The Project

The project is part of a program partially funded by the BMRG (Burnett Mary Regional Group) to restore the natural bush at Eurong Village with three similar working bees in the 2012-2013 financial year. It is supported by the Kingfisher Group that operates the barges and gives us free barge crossing as well as very cooperative access to their Eurong Resort that has been the centre of the area worked in. The gardens of Eurong Resort have been and continue to be a major source of weeds that are now spreading into the surrounding bush. Our priority has been to eliminate as many of the invasive weeds as possible from the res0rt and replace them with non-invasive natives.

Another part of the project is to monitor for any potential adverse environmental change on Fraser Island that is anthropologically induced. This project involves photo monitoring and measuring sediment movement.

For this week there was a group of 8 people from Brisbane and Maryborough led by John Sinclair and cared for by Su Dawson who shared a Eurong House, "Talinga", for six nights. The team of 8 people put in more than 200 hours of solid bush regeneration work and explored much of the island while observing and monitoring changes during the week.



Day 1 Sunday, 10th March Brisbane to Eurong

The day earl on looked to be threatening to deliver showers as it had done for almost every day days for the previous month but by good fortune we escaped and the day became progressively sunnier as it progressed.

Having started at Camp Hill with four we progressed to Spring Hill and then to Red Hill before heading up the Bruce Highway. The zeal of the team for tackling weeds was first demonstrated at our Morning Tea stop at Yandina where reflex action had people uprooting weeds adjacent to our stop. Our next stop was a splendid lunch with Robin and Marcia Hyde playing host and was sat on the deck overlooking the Mary River and reloaded the trailer to accommodate our full complement of eight.

Our uneventful odyssey abruptly changed to an adventure at 3.50 pm as soon as we were on the barge. Robin noticed that the bearing on one trailer wheel had been shattered. It posed a quandary as to how to proceed with our huge load to get across the island to Eurong with such a badly crippled trailer. A few phone calls from the barge skipper to island mechanic, Andrew who operates FIVERATS, a vehicle recovery service and we had a solution. While we waited for Andrew to come to our rescue we removed the offending trailer wheel and had a cup of tea. Then we watched a professional at work effecting the repairs and within half an hour we were mobile again even though it was then almost dark.

The adventure continued when we arrived at "Talinga" in total darkness but Su had soon organized order out of the chaos and we sat down to a splendid seafood stir-fry dinner with Lemon merengue tarts and strawberries for dessert at 8.10 pm.



Day 2 Monday, 11th March Eurong Assessment and initial work

The day dawned clear although we see feel some scuds during the day starting with a good drench for Jeremy who hadn't quite finished his beachcombing when it briefly pelted down.

After a slowish start we began an orientation tour of Eurong to assess the needs and priorities. As we proceeded to the dump to salvage timber to recycle as monitoring posts and toured the resort area our plans evolved, particularly after an unscheduled encounter with the very helpful and cooperative and helpful resort maintenance manager, Bob Burnett.

After smoko we moved to various tasks. Robin and Jeremy, the handymen were about to work on preparing more monitoring poles using the timber that we had procured but we couldn't proceed because the rulers we had purchased hadn't been packed. They then set about refurbishing the sign shelter with the fresh posters that we had prepared for the task and it now looks much more interesting and likely to attract more attention.

The rest of the group went to work on the clivia lilies in front of the resort where they had gone feral. Other weeds were simultaneously dealt with as well as a sluggish carpet python that was reluctant to get out of Pam's weeding area. Garrett relocated it. We the endorsement of Bob Burnett we removed what we believe to be the only umbrella tree in the resort grounds because the Happy Valley experience demonstrates that one umbrella tree can grow into a forest very quickly. The work continued very busily to 1.00 pm.

Following lunch a tour was taken of the southern lakes scenic circuit. Due to the recent extended season of severe wind the beach was severely eroded. The morning high tide was chewing into the already high sand-cliffs at the head of the beach. It was therefore decided to travel the beach to Dilli Village while the tide was low. However the strong winds had deposited a lot of deep dry sand on the access track that made getting on to the track a formidable challenge.

