



# F . O . L . K . L . A . W .

## NEWSLETTER Summer Newsletter 2012

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Hi all,

For those members who have not re-joined, subscriptions are now due for 2012.

Folklaw annual accounts are kindly being audited this year by Jeremy Grant at no charge. We wish to take this opportunity to thank him. He does this every year for us and with the money we save we are able to support wildlife carers and help run the Koala Reserve.

Folklaw's AGM will be held within the next few months. Members will be notified when a time and date has been arranged. We must hold an AGM each year to fulfil our legal requirements.

Since the spring newsletter in November we have put in 540 plants in the Koala Reserve which concluded the planting season. We have had positive feedback from members of the public about the upkeep of the Koala Reserve.

We have grown about 300 plants in readiness for the autumn planting season.

Folklaw members walk the Reserve on a daily basis and report any problems. We would like to thank them for their help.

Several members of Folklaw have unofficially become rubbish collectors in Somers. As they walk along the many paths and streets of Somers - and of course the beach, they collect litter and deposit it in many of the bins provided by council. To-date rubbish collected has consisted of plastic buckets, bait bags, plastic bags and bottles, glass bottles, thongs, a crucifix on a chain, an aluminium non-stick frying pan, rope, socks, hats, lolly wrappers, fishing line etc. Consider taking a plastic bag or bucket with you on your next walk around Somers and pick up some litter as you go. By doing this, you do not have to look at the same rubbish each day on your walks. I make it a habit of taking a plastic bucket with me wherever I walk the dog to collect rubbish - it keeps me fit and helps the environment. I have noticed a definite improvement in the areas that I walk.

### **Patterson's Curse (Baddie):** (*Echium plantagineum*)



*Echium plantagineum* is commonly known as Paterson's Curse, Purple Viper's Bugloss, Bluweed, Lady Campbell Weed or Riverina Bluebell, and Salvation Jane. In times of drought, many of South Australia's grazing pastures died off and due to its drought hardiness, *Echium* was used a source of food for grazing animals, hence the name Salvation Jane. It is native to western and southern Europe, northern Africa, and south-western Asia.

It is an introduced plant to Australia, South Africa and United States, where it is an invasive weed. Paterson's Curse has positive uses – it is the source for a particularly fine grade of honey. As a fodder plant, with proper handling, it can be valuable fodder over summer for cattle and sheep, but not livestock without ruminant digestive systems like horses. Due to a high concentration of pyrrolizidine alkaloids in the shoot the toxins are cumulative in the liver, and death results from too much Paterson's curse in the diet.

In the 1880s it was introduced to Australia, probably both as an accidental contaminate of pasture seed and as an ornamental plant. The name for the plant was derived from Jane Paterson or Patterson, an early settler of the country near Albury. She brought the first seeds from Europe to beautify a garden, and then could only watch helplessly as the weed infested previously productive pastures for many miles around.

The plant has hairy, dark green, broadly oval rosette leaves to 30 cm long. The several seeding stems grow to 120 cm in height and develop branches with age. Flowers develop in clusters; they are purple, tubular and 2-3 cm long with 5 petals. It has a fleshy taproot with smaller laterals. Although generally an autumn germinating spring-flowering annual, Paterson's Curse has become highly adaptable to Australian erratic rainfall events and, given suitable rainfall, some plants germinate at any time of year, but the plant never survives for more than one year. Control of the plant is carried out by hand (for small infestations) or with any of a variety of herbicides, and must be continued over many years to reduce the seedbank. (Most seeds germinate in the first year, but some survive for as long as five years before germinating.) In the longer term, perennial grasses (which do not need to regenerate from seed each year) can out-compete Patterson's Curse, and any increase in perennial cover produces a direct decrease in Paterson's Curse. However, the annual cost in control measures and lost production in Australia was estimated (in a 1985 study by the Industries Assistance Commission) to be over \$30 million, compared to \$2 million per year in benefits.

The Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO) has carried out research on numerous classical biological control solutions, and of the 100-odd insects found feeding on Paterson's Curse in the Mediterranean, judged six safe to release in Australia without endangering crops or native plants.

The leaf-mining moth *Dialectica scariella*, the crown weevil *Mogulones larvatus*, root weevil *Mogulones geographicus* and the flea beetle *Longitarsus echii* are now currently widely distributed in southern Australia and can be found easily on most large Paterson's curse plants encountered. The crown weevil and flea beetle are proving highly effective. While the CSIRO is cautiously optimistic, it is expected that biological control agents will take many years to be fully effective.

The most recent economic analysis however, suggests that biological control has already brought nearly \$1.2 B in benefits to Australia by reducing the amount of Paterson's Curse in pastures. Investment in to the biological control of Paterson's Curse has already reaped a benefit cost ratio of 52:1.