



RECOMMENDATIONS ON THE MANAGEMENT OF

WEEDS

IN THE AUSTRALIAN CAPITAL TERRITORY

Developed by the Landcare ACT Weeds Working Group, 2023

Acknowledgement of Country

We acknowledge the Ngunawal people, who are the Traditional Custodians of this country, and all First Nations people and their continuing connection to land, waters and community. We pay respect to elders past, present and emerging.



Preface

Weeds are an ever-present, ongoing challenge all around Australia. In the ACT, weed management is practiced by people in a wide range of professional and volunteer roles with varying levels of time, expertise and financial support. The problems are complex, and weeds will always be with us. Effective weed management requires coordinated, collaborative action across lands under a range of custodians, managed for varying purposes, by people with a wide range of perspectives and priorities. It requires coordinated resources over successive seasons, years and decades to improve and sustain healthy, productive, resilient landscapes.

This document has been prepared by Landcare ACT's Weeds Working Group, in response to community concerns regarding the effectiveness of existing land management practices in containing and limiting the spread of invasive plant species in the ACT. Landcare ACT is the peak representative body for community landcaring and this paper reflects discussions with our members, government stakeholders and the broader community during extensive community consultation over a two-year period, including the "Weeds Forum" held in November 2021.

Landcare ACT convened the Weeds Forum inviting landcarers, specialists and ACT Government staff to attend an online event which included presentations and interactive discussions. Over 80 people shared their concerns and ideas on how to confront one of the biggest threats to biodiversity and productivity in the ACT landscape. A review of the common themes of the forum deliberations identified a diverse range of issues, including the need for structural changes to the governance of weeds management, and a strong desire by the community for a closer, more collaborative approach.

The basis of successful weed management in future must include people from all walks of life - academia, government, farmers, students and householders - all doing their bit in a combined, coordinated and cooperative way. Landcare ACT's Weeds Working Group calls for greater collaboration by all those involved in dealing with weeds in the ACT.

Catherine Kiernan
Chair
Weeds Working Group
Landcare ACT

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Introduction

Landcare ACT is the peak representative body for community landcare in the ACT. ACT landcarers and community Landcare organisations play an important role in controlling, containing and eradicating weeds in our parks, reserves, and privately held rural areas, as well as educating urban residents about weed control on their properties in the 'Bush Capital'.

Landcare ACT's Weeds Working Group has prepared this paper to collate the Landcare community's views and articulate their priorities for better, more holistic weeds management, following extensive consultation with the community and key stakeholders, including the Landcare ACT's Weeds Forum held in November 2021.

Deliberations on weeds management over decades have concluded that success in containing and controlling weeds is only possible with multi-scale, tenure-blind, coordinated, ongoing action by the whole community in collaboration.

Landcare ACT's Weeds Working Group is advocating for increased and more collaborative action on weeds management to protect productivity, amenity and biodiversity, as well as to support the valuable work of our volunteers.

"Weeds are indeed a wicked problem – by definition, a wicked problem is one that is complex, has no easy solution and changes over time.

All of us, the government, landholders, community organisations and community Landcare volunteers are needed in identifying solutions... we need to listen to traditional custodians, and to work together to improve and sustain our landscapes"

Dr Maxine Cooper
Independent Board Chair Landcare ACT
November 2021



Above: African Lovegrass. Photo: C. Kiernan
Right: Common blackberry (stock photo)



"In Australia, almost all native ecosystems have been invaded or are vulnerable to invasion by exotic plants. Concerns about the environmental and agricultural impacts of invasive plant species have resulted in billions of dollars being spent on practices that limit their spread and reduce their extent, millions of dollars invested in invasive species research and untold number of volunteer hours dedicated to removing weeds from areas of areas of high local and environmental value.

Despite more than a century of significant time and resources devoted to weed management and some success stories, wave after wave of plant species continue to invade and advance across the country.

