale of weed outbreaks they generally face. If you check your property regularly and thoroughly for weeds, and remove weeds as soon as possible (especially before they have had a chance to set seed), these simple control methods should remain viable.

Once weeds have been removed, minimising the disturbance to soil and vegetation will reduce the gaps left for new weed invasions. Weeds thrive on bare ground, so revegetation of the site may be required (such as by sowing pasture).
What are the guidelines for responsible use of herbicides?

Herbicides must be used in accordance with the instructions included on the label or packaging. You should always follow these instructions, and wear appropriate protective clothing when using herbicides, which may include a long sleeved shirt and long pants, waterproof gloves, heavy duty shoes, eye protection and a respirator.

You may also be obliged by State or Territory legislation to undergo training and obtain accreditation or certification in correct chemical safety, handling, application and record-keeping procedures. Some States or Territories only require accreditation for those who use more than a certain amount of chemicals annually (although these requirements may have changed since this booklet was published). Several organisations offer accreditation or certification courses. See the section Chemical certification or accreditation for more details.

You may also be required to keep records of chemical use on your property to comply with legislation or quality assurance programmes, such as the Livestock Production Assurance programme administered by Meat & Livestock Australia. If you participate in any quality assurance or primary production accreditation programmes, make sure you understand the requirements relating to chemical use. Organisations administering these programmes, or local weeds inspectors, will be able to provide advice on how chemical use records must be kept.
How do I control large-scale weed outbreaks?

In some cases, you may be faced with a large weed control task that is too difficult to manage without help or expensive equipment. However, large-scale outbreaks often involve a number of neighbouring properties, particularly where there are a number of adjoining small farms. By banding together with your neighbours to control the same weed, you can share the associated labour and costs, and possibly even share equipment if, for example, one neighbour has a large sprayer. Local Landcare volunteers may also be able to assist, particularly if you intend to control large weed outbreaks as a step towards revegetation or environmental restoration works on your property.

Combining resources with your neighbours also makes employing a spray contractor more affordable. When employing a contractor, ensure that they have the correct licencing and/or accreditation. Requirements vary across Australian States and Territories, so if you are not sure, contact your local weeds inspector or authority for advice. They should be able to recommend a contractor, and may even be able to undertake the work themselves.
What are ecological and biological weed control?

Many farmers, particularly those who own small farms, are reluctant to use chemicals to control weeds on their land. Sometimes physical removal of weeds may also be impractical, given the number of plants or the amount of labour involved. In these circumstances, you might wish to consider ecological control options.

Ecological or cultural control of weeds involves altering your normal land management practices to suppress weeds. It may simply involve appropriate use of grazing animals. For example, goats may be used to control large areas of blackberry, making spot spraying possible once the plant numbers have been reduced. Selective grazing with sheep, cattle, goats or horses at certain times of year can make it more difficult for certain palatable weeds to become dominant, by restricting their ability to set seed or otherwise propagate. Selective grazing is also a potentially useful method for controlling weeds on difficult to access areas of your property. A good pasture and grazing management system will maintain vigorous grass and clover cover in your paddocks, making it more difficult for new weed invasions to take hold.

Biological control of weeds particularly involves using fungi or insects that are ‘natural enemies’ of particular weeds. Such techniques are becoming more common as a non-chemical form of weed control, though they can be expensive to implement and have only been developed successfully for some species. However, it is worthwhile finding out whether biological control agents are available for you to distribute for the weeds on your land.

Further information on biological control options is available from

Chemical certification or accreditation

Short courses such as those developed by SMARTtrain teach participants appropriate chemical storage, use and safety. Once you have completed the course, you will obtain accreditation in chemical use on farm, appropriate to your State or Territory’s legal requirements. Ongoing accreditation may require participation in refresher courses after a set period (e.g. five years).

Examples of chemical accreditation providers are listed in the table below. However, this list is not exhaustive. Training may also be available from your State or Territory farmers association, TAFE, or other local provider.

