



## **Fraser Island Defenders Organisation (FIDO) Happy Valley weeding trip 27th April - 3rd May**

**Volunteers:** Peter Shooter (Nambour), Chris Breitenbach (Auchenflower), Greg and Dianne Smith (Peregian Waters), Rhonda and Graham Wood (Fairfield), Cath Barron (Spring Hill), Leonie Martin (Castle Craig Sydney), Pat Turner (Montville), Jane Minor (Alexandra Headlands), Alistar Barron (Victoria Point), David Anderson, Fraser Island Association, (Eurong).

### **Butchulla Aboriginal Corporation:**

We also had the pleasure of having with us the following 4 Butchulla Land and Sea Rangers from the Butchulla Aboriginal Corporation for three days: Corey Currie, Norman McDonald, Tahlia Burns, Genevieve Rainbow.

Working with the Butchulla Rangers was a great experience for the FIDO volunteers. We look forward to an ongoing association with them.

### **2019 Cassia Blitz**

While FIDO Happy Valley weeders have been removing Easter Cassia (*Senna pendula* var. *glabrata*) for many years, in 2018 we dedicated a week in May when the Cassia was in flower as a "Cassia Blitz". The bright yellow flowers makes them very easy to find when in bloom.

### **Eradication method for Easter Cassia:**

Where plants can be hand pulled, this is the first option. Where they are too large to be pulled, they are cut as close as possible to ground level and 100% Roundup (glyphosate) applied to the stump.

In 2018 we had 14 volunteers. The most significant work was done in the valley just South of the Village. The entire dunal slopes were yellow with flowers at commencement, and at the end of the week there was no yellow left on the dune face or well beyond. We also removed Cassia extensively from the land under our control both in the village and the immediate surrounds.

This trip, the team of 16 revisited that valley and associated dunal systems and all the areas we had worked in 2018 and mopped up. By continually removing all the flowering plants we are seeking to assure no further seed set, which is the aim. This will be an ongoing process until all the seed stock in the soil has germinated or degraded. This will take some years of vigilance and ongoing eradication.

While I cannot find definitive information in the literature regarding seed dispersal, there is speculation that it is bird dispersed. Given the random distribution in the Happy Valley area and throughout the region, I can only conclude that this is the case.

We have extended our operation well beyond the village, in some places to the extremity of the Unallocated State Land (USL). This trip we did extensive work North of the village, through several valley/dunal systems. Extensive areas were cleared of the flowering plants. This was extremely difficult work, scrambling up and down very steep sand dunes. Our volunteers are to be commended for the work they did in this very difficult terrain.

Mopping up was also done in previously worked areas West of the village, and East of the Yidney Rocks Bypass Road.

Extensive work was also done in heavily infested areas West of Yidney Rocks Bypass Road. Some of these areas had not been previously worked.

David Anderson took out all the remaining flowering Cassia from the South beach access to the North beach access of the Yidney Rocks Bypass Road.

One serious infestation remains unaddressed. Immediately south of the Village, opposite Sailfish, the valley is heavily infested with a range of weeds, predominantly Para Grass (*Brachiaria mutica*) and Singapore Daisy (*Sphagneticola trilobata*). This is a wet marshy area. Easter Cassia, growing in a spindly scrambling form is intertwined with these weed species and all but impossible to access and remove.

A regeneration program needs to be developed for this area, and we will be seeking discussions with other agencies, including DNRM in relation to this matter.

We will continue to target Easter Cassia every trip, and a further Cassia Blitz will be held when the plant flowers in 2020.

### **Crabs eye (*Abrus precatorius* var *africanus*)**

To the best of our knowledge, this species is restricted to Happy Valley and immediate surrounds. Our aim is to ensure it does not extend the range and in the long term eliminate it.

It is our belief that the seeds are spread by birds, and over short distances by wind, as the seed pods desiccate and break up with seeds still attached. This then acts as a sail, which can be carried by storm gusts.

Work was done mopping up this species in previously worked areas. In the main these areas have no remaining mature plants. As with Cassia, our aim is to prevent flowering and seed set. Regenerating seedlings were hand pulled. This included some sizeable plants on this occasion as the soil was moist. Those that could not be pulled were spot sprayed with 1.5% Roundup. This is an ongoing process.

Extensive GPS mapping has now been done, and this in conjunction with flagging tape marking the location of plants that had set seeds greatly assists follow up for any regeneration.

While we have brought the heavily infested areas (20 to 30ha) in and around the village under good control, new infestations are being located as we extend our inspection to the extremity of the 250ha of USL. Extensive inspection of the USL is now our priority, to endeavour to ensure no incursion into the National Park.

*Abrus* has been found at the old dump site at Yidney. This is being treated by QPWS.

The next trip will focus largely on traversing the USL to locate any areas of *Abrus* beyond those we are aware of.

### **Broad Leafed Pepper (*Schinus terebinthifolius*)**

We regularly locate individuals or clumps of Broad Leafed Pepper. Usually these are of a size that can be removed with a hand saw. These are cut off close to ground level and the butt treated with 100% Roundup.

A very large clump was destroyed this trip on the South Eastern edge of the village. Another large tree was taken out from the first large dune South of the village. We were able to remove these trees on this trip as David Anderson, Fraser Island Association, was with us, and he has both a chainsaw and the required chain saw tickets.