One explanation for why enormous challenges continue in Australian weed management is because many groups of researchers, policy makers and practitioners work in isolation from one another, and from the sectors that may be influenced to effect change, despite repeated calls for greater collaboration. "

Sonia Graham and Robyn Bartel

Australian Academy of Science 2020 Fenner Conference on the Environment

The Australian Government's *Australian Weeds Strategy 2017-2027* lists seven principles that underpin effective weeds management, including:

- *Effective weed management is a responsibility shared between landholders, community, industry and government;*
- *Coordination amongst landholders, community, industry and government is necessary to manage weeds at a landscape scale; and*
- *Sustaining capability and capacity across landholders, community, industry and government is fundamental to effective weed management.*

It goes on to list the responsibilities of community groups to:

- *Lead, promote and participate in collective action based on community needs at a local, regional or national level to mitigate impacts of established weeds of national significance on community assets;*
- *Provide leadership and direction regarding weed risk minimisation;*
- *Represent community interests in weed management;*
- *Assist with data collection and information exchange; and*
- *Support and build public awareness about weed issues.*

While noting that "there are challenges ensuring that all stakeholders undertake their responsibilities in weed management", the document is quite clear that "weed management is a shared responsibility, involving people and organisations from the local to the national scale"

Weeds are a key threat to biodiversity and agricultural production and need to be cohesively managed across local, regional and even national scales. As the major land holder in the Territory, the ACT Government has a critical role to play in conducting weed control, containment and eradication, as well as policy-making, and establishing legislative mechanisms and enforcement. Clearly, government resources alone will never be enough to tackle this problem. Residents, other landholders, and communities must also play a role.

Weeds Forum 2021

In November 2021, the Landcare ACT Weeds Forum facilitated the sharing of knowledge and discussion of challenges and opportunities for weeds management. Over 80 landcarers, landowners, government staff, researchers and interested community members participated in the forum, held online due to covid restrictions.

The forum provided an opportunity for community Landcarers to hear from decision makers, experts and weeds warriors on the current weeds management strategies in the ACT and across the broader. There was also an opportunity to share perspectives regarding challenges and priorities for weeds management. Presenters for the event included a range of ACT and NSW weeds representatives and experts.

The presenters were:

- Wally Bell, Ngunawal Elder and Board Member, Landcare ACT
- Rebecca Vassarotti MLA, Minister for the Environment and Heritage
- Dr Paul Downey, Adjunct Associate Professor, University of Canberra and Invasive Species Consultant
- Ian Walker, Executive Group Manager, Environment, Heritage and Water, ACT Conservator Flora and Fauna, Environment Planning and Sustainable Development Directorate, ACT Government
- Steve Taylor, Invasive Plant Coordinator, Environment, Heritage and Water, Environment Planning and Sustainable Development Directorate, ACT Government
- Megan Wyllie, Invasive Species Coordinator, NSW Local Land Services, South East Region at NSW Department of Primary Industries

Recordings of presentations can be found <https://vimeo.com/showcase/9020611>.



Above: Screenshot of some of the attendees at the Weeds Forum, November 2021.

Forum participants were asked to list their top three weeds of most concern. Composite results are provided in the table below. Please note, this is not a comprehensive list of all concerning weed species.

Species	Common Name
Eragrostis curvula	African Love Grass (<i>transformer</i>)
Rubus fruticosus	Blackberry (<i>weed of national significance</i>)
Nassella trichotoma	Serrated tussock (<i>weed of national significance</i>)
Nassella neesiana	Chilean Needle Grass (<i>weed of national significance</i>)
Hyperium perforatum	St Johns Wort
Rosa rubiginosa	Briar rose
Multiple species	Thistles e.g. scotch, illyian, saffron, nodding, spiny
Arctotheca calendula	Capeweed
Multiple species	Hawthorn and other garden tree escapees
Rumex acetosa	Sorrel (common / wild)

Participants engaged in discussions using an online collaboration tool to communicate issues, concerns, ideas, and solutions for Landcare and weeds management in the ACT region. The questions posed to participants were:

- What weeds are of greatest concerns to you?
- What do you want to be protected from weeds?
- What is being done that is important in controlling weeds?
- What would like changed in relation to weeds management?

