



Department of  
Primary Industries

Invasive Species Biosecurity

## NSW Black Knapweed Strategic Plan

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

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NSW Black Knapweed Weed Strategic Plan

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**More information**

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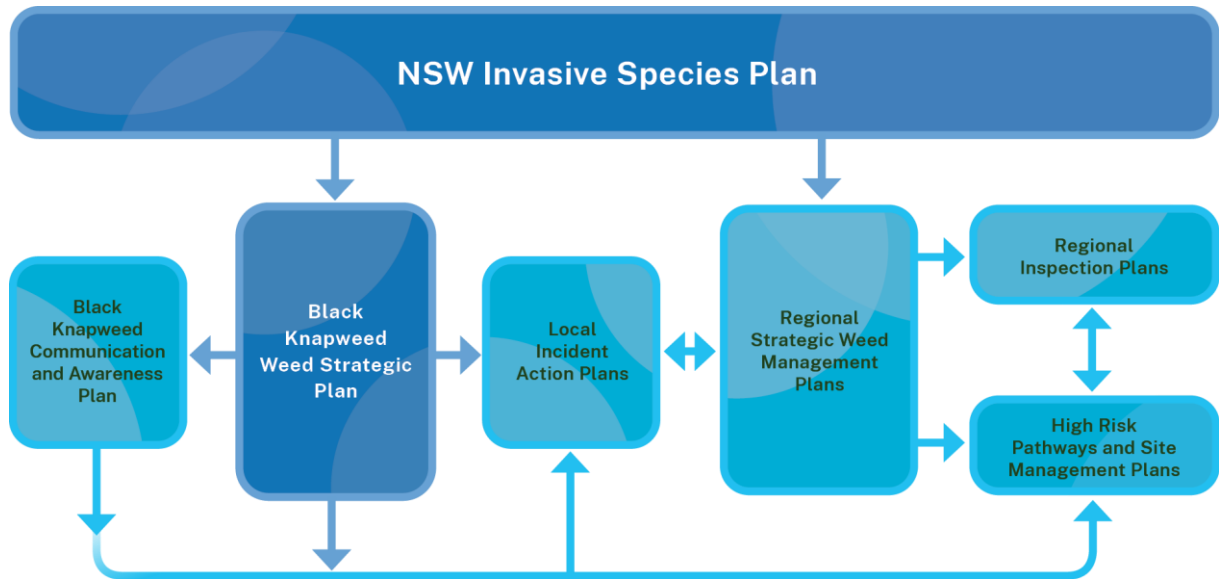
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© State of New South Wales through Regional NSW 2023. The information contained in this publication is based on knowledge and understanding at the time of writing (May 2023). However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Department of Regional NSW or the user's independent adviser.

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## Planning hierarchy



## Mission

**To keep New South Wales free from self-sustaining populations of black knapweed weed.**

This will be achieved by preventing new incursions in NSW and rapidly detecting and eradicating any populations found within NSW. This includes improving awareness and identification skills, and treating all new infestations as quickly as possible after detection.

Black knapweed (*Centaurea nigra* x *C. jacea*) will be managed in accordance with the requirements of the NSW *Biosecurity Act 2015*, with the aim to eradicate infestations in NSW by preventing future seeding and removing all plants. Progress towards eradication and this plan will be reviewed biennially.

## Biosecurity duties

Section of Act	Statutory requirement
Schedule 2	Black knapweed weed is prohibited matter throughout NSW.
s.28(1)	A person who deals with biosecurity matter that is prohibited matter throughout NSW is guilty of an offence.
s.30(1) s.31	A person who becomes aware of, or suspects, the presence or introduction of black knapweed has a biosecurity duty to immediately notify an authorised officer.
36(1)	A person who becomes aware of, or suspects, the presence of black knapweed in NSW has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk posed or likely to be posed by the prohibited matter is prevented, eliminated, or minimised.

## Risk and impact

Black knapweed will grow in a wide variety of habitats and most soil types. It grows best in disturbed sites (e.g. overgrazed or cultivated paddocks, roadsides, creek lines) with moist soils, in areas when annual rainfall is greater than 750 mm.

