



# Fraser Island Defenders Organisation

FIDO, "The Watchdog of Fraser Island", aims to ensure the wisest use of Fraser Island's natural resources.

## Happy Valley Bush Regenerating Trip 9th - 15th June 2019

**Volunteers:** Peter Shooter (Nambour), Chris Breitenbach (Auchenflower), Sanja Shooter (Mt Gravatt), Barry Smith (Gympie), Zela Bissett (Gympie), Larry Hohenhaus (Mudjimba), Sophie Munns (Chermside)

### **General Operation:**

Our group operated in two teams as below:

#### **Team 1.**

Chris Breitenbach, Larry Hohenhaus and Sanja Shooter worked as a team of three. This team worked in difficult terrain, requiring a high level of fitness.

#### **Team 2.**

Peter Shooter, Barry Smith, Zela Bissett and Sophie Munns made up the second team. This team also worked in some difficult terrain, but generally not as gruelling as Team 1's.

Team 1 did extensive eradication of Easter Cassia (*Senna pendula* var. *glabrata*) towards the North East of the Happy Valley Unallocated State Land (USL).

The method involved hand pulling for the vast majority of plants. Where larger plants could not be pulled, they were cut low with bush saws or long handled cutters and the butt coated with 100% Roundup (glyphosate). In the main this was applied with a wick wand rather than by a hand held spray applicator, as we have used previously.

They also worked on areas of Abrus (*Abrus precatorius* var. *africanus*) that had been found in the North East region of the USL during the May trip. Seeds were collected, climbers pulled down out of the canopy, small seedlings hand pulled and the larger plants that could not be pulled were foliage sprayed with 1.5% Roundup.

Occurrences of Abrus communities and mature individual plants were both GPS recorded and tagged with fluoro pink flagging tape for follow up on future trips.

This team undertook extensive exploration of outlying areas of USL looking mainly for outliers of Abrus. While most exploration was done on foot, this was greatly assisted by an agreement by DNRME, who have responsibility for USL, to give us access to their internal chained off service roads. This greatly assists our ability to thoroughly explore the 250ha of USL surrounding Happy Valley.

Outbreaks of Abrus were discovered towards the Western extremities of the USL. Climbing plants were pulled from the canopy, seeds were collected and communities and individuals GPS recorded and marked with fluoro flagging taped. They will be eliminated next trip.

In time we aim to survey the entire USL to detect and eliminate Abrus, to prevent it encroaching into the National Park.

As Team 1 explored the USL looking for Abrus outliers, they also hand pulled or cut and pasted Easter Cassia they came across.

Team 1 did an extraordinary amount of very productive work in very difficult conditions.



***Newly discovered Abrus outbreak towards the West of the USL. Top picture shows clusters of red seeds.***

Team 2 searched all the areas we have responsibility for inside the dingo fence looking for emergent Abrus seedlings. In the main these were hand pulled. Because there was good rain immediately before this trip, some larger plants could be hand pulled, with care being taken not to break the stems off at the crown. Broken off plants regrow from the remnant roots. Slightly larger plants that would not hand pull were spot sprayed with 1.5% roundup from small held spray bottles. No seed- bearing plants were located in these areas.

This mopping up process was extended to outside the dingo fence either side of the Western Happy Valley (Yidney Scrub) Road; West of the dingo fence between the Happy Valley Road grid and the grid on Yidney Rocks Bypass Road, and beyond the Yidney Rocks Bypass Road on either side of the road.

Team 2 also eradicated a few remaining small Cassia and emergent seedlings in all these regions as well as basket asparagus (*Asparagus aethiopicus* var. *sprengeri*). These were dug out and hung in trees to die. A number of other weeds including Mickey Mouse Plant (*Ochna serrulata*), Brazilian Nightshade (*Solanum seaforthianum*) and Mossman Burr (*Cenchrus echinatus*) were eradicated from these areas.

Team 2 cleared a large area of Cassia West of Yidney Rocks Bypass Road in an area not previously visited. A considerable amount remains to be eradicated. Some *Abrus* was detected here, and foliage sprayed.

Team 2 revisited a valley on the Eastern side of Yidney Rocks Bypass Road that had been totally infested with Lantana, Cassia and *Abrus*. It had been largely cleared on previous trips. The weed infestation in this valley had been so thick, we took the decision on earlier trips to leave some lantana to provide habitat for native wildlife and prevent erosion. This will be taken out as regrowth occurs. Young Cassia and *Abrus* seedlings were removed. Very encouraging regeneration of several native species is occurring at this site.

After consultation with the immediate neighbours, a large clump of Broad Leafed Pepper-trees (*Schinus terebinthifolius*) was removed in the May trip at the end of Owen Street. This left a denuded area subject to erosion. After consultation with the immediate neighbour the area was replanted with 15 local shrubs and ground cover tube stock grown at the FIDO run nursery at Eurong, and three Young Pandanus. A number of cuttings of Coastal Pigface (*Carpobrotus glaucescens*) were also planted.

We also removed a large stand of Mother-in-Law Tongue (*Sansevieria trifasciata*) from this area.

#### **Abrus seed collection:**

This trip we collected a plastic shopping bag of seed pods for the week. (Slightly less than 2kg). This almost all came from new discoveries well away from the village. On early trips, we collected up to 9 large black bin liner bags per trip. This indicates we are winning the battle to control this invasive weed.