Some responses included:

Public perception and education, increased knowledge about why weed control is important

Less use of chemicals in our environment

Ensure groundcover of desired species; biological control; indigenous cultural burning; mechanical removal and if that fails; chemical spraying as last resort

More opportunity for the sharing of knowledge among landcarers about weed control. Spreading the knowledge outside the silos where we tend to work would be very useful, especially if it were all recorded in one spot online.

When we talk about priorities and goals that we not only focus on preventing spread and reducing weed populations but also on the social outcomes we want. E.g. diverse engagement, minimising burnout of volunteers, positive experiences

More research

More integrated approaches

Recognising that weed management is one part of land management. We need to recognise the role of humans in the landscape, and create a culture of stewardship and shared responsibility

More cohesive management plan, with good communication and agreements between PCS, Contractors and Volunteer groups so all roles are clear and effective

Weeds Forum 2021

As part of her presentation at the Forum, Minister Vassarotti said:

"There is a need for action. On the back of years of drought and bushfires the current climate drivers including La Niña weather patterns (are) resulting in higher than average rainfall, causing increased invasive weed growth. The impact of these species will persist and increase in the environment for decades."

Throughout the forum it was reiterated by many that weeds management must be a collaborative effort contributed to by all of us, from residents and volunteers, to community environmental groups, and the various government directorates and ministers. Participant feedback at the Forum indicated a need for reform of the structure of governance around weeds management, and a very strong desire for increased collaboration between government, community groups, landholders and volunteers.



Above Left: Serrated Tussock, a Weed of National Significance.

Image: <https://canberra.naturemapr.org/sightings/4448125>

Above Right: Chilean Needlegrass, a Weed of National Significance.

Image: <https://canberra.naturemapr.org/species/8864>

Summary of Recommendations

Landcare ACT's Weeds Working Group has developed a set of recommendations towards better, more holistic weeds management. These are based on extensive consultation with the community and key stakeholders, including the Landcare ACT's Weeds Forum held in November 2021.

The Weeds Working Group presents the following recommendations for action by the ACT Government:

1 - GOVERNANCE

- 1.1 Establish a cross-tenure Weeds Management Committee
- 1.2 Revise Land Management Instruments and enforcement mechanisms

2 - DATA COLLECTION AND REPORTING

- 2.1 Support all weed managers in accurate data collection
- 2.2 Fund Independent weeds monitoring and reporting with a focus on outcomes

3 - COMMUNITY ENGAGEMENT

- 3.1 Support volunteers in weed management
- 3.2 Start at home - Inform and support householders
- 3.3 Implement cool burns
- 3.4 Educate and empower our young people
- 3.5 Promote a holistic approach to weed management

Recommendations

1 – GOVERNANCE

Effective weed management needs coordinated action. Well-integrated, well-planned and well-executed weed management across all tenures is clearly needed, which requires solid governance structures. Landcare ACT members have highlighted that within Commonwealth Government, interdepartmental committees are effective in overcoming 'silos' and improving coordination and suggest that this method might be effective at the Territory level as well.

Looking after nature requires collaboration between the public and private sectors, sustained over time. The Weeds Working Group believe that a well-informed, collaborative, cross-tenure governance model is the only economically and socially sustainable way to achieve cost-effective weed control in our region.

RECOMMENDED ACTIONS

1.1 Establish a cross-tenure Weeds Management Committee

Establish a cross-tenure weeds management committee comprised of all relevant stakeholders including multiple government agencies, traditional custodians, rural landholders and community Landcare.

This committee will:

- Clarify roles and responsibilities for weeds management among all involved
- Share information about weeds management, priorities, outcomes and opportunities, identifying varying values and priorities
- Keep up to date with the status of new and emerging weed species in neighbouring areas which may threaten the ACT if not managed early
- Review ACT Government weeds management approaches and key performance indicators, ensuring community priorities and values are incorporated.