The first stop was at Lake Boomanjin that was the fullest that John Sinclair has ever seen. Then he was startled to discover that Lake Benaroon and Barga Lagoon were so full that the road was under water in part and up to the floorboards of Supe. It was a similar story at Lake Birrabeen that was the highest ever seen. The water had almost reached the base of the very photogenic Melalueca and the windy conditions had created waves to establish a sharp drop off making the beach almost non-existent.

While most of the group went on the exploration of the Southern Lakes, Michael put in five hours of work at the nursery and returned to find the smelly weed eradication team removing a weed from Talinga that we have not yet identified.

Monitoring:

On 26-28 November, 2012 FIDO had established several datum posts to monitor the rate of sediment deposition at particular sites. This was the first time that there has been an opportunity to gauge the rate of deposition. During the three-month period there

has been several heavy rainfall events to mobilize the loose sand from the roads and flush it towards these sediment alluvial plumes. Three sites were assessed during the day.



Cooloola Datum Post had 90 mm of sediment Kunyam Datum post had a depth of 40 mms but an erosion channel nearby might have prevented it being deeper. Both of the above sites were near the junction of the two one-way roads near Eurong. The other site monitored was Pibin Datum post at the crossroads where the deposition was 20 mm. We also encounters a group of four European hikers there who were looking for the Central Station hikers camp that they had walked past. It was a sign that more people may be looking for a hiking experience on Fraser Island.

Hours worked: 44 hours on bush regen and 16 hours monitoring while Michael again worked on the nursery (4 hours). Total **64**

Day 3 Tuesday, 12th March Eradicating Resort's invasive weeds

After breakfast there was a flurry of activity in front of Eurong resort. Jeremy and Garrett cleaned up a few lantana suckers in front of the resort. During the course of the morning Resort staff expressed their appreciation for FIDO's effort in November of clearing the lantana from the front of the resort. Having obtained permission to eradicate the clivia lilies from the resort gardens, this was the first major task of the day with two trailer loads of mainly clivia bulbs being gathered from the Eurong Resort gardens and taken to the dump. Clivias had obviously been self-introduced to many parts of the resort with their seeds being spread by the wind.

As we worked away, many other invasive weeds were found to have been harboured there including mother-in-law's tongue, Singapore daisies, Asparagus fern, various agaves. Cocos palms, arrow

vine In the end we believed we had removed most of the Clivias from the front of the Resort although we will need follow up to ensure that these have been eradicated.

After smoko Robin and the three "Hill girls" went off to tackle the Coral creeper that was surrounding the appropriately named "Coral Seas Units" of the resort. 10 person hours later there was still at least another day's work in front of that crew. In the process as always more other weeds were uncovered and the women were assigned to continue the challenging task on the morrow with it being clear that we will need to follow up with Roundup to treat the anticipated load of seedlings in the cleared area.

One of the positive outcomes for the morning's work was an encounter with one of the Kingfisher managers, Warwick. John Sinclair approached him about gaining access to the Kingfisher nursery to procure planting stock to fill the void in the gardens occasioned by removal of the number of invasive weeds that they had previously harboured and degree of the invasion. A phone call was placed by Warwick to Peter Burnet who manages the Kingfisher nursery and it was agreed that the FIDO group would meet Peter at 2.30 pm the following day to inspect the nursery. Our request for some Kingfisher assistance in the planting out was less successful.



We finished the morning's work with another couple of trips to the dump (three for the day)

Following lunch the group went for a walk to Wabby Lakes walking in via the now disused northern track. While collecting seed from a Macrozamia on the track abandoned by the QPWS, Peter Meyer a tour guide from Kingfisher and professional Fraser Island photographer, literally ran into us and we had a useful exchange of information, mutually agreeing that this track should be reopened for public use. After a swim for five the group returned to the beach

and a late afternoon tea as a prelude to Happy Hour back at "Talinga".

Hours worked: 46 hours on bush regen and Michel worked 4 hours in the nursery. Total **50 hours**

No time was spent on any formal monitoring although the extent of the beach erosion was indicated by the height of the sand cliffs that were more than 3 metres high in places. The extent of the beach erosion was also marked by the appearance of One Tree Rocks emerging from the beach surface. Although they are not as exposed as they were in 1974, this is the first time since 1974-75 that they have been so clearly exposed.