Alternatively, the SMARTtrain National Support Centre (freecall 1800 138 351) or ChemCert Australia (02 9387 4714) will also advise you on your responsibilities, where training is available locally, and on the form of accreditation required in your State or Territory.

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<th>National/New South Wales/ACT</th>
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<td>Rural Solutions SA</td>
<td>TAFE (ChemCert)</td>
<td>ChemCert</td>
<td>AgForce Queensland</td>
<td>ChemCert</td>
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<tr>
<td>Phone: 02 9387 4714</td>
<td>Phone: 1300 364 322</td>
<td>Phone: 1300 655 307</td>
<td>Phone: 03 5622 2055</td>
<td>Phone: 07 3236 3100</td>
<td>Phone: 08 9341 5325</td>
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<td>Email: <a href="mailto:info@chemcert.org.au">info@chemcert.org.au</a></td>
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<td>Email: <a href="mailto:farmcarewa@bigpond.com.au">farmcarewa@bigpond.com.au</a></td>
<td>Email:</td>
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Examples of chemical accreditation providers:

- **National/New South Wales/ACT**
  - ChemCert
  - Phone: 02 9387 4714
  - Email: info@chemcert.org.au
  - Web: www.chemcert.org.au

- **South Australia**
  - Rural Solutions SA
  - Phone: 1300 364 322
  - Email: info@ruralsolutions.sa.gov.au
  - Web: www.ruralsolutions.sa.gov.au

- **New South Wales**
  - NSW Farmers Association (Chemical Card)
  - Phone: 1300 794 000
  - Email: emailus@nswfarmers.org.au
  - Web: www.nswfarmers.org.au

- **Tasmania**
  - TAFE (ChemCert)
  - Phone: 1300 655 307

- **Northern Territory**
  - James Gorrie, School of Science and Primary Industries, Charles Darwin University (SMARTtrain)
  - Phone: 08 8946 6441
  - Email: primaryindustry-enquiries@cdu.edu.au

- **Victoria**
  - ChemCert
  - Phone: 03 5622 2055
  - Email: chemcertvic@sympac.com.au
  - Web: www.chemcertvic.org.au

- **Queensland**
  - AgForce Queensland
  - Phone: 07 3236 3100
  - Email: agforce@agforceqld.org.au
  - Web: www.agforceqld.org.au

- **Western Australia**
  - ChemCert
  - Phone: 08 9341 5325
  - Email: farmcarewa@bigpond.com.au
What assistance is available to control weeds on my land?

Personal assistance

Weeds officers are responsible for weed detection and control within a district, but are also available to help all farmers, including small farm owners, to manage weeds on their land. They will be able to advise you on the most effective and least time-consuming methods to control particular weeds. *If you need assistance or advice on weed control, your local weeds officer or inspector is a good first contact.* Your local government office or State/Territory government will be able to advise you who to contact locally.

Many rural merchandise stores now employ agronomists, who may also be able to offer you advice on controlling particular weed species. Your State or Territory government may also employ local or district agronomists. A list of State and Territory contacts is listed in the section *Where can I get further information?*

Your neighbours are also a useful source of assistance and advice. It may be in the best interests of neighbouring farmers (particularly commercial farmers) to see that weeds are kept under control in their district, as rapidly spreading weed infestations may impact on their farm’s profitability. So it is in the interest of neighbours to help you to manage weeds on your land.
Financial assistance

Depending on the extent of the weed problem on your property, and the weed species involved, you may be able to obtain a grant to undertake control activities. Funding may be available from a range of sources, including various community and environmental grants from local, State, Territory, and Federal government, Landcare Australia, or regional natural resource management bodies (such as Catchment Management Authorities - CMAs).

Your chance of obtaining a grant to control weeds may increase if you apply for funding in conjunction with neighbours, if you are seeking to control declared, prohibited or high priority weed species, or if the weed control work coincides with habitat restoration (such as revegetation or tree planting).

A list of possible funding providers is available on the following two web pages:


For advice on Australian Government funding sources, phone the Commonwealth Regional Information Service on 1800 026 222.
Where can I get further information?

