FRASER ISLAND DEFENDERS ORGANISATION

Happy Valley Cassia Blitz Weeding Trip: 29th April - 5th May 2018 Report

Volunteers

Peter Shooter – Nambour
Chris Breitenbach – Auchenflower
Greg Smith - Peregian Springs
Dianne Smith - Peregian Springs
Dianna Coghill - Marcus Beach
Graham Coghill - Marcus Beach
Leonie Martin - Castle Crag Sydney
Maureen Dunn – Toowoomba
Jan Mosler – Toowoomba
Pat Turner - Montville
Maree Ziirsen - Point Lookout
David Anderson - Eurong
Mike Anderson – Fitzgibbon
Sally Blattman – Bokarina

Cassia Blitz

This trip coincided with the flowering of *Senna pendula var glabrata*, commonly known as Easter Cassia. The profuse bright yellow flowering at this time of year makes it a perfect time to target this invasive woody weed. Hence the decision to dedicate this week to a Cassia Blitz.

Our large group of 14 FIDO volunteers included David Anderson from the Fraser Island Association and his brother Michael from Fitzgibbon.

Easter cassia is widespread around Happy Valley and FIDO, along with Parks and other organisations has been removing it for years. It grows in a wide range of conditions on Fraser Island ranging from the top of sand dunes to permanent wetlands. It grows into a small single stemmed tree in open conditions, a straggling tall stemmed plant extending into the low canopy of bush land, through to a many stemmed low plant in wetlands. It frequently falls over and layers where stems touch the ground, making movement through and around it difficulty and removal even more difficult.

The main area we targeted was the valley and surrounding dunes directly South of Happy Valley village. The infestation here was extensive. David Anderson had marked out access routes with flagging tape in advance and we established tracks and worked either side of these tracks.

We also worked either side of the Yidney Rocks bypass road, in the valley immediately north of the dingo fence extending down to the beach, and various other infested areas shown on the accompanying map. We also removed considerable amounts in and around the housing area of the village.

Wherever we saw yellow Cassia flowers we destroyed the plant.

Control methods

Where possible, plants were hand pulled. Where not possible, stems were cut as low as possible with long handled cutters, bush saws and a small battery operated reciprocating saw. The remaining stems were then wetted with 100% roundup from 500ml squirt bottles or other adapted bottles. Frequently the target plant was tangled with a range of both native and weed species making access extremely difficult. In many instances it involved crawling underneath the vegetation to access the origin of the stems.

We successfully destroyed the vast majority of the Cassia South of the town by this method. However we did not get to kill stands in wet areas where the plants were short, multi stemmed and intertwined with mainly Singapore Daisy *(Sphagneticola trilobata),* Para Grass *(Urochloa mutica)* and a range of other weeds and native plants. The method we used in dryer areas where the plants were much less multi stemmed was not practicable in the wet areas.

Following advice in a NSW Department of Agriculture publication, we established a trial area of about 150 square metres where 5% roundup was applied as a spot foliage spray from a back pack. Early indications looked promising and we will inspect the site at the commencement of the August trip. Spot spraying to minimise collateral damage to native vegetation was our priority.

Lantana: Often the Cassia was intertwined with Lantana, which we also pulled out or cut and squirted with Roundup.

All up the Cassia Blitz was a huge success, with the results very easy to see as the leaves and flowers wilted.

Abrus precatorius subspecies africanus

Abrus precatorius has been our principal target in the Happy Valley region of recent years. While the population is now very low in areas we have access to, we continued to find isolated plants in the areas we worked. When discovered we marked them with flagging tape and foliage sprayed them.

We did extensive hand pulling or foliage spraying of emergent Abrus in the areas inside the dingo fence on the West side of the village. We also removed a considerable number of basket asparagus *(Asparagus aethiopicus)* plants in this area.

We inspected an area South West of the communication tower where we discovered a severe outbreak of Abrus in February. We had established a photo point and foliage sprayed this area in February. The kill rate was 100%, but there were many emergent seedlings which we will prioritise in August. We photographed the area for reporting purposes.