Day 4 Wednesday, 13th March X Brazilian Cherries - Kingfisher

There was a very early start to ensure that we kept up with our commitment from the QPWS that were waiting for us at 7.30 am to begin the assault on the huge Brazilian cherry infestation of Second Valley. However even before that we had procured the large trailer made available to us by the Eurong resort to help move the mountains of branches and stems felled in the process. QPWS 2IC Kim Fleischfresser wielded one chainsaw while BJ, one of the indigenous rangers, was able to stay with us for four and a half hours for a task we initially thought might be done in just over an hour.

While the rangers worked the chainsaw, Michael moved ahead identifying and marking trees while Jeremy, Garrett and F.L. were loading the trailer and delivering to the dump and Robin was busy painting stumps of those cherries that had been felled. (He had great difficulty in keeping up with the chainsaws). Soon the team was joined by John, another indigenous ranger, who also contributed a ranger ute to transport the fallen plants to the dump. Also adding to the effort was David Anderson, President of the Fraser Island Association who had

obtained the permission from a number of householders to clear their propertied of Brazilian cherries. The only exceptions could not be contacted for consent in time for this week's program. However it was clear after four hours that the project would be unlikely to be completed this week. We are already planning for next trip including the option of purchasing our own chainsaw to work to woody weeds such as Brazilian cherries.



By the end of the morning session there were still many to clear up, more stumps to poison and a query if we had the best method of treatment since some of the stumps we had drilled and poisoned in November were now suckering.

While the men were thinning out the forest the three women were carrying out vital work at the resort. Their first task was to prepare the gardens near the laundry for planting with new plants from Kingfisher nursery. The second was to remove the Coral creeper from the adjacent area and the third mammoth challenge was to remove all coral creeper from the Coral Seas Units. There did so and achieved significant success although this area will need to be treated again in a month or so possibly by spray to stop the myriads of seedlings from replacing the infestation.

After lunch the group with the trailer headed for the Kingfisher Resort but not without stopping along the way to check the Monitoring sites of Dhomba and Wongul. Each had accumulated 50 mm of deposition since the datum poles were established just three months earlier. A quick estimate at Wongul showed that the sand had spread over an area more than 15×15 metres. It suggests that 17 tonnes of sand had been spread over this area since the poles were planted in December.

Then it was a steady trip to Kingfisher where remarkable we encountered only one vehicle. We met Peter Burnett and his assistant Aaron who took

us to the nursery where they had quite a stock of plants. We were unsure about the use of some of their Callistemons but they had many *Banksia integrifolia*. We were able to make a selection and fill the trailer with a selection of plants. It was also resolved that Michael would Email Bob Burnett with a list of target plants that the nursery should try propagating to landscape the Eurong Resort.

The trip home was slow and steady to stop the plants being too windblown with the only incidents being a stop at the Stonetool Sandblow lookout and to watch a Cool Dingo bus being extricated from its vain attempt to get off the beach at the start of Cornwalls Break.

Hours worked: 40 hours on bush regen, 2 hours sediment monitoring plus several hours in transit to collect planting material from Kingfisher Resort with 6 person hours spent at the nursery. Total **48**



Day 5 Thursday, 14th March Woody weeds, planting - Happy Valley

The day began with Michael placing out the plants collected from the Kingfisher Resort nursery. Then after breakfast everyone went to their respective tasks. Michael and the three women went about planting. They concentrated on establishing more diversity around the lone casuarinas that had been spread west of the Eurong Resort's tennis court so that now that there are three or four plants in each grouping as well as an expanded area in the garden that had become too waterlogged to survive as originally intended. There was some supplementary planting of midyim in the roundabout. Also four Banksias were planted adjacent to the road on the northern side of the resort. There are still many more plantings to be made on our last full day of this weeding operation.

Meanwhile the four other men were following up the work on the Brazilian cherries begun yesterday.