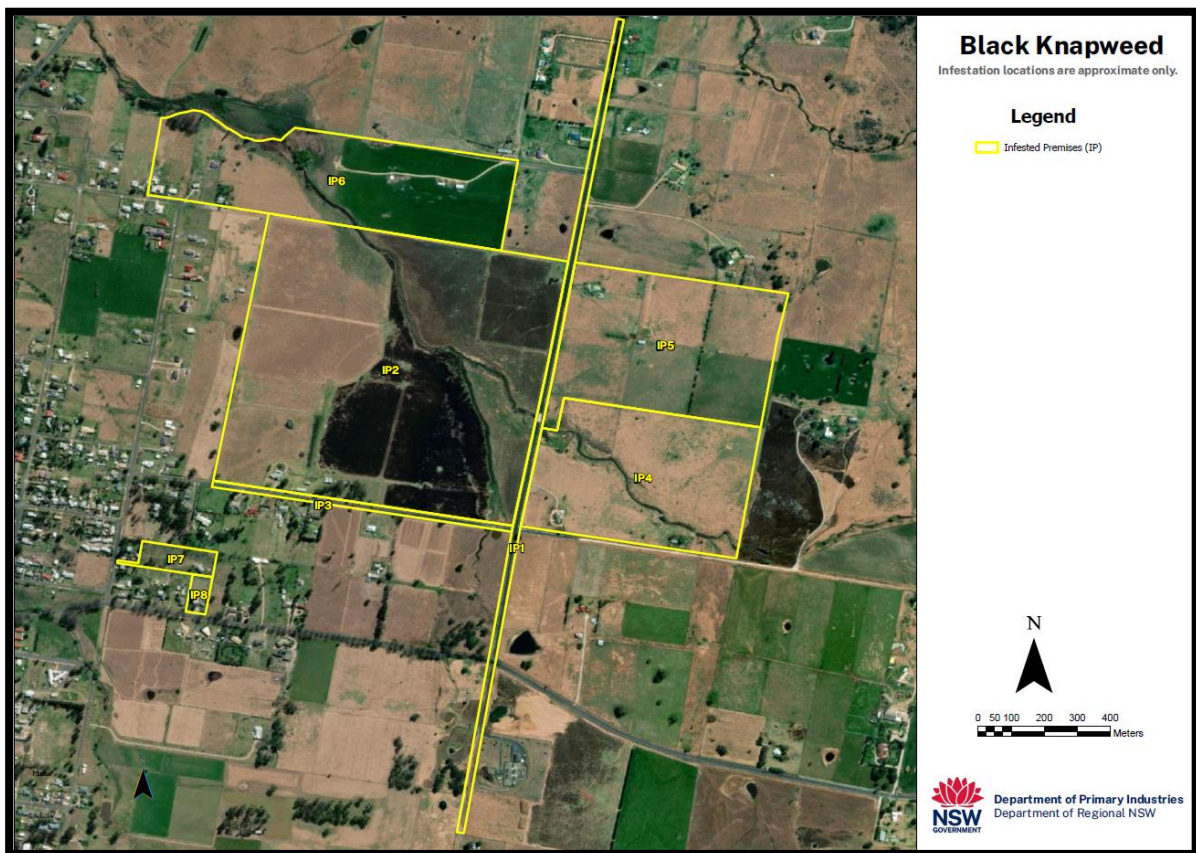
Black knapweed is a significant threat because it has the potential to invade vast areas of land where it:

- can outcompete desirable pasture plants
- can outcompete native vegetation, leading to loss of habitat for native fauna
- can produce chemicals that suppress other plants
- is not normally eaten by livestock
- is difficult to control
- can contaminate crops.

Black knapweed is present in northeast Victoria where it is confined to a few locations on roadsides, and in pastures on fertile soils around the cropping areas of Euroa. Cultivation can spread black knapweed. In the USA and Canada, black knapweed has infested two million hectares of land and threatens endangered wet meadow native species.