All up, we contributed a minimum of 350 person hours to weed eradication. The work was extremely hard and the group displayed great commitment to the project.

Future Trips

August 5th – 11th

November 18th – 24th

Peter Shooter

NOTE: In addition to the mapping and before and after photographs in this report, a separate attachment from one of the volunteers resident on Fraser Island (K'gari) David Anderson shows the visual impact of the Cassia Blitz. That eliminated almost every Easter Cassia within the large target area with very steep and difficult terrain. While the children's story featuring Uncle Dave isn't set in Happy Valley the epic efforts of the volunteers is in part captured in the quest to remove Easter Cassia that is largely confined on Fraser Island (K'gari) to proximity to the townships. FIDSO's efforts aim to prevent it spreading into inaccessible bush. *John Sinclair,* Honorary Project Officer, FIDO

Happy Valley Photographic Report — May 2018

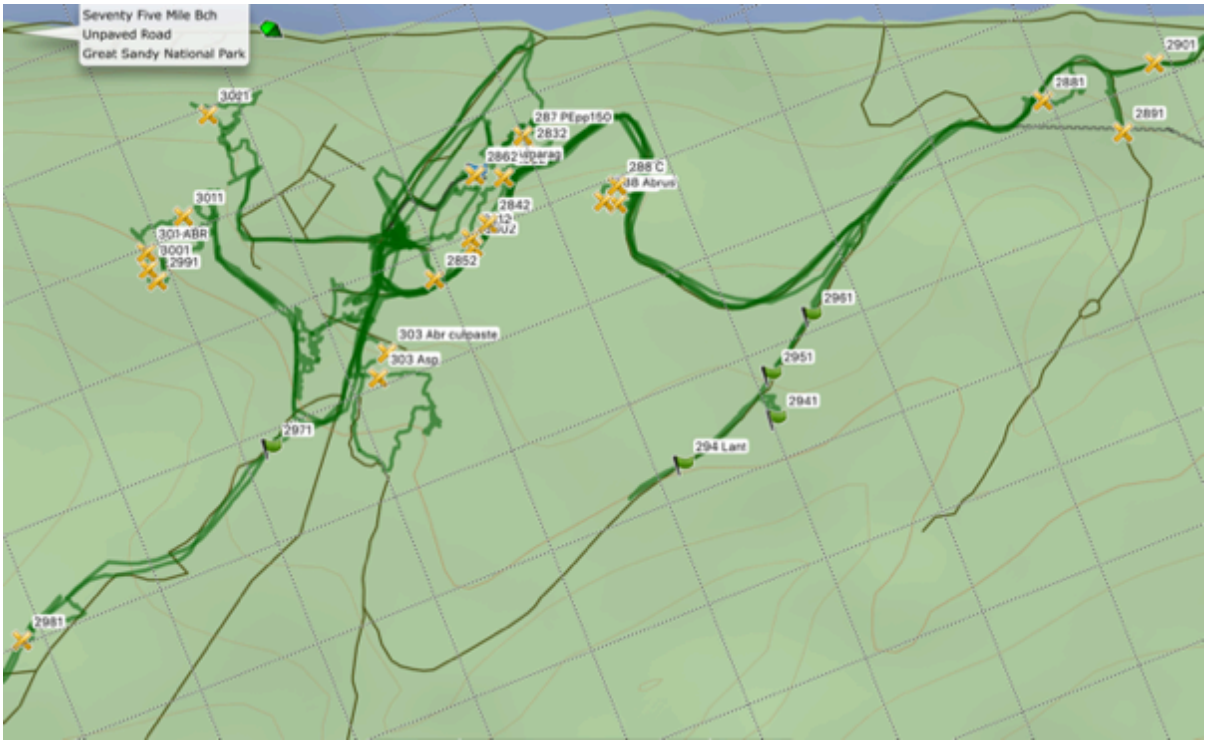
From Peter Shooter's Emails: These are the main areas we worked on last week. As well, we picked off flowering Cassis plants wherever we saw them. That included quite a bit close in around the town. There is now a huge difference between Bree's area and ours on the Cassia front. Have a look on the Northern side of town. Her area is bright yellow.

