weed warning

Don't let them get away!

Weeds are most effectively controlled when they and their numbers are small — a little weed control work today will save many dollars and days of work in years to come. As the number of Paterson's curse infestations in Tasmania is still limited, now is the time to take action!

Control that weed!

The best control programs for Paterson's curse use a number of integrated methods, including grazing or cultivation of infested areas, herbicide treatment, manual removal and ongoing monitoring.

Small areas of Paterson's curse can be controlled through manual **removal** – individual plants can be dug out, preferably at the rosette stage, and as long as the tap root is removed, the plant will not resprout. **Slashing** of the plants can be used as an interim measure to prevent the plants from flowering, however, will require further follow-up using other control methods. Chemical control alone is unlikely to effectively control Paterson's curse in the long term, but can be a good first step. Depending on its location and the surrounding vegetation, this weed can be controlled by spot spraying with a glyphosate based herbicide, clopyralid or metsulfuron methyl. Herbicide control is most effective when the plants are still small. between May and November. Always read and follow the label, wear protective equipment and avoid off-target damage during chemical control. **Selective grazing** by sheep can be an effective means of controlling this weed in pasture, however, this must be carefully planned to ensure adequate control and to avoid harming livestock. The establishment of crops or pasture can also be used to suppress large Paterson's curse infestations.

Consult an agricultural specialist for the best strategy for your property.

Any control program for Paterson's curse within pasture areas is best conducted in cooperation with neighboring properties. The best solution for your site will vary on the type and intensity of infestation — for advice and more details on control methods, consult the DPIPWE website (www.dpipwe.tas.gov.au/weeds).

Do the right thing

Weed waste dumped in bushland or local reserves gives pest plants a leg-up into new areas. Do the right thing, and dispose of your weed waste responsibly — double-bag any flowering Paterson's curse you have removed and burn in an enclosed incinerator.

Weeds are easily spread by contaminated machinery and people – check your clothes, shoes, vehicles and other machinery for soil or plant matter that could be carrying weedy plant seeds.

Get informed

Paterson's curse is a significant weed threat for Southern Tasmania. For further information contact your local Council office or call DPIPWE on 1300 368 550.

Viper's bugloss (*Echium vulgare*) is closely related and very similar in appearance to Paterson's curse and is also a declared weed in Tasmania. The seedling and rosette is similar to Paterson's curse except that the leaves are less broad, and the veins are longitudinal and not branched. The stems branch more freely and are generally shorter, whilst the stem leaves grow directly from the stem and are elongate. The flowers are similar to those of Paterson's curse but slightly smaller and darker in colour. Its distribution is currently limited in Southern Tasmania.

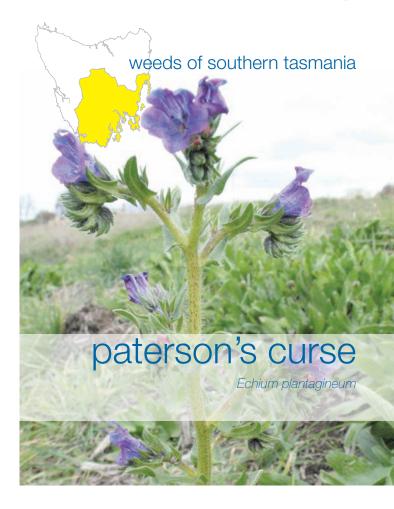












Also known as

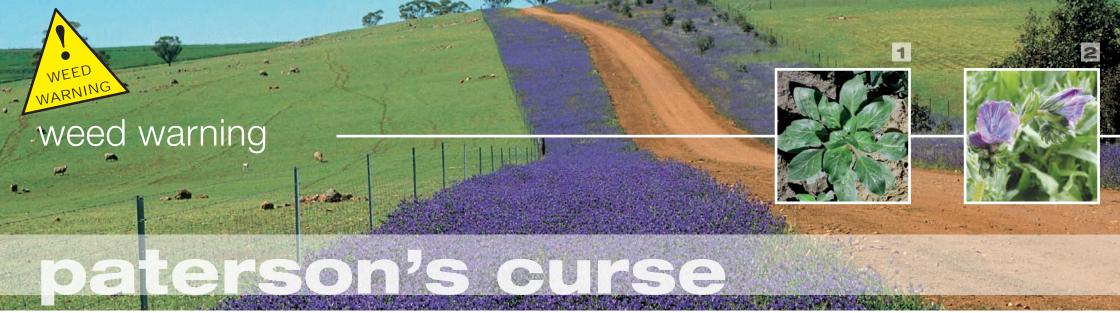
Salvation Jane, Blue weed, Riverina bluebell