#### **Nursery Seed Collection:**

FIDO's Suzanne Wilson operates a nursery at Eurong that provides plants for any resident, business or group on the Island. All the plants produced in the nursery are grown from local stock.

We now have approval to collect planting material for the nursery from USL on K'gari.

This trip we collected a bag of ripe Pandanus seed for the nursery. This is very valuable as K'gari's Pandanus have been decimated by an introduced leaf hopper of recent years. Many have died.

It is important that we produce plenty of seedlings to replace losses of this iconic local plant.

#### **Overview:**

FIDO's Happy Valley weeding program has been running for many years. I took up the co-ordinator role in early 2014 and we have been doing 4 week long trips per year since then.

We remove a range of weed species each trip, but we have focused our attention on two species. Both were introduced to the island as garden plants and have escaped. Our aim is to bring the population to as low a level as possible, to prevent them spreading into the National Park.

**Easter Cassia:** This is a spreading shrub to small tree. It has distinctive bright yellow flowers that occur mainly in March - May. Hence the name Easter Cassia.

It originates in South America.

**Crab's Eye:** This plant is a creeper that will extend into the canopy of trees and shrubs and block out all the sun light, leading to the weakening of the plant it grows on and sometimes death.

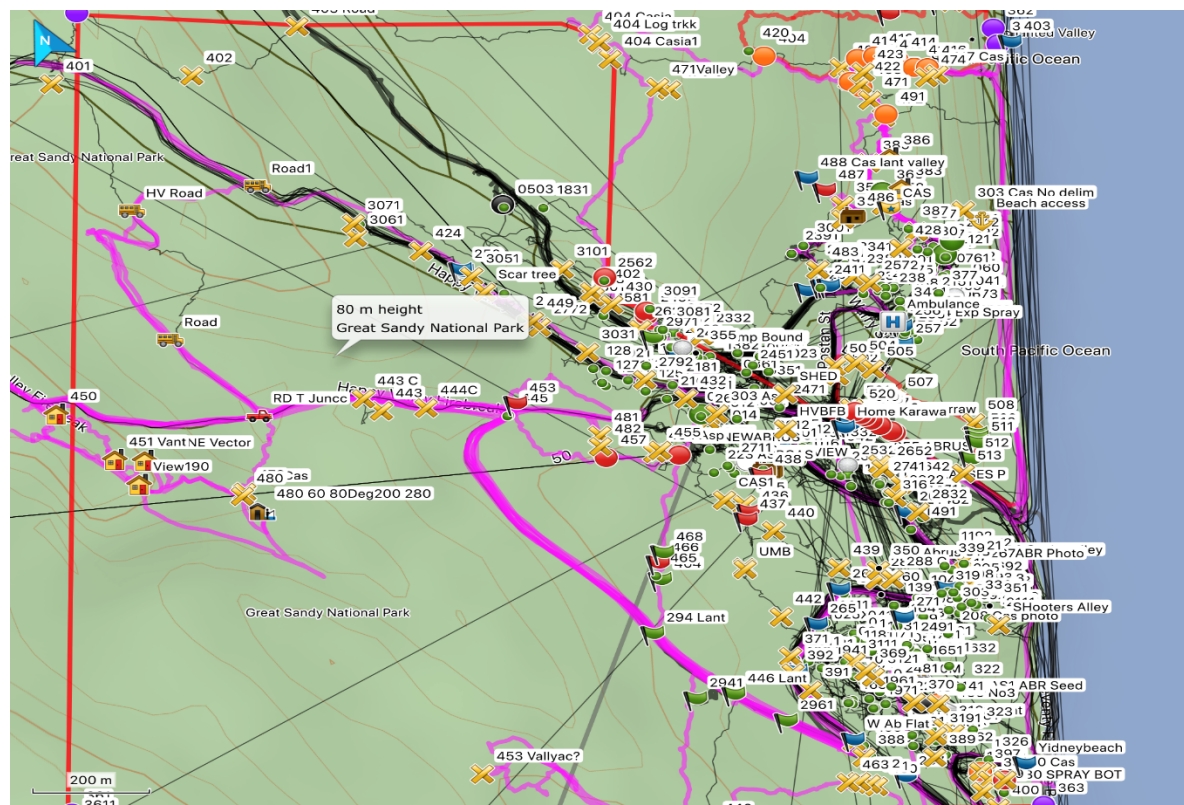


It has an attractive bright green compound fern like leaf, insignificant mauve flowers, and clumps of very attractive but very poison bright red seeds that can stay on the plant for well over a year.

To the best of our knowledge it is only present in and around Happy Valley, and we are very keen to ensure it does not extend its range.

It originated in Africa.

Both these species had heavily infested Happy Valley when we commenced this weeding program. There are very few left on the land we operate on both in the village and the immediate surrounds. We remove all the plants we encounter, but especially mature seed producing plants. We follow this up by removing all new seedlings. This way we remove the plant from the environment over time.



**Aggregation of GPS records of Abrus locations shown by yellow crosses. This allows us to revisit these sites to check for any regeneration. Pink tracking lines shows GPS movement this trip.**

**Hours worked:** 140 minimum

#### **Future trips:**

One more trip is planned for 2019.

Sunday 22nd October - Saturday 2nd November

#### **Peter Shooter**

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