Chris Brietenbach's notes: A rough schematic to be confirmed with the GPS record

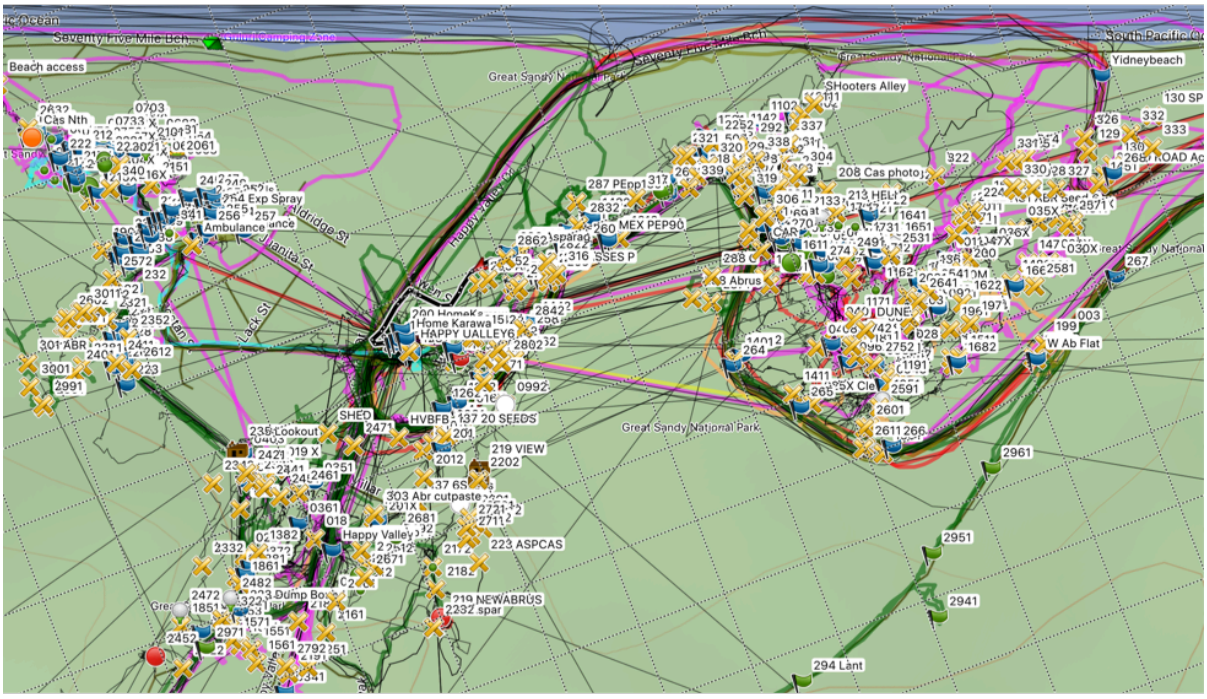
Red = Known Abrus seeded areas

Yellow shaded: Abrus covered areas that are now mainly seedlings and premature plants that have been either hand weeded out due to the good conditions from prior rain or marked for chemical treatment and eradicated

There are some Indications of Abrus on the Western road, North west valley and likely East of Yidney rocks road. The Easter Cassia eradication program and a future delineation survey may assist in determining the extent and likely cause of the distribution of the population of Abrus.



Chris Brietenbach's overview of the area treated without the detailed mapping of specific sites subject to treatment.



Happy Valley - Main Site coverage (excl. Yidney rocks & West boundary) Based on Chris Brietenbach's more detailed GPS tracking and mapping of sites treated.

Before and After Abrus near Communications Tower

6th Feb 2018 Example of Abrus outbreak South West of Communication Tower, Happy Valley

After shot. **5th May 2018**