## Current extent in NSW

All black knapweed plants in NSW occur across a single 150 hectare infestation within the Tenterfield Shire in the Northern Tablelands, with a core infestation area of approximately seven hectares. There is evidence to suggest the plants were intentionally introduced in the early 1900s. Plants are restricted to two roadsides and six private properties (Map 1).



**Map 1. Map showing all 8 black knapweed Infested Premises, east of Tenterfield township**

## Management Objectives

1. Coordinated governance
2. Prevent the introduction of new propagules
3. Early detection of new incursions
4. Timely response to new incursions
5. Biosecurity duties are met

## Objective 1 Coordinated governance

### Key Performance Indicators

Success	Performance indicator	Basis for comparison
<i>Black Knapweed Incident Management Team/s operate/s effectively</i>	Black Knapweed Weed Strategic Plan is implemented and reviewed annually	No self-sustaining populations of black knapweed weed in NSW

### Strategies and Deliverables

	How	By when	Who	Output/Activity
1.1	Lead multi-agency weed surveillance exercise twice a year at each infestation	15 December and 28 February each year	DPI	Thorough search of IPs and neighbouring properties and pathways for plant spread. Treatment within 1-2 weeks if plants found to prevent seeding
1.2	Maintain a black knapweed database with detail delimitation, being records and reports about all infestations	Ongoing as new incursions are detected and existing sites reinspected	DPI LCAs	Annual Situation Report provided to the State Weed Committee BIS record entered for all inspections and control activities relating to black knapweed Voucher specimen provided to herbarium for all new infestation sites
1.3	Review this plan biennially within the scope of the NSW Invasive Species Plan	Biennially, starting April 2025	DPI	Black Knapweed Strategic Plan is reviewed biennially and updated as required

## Objective 2 Prevent the introduction of propagules

### Key Performance Indicators

Success	Performance indicator	Basis for comparison
<i>Preventing the introduction of propagules stops incursions</i>	No introductions from known pathways	No introductions after publication of this Strategic Plan

### Strategies and Deliverables

	How	By when	Who	Output/Activity
2.1	Identify and assess new invasion pathways	Ongoing	DPI	New invasion pathways identified and risk assessed
2.2	Strict hygiene practices	Ongoing	DPI LCAs	Implementing hygiene practices for people that enter known IPs, animal quarantine, and restricting movement of soil off site from known IPs
2.3	Review existing invasion pathways	Annually	DPI LLS	Existing pathways reviewed as required

### Objective 3 Early detection of incursions

#### Key Performance Indicators

Success	Performance indicator	Basis for comparison
<i>Early detection of incursions reduces time until eradication</i>	New incursions are detected in first generation and before plants set seed	Improvement over time

#### Strategies and Deliverables

	How	By when	Who	Output/Activity
3.1	Include black knapweed high risk sites and pathways in regional inspection plan	30 June 2024	LLS	11 regional inspection plans include black knapweed high risk sites and pathways
3.2	Exchange information and collaborate with cross border contacts on high-risk pathway inspections	Prior to each NSW/VIC cross-border meeting	DPI	Cross border contacts exchange information and collaborate on high-risk pathway inspections
3.3	Investigate the possibility to trace livestock movements into NSW from infested properties in Vic	Within 2 months of receiving reports	DPI LCAs	100% of black knapweed carrier movements traced through reports and NLIS records
3.4	Develop and implement a Communication Plan	October 2024	DPI	A black knapweed communication plan campaign is developed and all actions implemented
3.5	Develop tools and training to assist field-based personnel to recognise black knapweed	October 2023	DPI	Virtual 3D model available Prohibited matter training courses available Physical model available NSW WeedWise profile current



3.6	Train and deploy scent detector dogs on black knapweed	Training by December 2024, then deployed at least once annually until eradication (5 years)	DPI	Detector dogs available to find black knapweed plants that humans miss at all sites where they are deployed
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## Objective 4 Timely response to detections

