



Government  
of South Australia

## Declared Plant Policy

### Bluebell Creepers (*Billardiera heterophylla* and *B. fusiformis*)

Bluebell creepers are woody climbers or shrubs native to Western Australia and widely planted in South Australia where they have become a common escape in native vegetation.

#### Management Plan for Bluebell Creeper

##### Outcomes

- Protect the integrity of native vegetation by minimising the further spread and impacts of bluebell creepers.

##### Objectives

- Prevent the spread of bluebell creepers to uninfested areas due to planting.
- Control high priority infestations according to regional management plans.
- Contain larger and low-priority infestations of bluebell creepers.

##### Implementation

- Biosecurity SA to publicise the new status of bluebell creepers as a declared plant.
- Natural Resources Management (NRM) authorities to respond to any reports of sales of bluebell creepers.
- NRM authorities in the Adelaide and Mount Lofty Ranges, Kangaroo Island and South East regions to map infestations that threaten significant native vegetation sites and prioritise these for action.
- High priority infestations in these regions to be controlled as detailed in their regional management plans.

##### Regional Implementation

Refer to regional management plans for further details.

NRM Region	Actions
Adelaide and Mount Lofty Ranges	Destroy infestations
Alinytjara Wilurara	Limited action
Eyre Peninsula	Limited action
Kangaroo Island	Contain spread
Northern and Yorke	Limited action
South Australian Arid Lands	Limited action
South Australian Murray-Darling Basin	Limited action
South East	Contain spread

## Bluebell Creeper policy

### Declaration

To implement this policy, bluebell creepers are declared under the *Natural Resources Management Act 2004* throughout the whole of the State of South Australia. Sale of bluebell creeper, by itself or as a contaminant of other goods, is prohibited.

NRM authorities in the Adelaide and Mount Lofty Ranges, Kangaroo Island and South East NRM regions may require land owners to control bluebell creeper plants growing on their land. NRM authorities in these regions are required to control plants on road reserves and may recover costs from adjoining land owners.

Bluebell creepers are declared in category 3 under the Act for the purpose of setting maximum penalties and for other purposes. Any permit to allow their sale can only be issued by the regional NRM Board pursuant to section 188.

The following sections of the Act apply to bluebell creepers throughout each of the NRM regions noted below:

Sections of Act	Region							
	AMLR	AW	EP	KI	NY	SAAL	SAMDB	SE
175(1) Prohibiting entry to area								
175(2) Prohibiting movement on public roads								
177(1) Prohibiting sale of the plant	X	X	X	X	X	X	X	X
177(2) Prohibiting sale of contaminated goods	X	X	X	X	X	X	X	X
180 Requiring notification of infestations								
182(1) Landowners to destroy the plant on their properties								
182(2) Landowners to control the plant on their properties	X			X				X
185 Recovery of control costs on adjoining road reserves	X			X				X

### Review

This policy is to be reviewed by 2020, or in the event of a change in one or more regional management plans for bluebell creepers.

### Weed Risk

#### Invasiveness

Bluebell creepers reproduce mainly by seed, though they also readily produce shoots from underground rootstock if aboveground parts are damaged. The climbing stems are also capable of rooting at their nodes when they come into contact with soil.

The fruits contain up to 80 seeds, which are mostly dispersed by birds and other animals that eat the fruit, but they may also be spread in dumped garden waste.

Bluebell creepers seeds germinate at between 15°C and 25°C, which correspond to temperatures in the field when rainfall is at its highest. Although seedlings are initially slow growing as they form a root system, they later grow more rapidly. They produce fruit 2 years after germination.

## Bluebell Creeper policy

### Impacts

Bluebell creepers can invade grassy woodlands, sclerophyll forests, shrublands, lowland grasslands, riparian areas and heaths. They smother the ground flora and grow over smaller shrubs.

In forestry, they have the potential to prevent tree regeneration smother seedlings and small trees and can form a total ground cover while running up to 5 metres up stems in mature stands

Bluebell creepers contain toxins that can cause skin irritation and nausea.

### Potential distribution

The native habitat of bluebell creepers is eucalypt woodlands, open forests and coastal heathlands in Western Australia, where it tends to be seral in disturbed sites. Where naturalised in south-eastern Australia, they grow in similar habitats and mainly on acidic sandy soils.

Distribution is confined within the 600 mm annual isohyet and it does best where annual rainfall exceeds 700 mm.

### **Feasibility of Containment**

#### Control costs

From the literature available, control of bluebell creepers can be difficult and labour-intensive due to a persistent fire-responsive seedbank. Elimination of an infestation may require initial herbicide treatment by spot-spraying at high rates and cut stump application to old stems, burning in some situations, and re-treating the regrowth with herbicide.

#### Persistence

Bluebell creepers regenerate after burning from stem bases, suckers and seedlings. The seeds remain viable in soil for more than 5 years.

#### Current distribution

Bluebell creepers are now widely naturalised in suitable habitats from the Port Lincoln area, Kangaroo Island, the Mount Lofty Ranges and Fleurieu Peninsula to Mount Burr Forest in the South East. Due to their rainfall requirements, they do not extend north of Anstey's Hill in the Mount Lofty Ranges or of Naracoorte in the South East.

### **State Level Risk Assessment**

Assessment using the Biosecurity SA Weed Risk Management System gave the following comparative weed risk and feasibility of containment scores by land use:

<b>Land use</b>	<b>Weed Risk</b>	<b>Feasibility of control</b>	<b>Response at State Level</b>
Native vegetation	low 19	very high 3	monitor
Forestry	low 19	very high 3	monitor

## Considerations

This plant has been promoted as a garden ornamental since the 1960s under the name of sollya. It is variable in form across its wide native range, and the forms planted around SA may have been selected for high growth rate and flower production in high rainfall conditions. The flowers range from blue to pink to white.

Risk assessment indicates a management action at State level of monitoring in native vegetation. However, the local weed risk of bluebell creepers in high rainfall areas is much higher, up to 250 mm in the Adelaide and Mount Lofty Ranges NRM region where a strategy of destroying infestations is justified. Regional management plans vary according to regional habitats and presence of the weed. In the Kangaroo Island and South East NRM regions, spread of bluebell creepers are to be contained. Limited action is required in other regions where there is little or no vulnerable habitat.

A sterile horticultural hybrid, known as Edna Walling blue bells (*Billardiera heterophylla* x *Billardiera parviflora*), is now becoming more popular in cultivation as it is thought to be less invasive.

## Synonymy

*Billardiera heterophylla* (Lindl.) L.W. Cayzer & Crisp, Austral. Syst. Bot. 17: 119 (2004).

Basionym:

*Sollya heterophylla* Lindl., Edwards's Bot. Reg. 17: t. 1466 (1832).

*Billardiera fusiformis* Labill., Nov. Holl. Pl. 1: t. 90 (1805).

Nomenclatural synonym:

*Sollya fusiformis* (Labill.) Payer, Traité Organogén. Fl. 174, t. 34 (1854).

Taxonomic synonyms:

*Billardiera elongata* Schnizl., Iconogr. Fam. Regn. Veg. 4: t. 234 (1870).

*Billardiera salicifolia* (Marnock) F.Cels, Ann. Fl. Pomone 1839-1840: 187 (1840).

*Sollya salicifolia* Marnock, Fl. Mag. & Bot. Repos. 4: 62 (1839).

Other common names include Australian bluebell, Australian bluebell creeper, native bluebell, purple appleberry, sollya, Western Australian bluebell, West Australian bluebell creeper and Western Australian bluebell creeper.

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