The removal of the trees close to town has left a large bare area. We will replant with appropriate plants from our Eurong nursery next trip.

**Hours worked:** 312 minimum

### **Future 2019 Trips:**

Sunday 9th June - Saturday 15th June

Sunday 27th October – Saturday 2nd November

We are looking for volunteers for both these trips.

Ph 0417 649 158 or Email: [peter.shooter2gmail.com](mailto:peter.shooter2gmail.com)

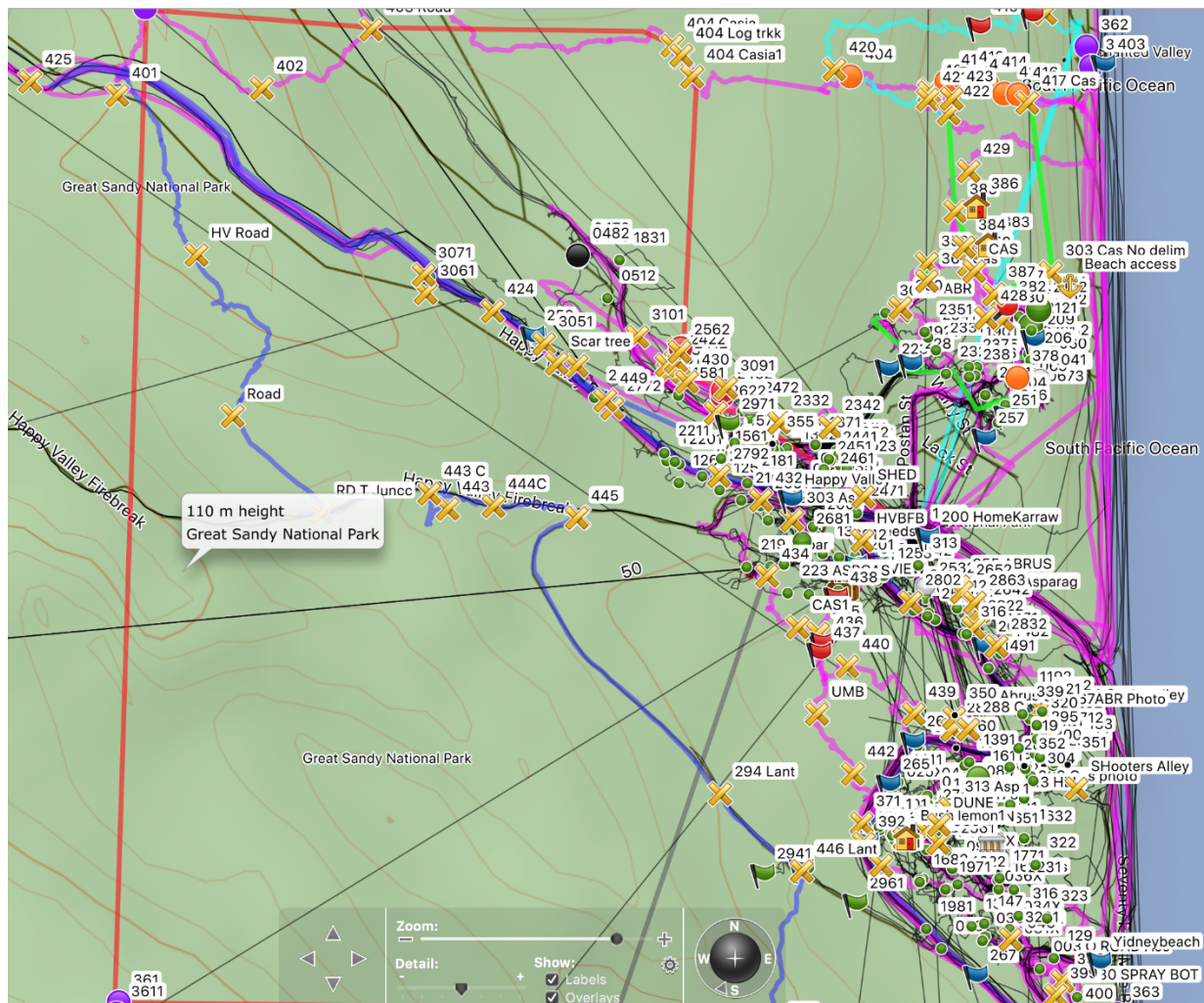
### **Before and after shots of an Easter Cassia infected area South of Happy Valley**



These pictures show the view from Sailfish South. The top picture was taken before the start of the 2018 Cassia Blitz, showing a yellow landscape coloured by Cassia flowers.

The bottom photograph was taken one year later at the start of the 2019 Cassia Blitz. Note some small residual areas of yellow. These plants were subsequently destroyed.

## GPS records of mature *Abrus Precotarius* var *africanus* plants – Happy Valley



This image shows cumulative GPS records of locations where mature *Abrus* has been located and recorded in the Happy Valley area. Plants at these sites either had observed seeds or were likely to have had seeds.

We have one hand held GPS operated by Chris Breitenbach.

Other volunteers mark locations of mature *Abrus* with fluoro pink flagging tape.

By revisiting both the GPS locations and the pink flagging tape marked sites, we can repeatedly inspect for emergent seedlings and remove them.

This is the methodology we are employing to control and hopefully eliminate this invasive species.

### Peter Shooter

FIDO Volunteer Weed Management Co-ordinator, Happy Valley