1.2 Revise Land Management Instruments and enforcement mechanisms

Weeds are not managed consistently across the ACT. The legislation that does exist is patchy and rarely enforced in practice. In addition, while neighbouring properties across the border are subject to financial penalties for failure to manage weeds adequately, ACT legislation has little consistency with the legislative framework in NSW.

To provide a degree of Territory-wide consistency, it is recommended that the ACT government:

- Implement the recommendations of the Auditor General's Report No. 1 of 2021
- Implement the recommendations of the ACT Government Standing Committee on Public Accounts Inquiry into the Auditor-General's Report No. 1 of 2021: Land Management Agreements
- Similarly review the use of Plans of Management for Nature Reserves
- Ensure that land under other forms of tenure (such as the Suburban Land Agency) also has enforceable plans for weed management in place
- Ensure all legislation in relation to weeds management is enforceable and enforced.

Recommendations (continued)

2 – DATA COLLECTION AND REPORTING

Accurate and comprehensive data is essential for effective weeds management. Providing publicly accessible and meaningful data on weeds in the ACT, their control and containment or spread, as well as resources deployed in both volunteer hours and financial costs, is essential to engage the community and landholders, and to provide some level of public accountability. The invasive plants dashboard developed by ACT Government is widely praised.

Ensuring that data can be collected, analysed, and reported is crucial. Simplified data recording measures will lead to better data collection, which in turn will result in more effective weeds management. Properly resourced and funded data analysis and reporting is also essential.

RECOMMENDED ACTIONS

2.1 Support all weed managers in accurate data collection

Effective digital monitoring and reporting methods of weeds management requires engagement of all involved, including volunteers, rural landholders, contractors and government record valuable data. There is a perception that data collection is fragmented, with multiple reporting pathways ("too many apps").

To support all weeds managers in data collection it is recommended that the ACT Government:

- Promote the use of the Esri Field Maps app (formerly called the Collector app) among all weeds managers, and provide sufficient training
- Ensure that the Field Maps app is straightforward to use, intuitive, and not reliant on constant high-speed internet connections (as computer literacy and access to both internet and up-to-date devices can be quite variable, particularly amongst rural landholders and volunteers working away from the city centre)

2.2 Fund Independent weeds monitoring and reporting with a focus on outcomes

To monitor the longitudinal impact of weeds management, reporting needs to focus on outcomes, as well as activity reporting.

It is recommended that the ACT Government:

- Provide funding for independent longitudinal reporting of outcomes and trends in weeds management, to be made publicly available. This would include all land in the ACT, not just nature conservation reserves and have a focus on triple bottom line
- Document and make publicly available expenditure on weeds management.

Recommendations (continued)

3 – COMMUNITY ENGAGEMENT

Landcarers in the ACT make a significant contribution in terms of weed control in the urban parklands, nature reserves and rural lands of the ACT Region. As outlined in the [ACT Environmental Volunteers Report](#), the contributions of volunteers in the ACT equate to over \$21.5 million dollars. Much of the work of environmental volunteers is weed control on public land. Volunteers often have extremely high levels of expertise in a range of ecological and land management subjects and bring skills and experience from their professional careers into the volunteer realm. Similarly, many volunteers work in the same patch for decades and develop strong local environmental knowledge of an area. Supporting these volunteers in their work provides a significant benefit to the ACT.

While environmental volunteers make a significant contribution to weed management in the ACT, there are some barriers to their engagement. These include lack of information on weed identification and management practices, policies that disallow power tool use, inconsistent metrics for volunteer contribution. The recommendations below address these barriers.

RECOMMENDED ACTIONS

3.1 Support volunteers in weed management

Weeds managers (volunteers, rural landholders, and others) consistently report that there is an excessive administrative burden associated with weeds management in the ACT. Volunteering can be further supported and promoted with simple strategies.

