

# Cann River Area Post Fire Bush Regeneration



After the 2019-20 fires, DELWP and Bushfire Recovery Victoria have received many enquiries from the East Gippsland community regarding emerging plants and concern about weeds.

# Am I seeing weeds colonise after fire or are these native plants?

It can be challenging to tell the difference between native and weed plants that respond to fire. This leaflet lists only a small number of regionally prioritised weeds and commonly mistaken natives.

Many plant species are stimulated to reproduce following a fire. The increase of available nutrients, light and moisture encourage rapid seed germination and growth in some plants. These are called colonising plants; they grow quick to protect the topsoil after disturbances like fire, and they can be both native and invasive species.

Plant responses post-fire include:

- Increased productivity,
- Increased flowering,
- · Fire stimulated seed release and dispersal,
- Improved seedling germination and establishment (through physical and chemical cues such as rupturing of seed coat or smoke and ash). Some seeds are dependent on fire for germination.

Land managers have legal obligations, under the Catchment and Land Protection Act 1994 (CaLP Act), to control noxious weeds.



# **Weed plants**



## Dolichos Pea (Dipogon lignosus)

**Description:** Climber reaching up to 5 m.

**How it is spread:** Fire stimulates seed germination, root mass reshoots, and suckers from roots and stems.

Invasive level: Highly - smothering host trees.

Control technique: Chemical.



Description: Woody shrub up to 2m.

**Spanish Heath** (*Erica lusitanica*)

**How it is spread:** Mature plants can produce 9 million seeds annually and suckers from roots.

Invasive level: High.

Control technique: Chemical.



Boneseed (Chrysanthemoides monilifera), WoNS

Description: Woody shrub up to 3m.

**How it is spread:** Fire stimulates seed germination. A mature plant can produce up to 50,000 seeds.

Invasive level: Moderate.

Control technique: Physical and chemical control.



## Cape Ivy (Delairea odorata)

Description: Climber reaching up to 10m.

**How it is spread:** Reproduction is both vegetative from stolons and stems, and via seed dispersed by wind and water.

Invasive level: High.

Control technique: Physical or chemical.

# **Weed plants**



Cape Broom (Genista monspessulana) WoNS

**Description:** Shrub up to 3m, can form into dense thickets. Note that pods are hairy all over.

**How it is spread:** Fire stimulates the mass germination of long-lived seeds.

Invasive level: Moderate.

Control technique: Physical, chemical and

biological.



Japanese Honeysuckle (Lonicera japonica)

Description: Climber reaching up to 10m.

**How it is spread:** Mass germination after fire, reshoots from roots, and suckers from roots and stems.

Invasive level: Moderate.

Control technique: Physical, chemical and

biological.



### Blue Periwinkle (Vinca major)

**Description:** Ground cover, stem length 2-4m.

**How it is spread:** Stems set roots when in contact with the ground; stems are transported by machinery and water. Prefers shady conditions. Poisonous to stock if eaten.

Invasive level: Moderate.

Control technique: Physical and chemical.



### Fleabane (Conyza sp.)

**Description:** Annual or perennial erect herb, 1-2m.

**How it is spread:** Seeds spread by wind, water, garden waste and vehicles.

**Invasive level:** Invasive to disturbed areas such as roadsides and riverbanks.

Control technique: Physical and chemical.

# **Weed plants**

# **Control techniques**

Physical Control	
Hand pull	For small, isolated patches of weeds.
Mechanical	For large thickets or woody type weeds brush cutter, mower, or dozer.
Burning	Controlled fires can prevent spread of some species.

	spread or some species.
Chemical control	
Spray	Large infestations use the herbicide recommended for the specific weeds.
Drill and fill	For large woody weeds.
Cut & Paste	For small infestation of young woody weeds.

# **Biological Control**

Some weed species have approved biological control agents like a predator insect, parasite, or

### **Further information**

#### **Victorian Resources Online**

Agriculture Victoria,

Department of Jobs, Precincts and Regions https://agriculture.vic.gov.au/biosecurity/weeds

Herbiguide: Pesticide expert on a disk http://www.herbiguide.com.au/InformationWeeds

#### Weeds Australia

Weeds of National Significance (WoNS) https://weeds.org.au/weeds-profiles/

### **Australian Pesticides and Veterinary Medicines**

Authority for chemical information http://www.apvma.gov.au

# **Native plants**



## Kangaroo Apple (Solanum aviculare)

Description: Native shrub up to 3m.

**Ecology:** Fire stimulates mass germination of long-lived seeds; it is a fast-growing, short-lived plant that provides shelter for the germination of shade-dependent plant species.

Benefits: Coloniser and shelter.

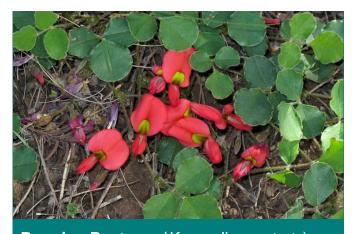


### **Incense Plant** (Calomeria amaranthoides)

**Description:** Native biennial erect herb up to 3m.

**Ecology:** A coloniser species of flood-prone riverbanks or wettish forests regenerating after fire.

Benefits: Coloniser species.



## Running Postman (Kennedia prostrata)

**Description:** Native ground cover / climber up to 3m.

**Ecology:** Colonising bear ground post-fire, this plant provides an important food source for butterflies and moths.

Benefits: Coloniser and food source.



## Eastern Nightshade (Solanum pungetium)

**Description:** Native small shrub up to 1.5m.

**Ecology:** Fire stimulates germination. This plant can mature quickly and produce succulent berries which provide a food source for birds and lizards.

Benefits: Food plant.

# **Native plants**



## Hop goodenia (Goodenia ovata)

Description: Native shrub up to 2m.

**Ecology:** After fire or disturbance, this early coloniser species provides excellent shelter and fruit is a food source.

Benefits: Food and shelter plant.



## Wattles species (Acacia species)

**Description:** Native shrub to tree up to 5 - 15m.

**Ecology:** This early coloniser species has nitrogenfixing nodules on the root nodes; this is important for nutrient cycling and the regeneration of other tree species.

Benefits: Coloniser and nitrogen-fixing plant.

Photographs have been sourced from:

- · Victorian Resources Online (VRO)
- · Weeds Australia Profiles
- NSW WeedWise
- VicFlora ANBG
- Ethos NRM
- DELWP

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ISBN 978-1-76105-454-9 (print)

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