To obtain further information on weeds on your property please contact your local weeds authority or local government/council, whose contact details should be listed in the ‘White Pages’. Alternatively, a list of State or Territory contacts is provided below. Please be aware that these contact details may have changed since this booklet was produced.

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<th>South Australia</th>
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<tr>
<td><em>Department of Agriculture, Fisheries and Forestry</em></td>
<td><em>Department of Water, Land and Biodiversity Conservation</em></td>
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<tr>
<td><em>Exotic Plant Pest Hotline</em></td>
<td><em>Animal and Plant Control Group</em></td>
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<tr>
<td>Phone: 1800 084 881</td>
<td>Phone: 08 8463 6800</td>
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<td><em>Territory and Municipal Services</em></td>
<td><em>Department of Primary Industries and Water</em></td>
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<tr>
<td>ACT Parks, Conservation and Lands</td>
<td><em>DPIW Switchboard: 1300 368 550</em></td>
</tr>
<tr>
<td>Phone: 13 22 81 (ACT and NSW residents)</td>
<td><em>Principal Weed Management Officer</em></td>
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<tr>
<td>02 6207 5111 (callers outside NSW/ACT)</td>
<td>Phone: 03 6233 6168</td>
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<td>Weeds Hotline</td>
<td>Customer Service Centre</td>
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<td>Phone: 1800 680 244</td>
<td>Phone: 136 186</td>
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<td>Email: <a href="mailto:weeds@dpi.nsw.gov.au">weeds@dpi.nsw.gov.au</a></td>
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<td><em>Natural Resources, Environment, The Arts &amp; Sport</em></td>
<td><em>Department of Agriculture and Food Western Australia - Small Landholder Information Service</em></td>
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<tr>
<td><em>Weed Management Branch</em></td>
<td><em>Phone: 08 9368 3807 or 08 9733 7777</em></td>
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<tr>
<td>Phone: 08 8999 4567</td>
<td>Email: <a href="mailto:Small_Landholder@agric.wa.gov.au">Small_Landholder@agric.wa.gov.au</a></td>
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<td><em>Department of Primary Industries and Fisheries</em></td>
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<td>Phone: 13 25 33 (Qld residents)</td>
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<td>07 3404 6999 (callers outside QLD)</td>
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References and further reading


* These documents, on which this booklet is based, are available from www.ruralfutures.une.edu.au or www.lwa.gov.au
Weed identification resources

Unfortunately no one resource is sufficient for identifying weeds throughout Australia. Most resources have a regional focus. Listed below are some of the more useful books, field guides, web sites and CD based weed identification tools available to Australian landholders.

These resources can be accessed through libraries, the web or purchased through book shops and book sellers, such as through Weed Information, Web http://www.weedinfo.com.au/default.htm, Phone (03) 5286 1533.

Your local weed inspector, local government office, State department of agriculture or primary industry, or rural merchandise store may also have a range of weed identification resources available.

Books and field guides

Aquatic Weeds


Tropical and Subtropical Northern Australia


Temperate South Eastern Australia


*Bush Invaders of South-East Australia*, by Muyt A (2001), RG and FJ Richardson, Meredith, Victoria.


**Western Australia**


**Semi-arid and Arid Australia**


Plant Identification in the Arid Zone, by Milson J (1996), Queensland Department of Primary Industries, Brisbane.

**CDs**


**Web sites**


Weed outbreak record

The following two pages can be used to record weed outbreaks on your farm. Alternatively, you can adapt this table into a farm notebook, computer spreadsheet or database, to suit your requirements. More information on weed marking and recording may be found in the section *What should I do when I find a new weed outbreak?*

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<th>Species</th>
<th>Location (e.g. paddock)</th>
<th>How outbreak marked (e.g. stick, pole, rock pile)</th>
<th>When to check location again (e.g. Spring)</th>
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To obtain an electronic copy of this booklet, please visit:

www.ruralfutures.une.edu.au

or

www.lwa.gov.au