The ACT government should:

- Fund development of training resources for all environmental volunteers regarding weeds identification and effective management techniques for specific weed species
- Support community Landcare organisations to offer additional training such as weed identification and best-practice management techniques
- Develop consistent approach to measuring volunteer contribution to weed control across agencies (TCCS, PCS and SLA)
- Acknowledge and promote volunteering by providing additional signage in areas where volunteers are working
- Review the use of power tools by volunteers
- Review and reshape Reserve Plans of Management. Many Reserves do not have Plans of Management. Where they do exist, they are often not current or do not include information to enable Parkcarers to maximise their value in weeds control
- improve mowing practices to reduce weed spread into areas being stewarded by Landcarers
- Commit to maintaining current levels of funding for organisations and agencies that support community environmental volunteers to enable longer-term stability and certainty.

3 – COMMUNITY ENGAGEMENT

RECOMMENDED ACTIONS (CONT)

3.2 Start at home - Inform and support householders

Encourage population-wide action on weeds by:

- Supporting community environmental groups to provide householders with information and incentives to tackle critical weeds in their own gardens and surrounds
- Supporting community Landcare organisations and groups to provide and promote information on weeds in the ACT, their control and containment, and their impact on our biodiversity.

3.3 Implement cool burns

Indigenous Australians have been caring for country in the ACT for many thousands of years and can make enormous contributions to the health of our landscapes and community.

The ACT Government should:

- Implement cool burns as a weeds management tool in partnership with community organisations, building on the success of the Ginninderra Catchment Group and other community-driven experience.

3.4 Educate and empower our young people

Control and management of weeds will take many decades of collaborative effort, and our young people need to be provided with the information and resources necessary to tackle these issues into the future.

It is recommended that the ACT Government:

- Fund a Junior Landcare Program, delivered by community landcare, that will work in collaboration with education providers
- Expand the scope of the ACT Environmental Grants to re-introduce an Education priority

3.5 Promote a holistic approach to weed management

Weed management is often conducted as a standalone activity when it should be integrated into a larger system of restoration. Removing one weed only creates space for another, unless the vegetation is replaced with more appropriate species

It is recommended that the ACT Government:

- Support community-based organisations to promote a broader understanding of the need to integrate weed management into a broader restoration plan, including appropriate revegetation.

Conclusion

Weeds management in the ACT will be best achieved into the future with a collaborative approach that involves all key stakeholders regardless of tenure, looking beyond our own boundaries towards the bigger picture. By taking a landscape-scale perspective, we can gain a more comprehensive understanding of the factors that drive weed growth and spread, and develop more effective strategies for managing and controlling these invasive plants. Despite the diligent hard work of many over decades, there is still much work to be done in order to effectively manage weeds in the long-term.

Community Landcare look forward to continued collaboration with government agencies to ensure that our efforts are well-coordinated and effective. Together, we can make a real difference in the fight against invasive weeds and preserve the natural beauty and productivity of our natural environment for generations to come. With a collaborative attitude and a commitment to working together, we can create a future where our public lands are healthy, diverse, and accessible to all.

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We thank you for your ongoing commitment

The Weeds Forum was delivered by Landcare ACT as part of the *Smart Farms* Small Grants 2 program, funded through the Australian Government's National Landcare Program.

Acknowledgements

This Community Views on weeds paper was made possible due to the contributions of the many people who worked tirelessly on its development.

Landcare ACT Weeds Working Group who were responsible for conception and coordination – Catherine Keirnan (Chair), Mike Braysher, Arnold Dekker, Martine Franco, Kat McGlip, Karissa Preuss

The **writers:** Catherine Keirnan, Maree Wright, Karissa Preuss

Many **partners** in ACT Government, most notably Ian Walker, Bren Burkevics, Steve Taylor and Frank Garafalow.

Landcare ACT Board and Members Council for ongoing contributions to the paper and the broader Landcare community.

Finally, to all who give their time and expertise to managing weeds in the ACT – thank you for all that you do.

Published June 2023

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