### Key Performance Indicators

Success	Performance indicator	Basis for comparison
<i>Timely response to incursions reduces time until eradication</i>	Incursions responded to in the specified timeframe	Improvement over time

### Strategies and Deliverables

	How	By when	Who	Output/Activity
4.1	Report suspected new infestations to DPI within 1 working day of discovery	Within 1 working day of discovery	LCA LLS	100% of new infestations reported to DPI within 1 working day of discovery
4.2	Treat all new small incursions (< 101 plants within 100 m <sup>2</sup> )	Within 2 working days of discovery	LCA	100% of new incursions are treated within 2 weeks of discovery
4.3	Treat all new large infestations (> 100 plants or > 100 m <sup>2</sup> )	Within 2 weeks of discovery	LCA	100% of new incursions have treatment commenced within 2 weeks of discovery
4.4	Undertake delimiting surveys within 6 weeks of discovery of all new infestations	Within 6 weeks of DPI/herbarium verification	DPI LCA LLS	100% of delimitation surveys are completed within 6 weeks of DPI/herbarium verification

4.5	Re-inspect incursion sites at least every 14 days between 1 Nov to 31 March to prevent seed set	Ongoing until eradication (5 years)	LCA	100% of incursion sites inspected every 14 days between 1 Nov to 31 March annually
4.6	Use NSW Biosecurity Act management tools to aid containment of incursions	Within 4 weeks of discovery	LCA	Management tool applied to 100% of incursion sites
4.7	Establish transects to measure progress toward eradication	As required	DPI	Reduction in seed emergence over time

## Objective 5 Biosecurity duties are met

### Key Performance Indicators

Success	Performance indicator	Basis for comparison
<i>Stakeholders discharge prohibited matter biosecurity duties</i>	Proportion of stakeholders meeting prohibited matter biosecurity duties: <ul style="list-style-type: none"> <li>- voluntarily</li> <li>- after receiving a direction</li> <li>- after receiving a penalty infringement notice or prosecution</li> </ul>	Voluntary compliance reaches or maintained at 100%

### Strategies and Deliverables

	How	By When	Who	Output/Activity
5.1	Support stakeholders with infestations and whose activities spread black knapweed to understand and discharge their biosecurity duties	As required	LCA DPI LLS	Stakeholders are adequately supported to discharge their biosecurity duties
5.2	Develop Incident Action Plan for each large incursion (as defined at 4.3)	As required	LCA LLS DPI	An Incident Action Plan is developed and implemented for each large incursion

## Monitoring, evaluation and reporting

The Black Knapweed Incident Management Team (Tenterfield) will evaluate stakeholder progress against this strategy every second April. This strategy will be reviewed every second May and revised on a needs basis.

## Acronyms and definitions

BIS – Biosecurity Information System

DPI – New South Wales Department of Primary Industries

LCA – Local Control Authority

LLS – Local Land Services

NLIS – National Livestock Identification System

## Additional information

### **NSW Invasive Species Plan:**

[www.dpi.nsw.gov.au/biosecurity/weeds/strategy/strategies/nsw-invasive-species-plan-2018-2021](http://www.dpi.nsw.gov.au/biosecurity/weeds/strategy/strategies/nsw-invasive-species-plan-2018-2021)

### **Local Land Services:**

<https://www.lls.nsw.gov.au/>

### **NSW Biosecurity Act 2015:**

[www.dpi.nsw.gov.au/about-us/legislation/list/biosecurity-act-2015](http://www.dpi.nsw.gov.au/about-us/legislation/list/biosecurity-act-2015)

### **NSW WeedWise profile:**

<https://weeds.dpi.nsw.gov.au/Weeds/BlackKnapweed>

### **Black knapweed situation reports**

<https://extranet.dpi.nsw.gov.au/weeds/state-priority-weeds> (internal -for weeds professionals only)

### **Weed risk assessments and Biosecurity Information System records in WIDX:**

[Widx.nsw.gov.au](http://Widx.nsw.gov.au) (internal -for weeds professionals only)