Impacts

Agriculture, stock poisoning, roadsides, disused areas, biodiversity, neglected areas

Current distribution in Southern Tasmania

Isolated and/or locally abundant in areas across the region



Background

Paterson's curse (*Echium plantagineum*) is native to the western Mediterranean, and was introduced to Australia in the mid-1800s as a garden plant. It took little time to show its weedy tendencies, and before long, had become established as one of the worst pasture weeds of southern Australia. It is toxic to stock if grazed for extended periods, and its bristly leaves and stems can cause irritation to both animals and humans. It is closely related to Viper's bugloss (*Echium vulgare*), which is also a declared weed within Tasmania (see rear fold).

Paterson's curse is a hardy plant that thrives in a broad range of soil types, largely in winter rainfall areas. It's best known as a weed of pastures, but also infests areas of degraded land, roadsides, and more open types of native bush. The seeds of this weed germinate earlier than other plants it grows alongside, and the seedlings quickly develop extensive roots and spreading leaves which crowd out surrounding plants. Paterson's curse infestations produce masses of rough-coated seeds, which are readily transported on the coats of livestock. Most seeds are thought to be spread through contaminated fodder (ie hay), in the coats or digestive tracts of animals, on vehicles or in contaminated soils. The seeds are also easily washed further afield by water, and can remain viable in the soil for at least 5 years.

This weed is estimated to cost Australia's sheep and cattle growers \$250 million every year.

Fortunately for Tasmania, Paterson's curse populations are still relatively small – we can still stop this weed, before it gets away!

Get a positive ID

Paterson's curse is an annual weed, generally growing to between 30 and 60cm tall, but rarely, reaching heights of up to 2 metres. After germinating, the plants put down a deep tap root, and form a rosette which bears leaves up to 30cm long. Leaves are light to mid-green, stalked, and oval to paddle shaped, and are covered in bristly hairs that can be irritating to the skin. These rosettes eventually sprout single or mulitiple branching stems, also covered in hairs. Leaves on the branches are generally smaller and narrower than those at the base, and grow on stalks which appear to clasp the branches.

The flowers are generally a bluish purple, are around 2-3cm long and are shaped a little like upturned trumpets. Paterson's curse can flower at almost any time, depending on local weather conditions — most flowers are seen between July and January with a peak flowering season over spring and early summer. Flowers produce 4 'nutlets', hard seed cases which contain dark-brown to grey rough-coated seeds. Most seeds fall from the plants at maturity, however, some often remain attached, which can allow them to be harvested in hay crops and spread to new areas.

Paterson's curse is sometimes confused with other bluish-purple flowered weeds, such as lucerne or vetches. Unlike either of these weeds, Paterson's curse has distinctly rough and bristly hairs.

If you believe you have found a specimen of Paterson's curse, collect a sample of it in a sealed bag and contact your local Council office or DPIPWE representative.

Weed management – it's your responsibility

Many people unwittingly harbour pest plants on their properties – some even actively grow them, knowing nothing of their weedy ways.

Although Paterson's curse is not yet widespread in Tasmania, it may have made its way onto your land.

This plant is a declared weed under Tasmania's *Weed Management Act 1999*. It is your responsibility under the Act to control Paterson's curse on your land. Failure to control it your property could result in legal action. It is also illegal to distribute the plant or its seeds in any way, whether as cut flowers, in contaminated stock feed, or on dirty equipment.

Weeds are a growing problem.

Act now – make a plan and make a start!

Images:

- 1. A young Paterson's curse rosette
- Paterson's curse flower