Many stumps remained to be painted and drilled and there were three loads of branches and stems felled yesterday to be taken to the dump. Then there was also the trees missed from the day before with the chainsaw which included one on private property that we had permission to remove and a huge guava tree that was growing on the road reserve. We were also assisted by David Anderson who helped remove some of the fallen trees. Under one fig tree we found not only some umbrella trees emerging but also some Bridal asparagus fern that will be a challenge for the April working bee as well as some treatment of the myriads of suckers and the small forest of Brazilian cherries over the hill from Second Valley. There are also at least three properties where we are awaiting permission from the owners to move in on their trees. The heartening factor has been the approval of the project by most of the locals at the obvious change to the Valley with the removal of this expanding weed.

Carrying away the fallen Brazilian cherries was a major operation in itself. When we left the dump the volume of garden wast proposed to be burnt had more than doubled suggesting a massive bonfire in the not too distant future to reduce the volume.

Following lunch we made an early start to get away to travel the beach. We had as our objective the Pinnacles. The Maheno, Eli Creek and Happy Valley where we proposed to make amendments to the sign shelter and tackle a few weeds near the resort. We accomplish all but the last item on the agenda due to one of the most unpredicted predicaments when Supe transfer case failed and we were locked into neutral.



After being abused for blocking the track some people shifted Supe out of the thoroughfare and then we were ignored. Our efforts to contact island mechanic, Andrew failed. So in desperation Fearless Leader rang the taxi service to come and convey post passengers back to Eurong. The Police Rescue Service came by and threw several of our number

into the paddy wagon. Finally a couple of tourists heading back to Eurong were able to convey everyone except Fearless Leader and Robin back to Eurong. While FL was feeding March flies and attempting to catch up on homework, Robin stopped off in Happy Valley to refurbish the FIDO sign shelter.

The unexpected rescue of Supe was accomplished by taxi-driver Steve who came without his taxi, jiggled some lever underneath the vehicle and had it set back in 4WD allowing Fearless Leader to get back to Eurong in daylight.

The drive up the beach was notable for several observations:

- The beach had become significantly more eroded since FL had driven the same length just three weeks earlier.
- There were more than 30 cm more of rock projecting from the lowered beach and the beds of rocks were much more extensive.
 The stumps of trees were exposed at Yidney Rocks. Rockems Rocks, Chards and McLaughlins were all well exposed and Poyungan Rocks extended more than 500 metres and would currently been impassable on all tides.
- For the first time in decades fresh new sandblows were appearing along the beach

 not a lot but some definite new exposures.
- Eli Creek was particularly popular even though at least six large buses were stopped by the rocks in getting there. When we stopped there were at all times at Eli Creek at least 17 vehicle plus a backpackers bus parked beside it.
- The problems of the large buses were becoming more apparent when we got stuck behind one at the Happy Valley by-pass. After six failed attempts to get up a hill and letting his front tyres only down to 35 psi. He was forced back off altogether after holding up much traffic and churning up the track.

Michael spent another afternoon working at the Eurong QPWS nursery.

Hours worked: 40 hours on bush regen, 3 hours monitoring and 5 hours on the nursery. Total **48**.



Day 6 Friday, 15th March Planting the gardens /Preparing poles

It was another fine day and although the winds had abated somewhat the waves whipped up by Cyclone Sandra drifting off in the distance still continued to pound and erode the beach at high tide. Our first couple of runs were to the dump to deposit household waste and much litter gathered by the early morning beachcombers as well as the garden waste built up at the Coral Seas Units. Then while the women went off planting the garden near the beer garden the men worked on preparing monitoring poles to be placed in the ground on the next trip while the Fearless Leader ensured that Supe could to revert to a 2WD back on the mainland.

The planting team's work focussed mainly on four gardens. One was near the beer garden having been purged of many weeds mainly lilies, mother-in-law's tongues and agaves. These have now been replaced with Banksias and Alyxias. Banksias and Callistemons have been plants beside the Tradewinds units. The other two gardens were immediately adjacent to the laundry and are amongst the three most visible gardens in the whole of Eurong because all traffic through Eurong has to pass beside them.

After smoko the planting progressed at a frantic pace until all of the plant stock provided by Kingfisher was disposed of in the Kingfisher gardens. The women made a special effort to select the optimum site for the planting of the *Angiopteris* as a feature plant and it has been located adjacent to a tap beside the swimming pool where it should grow into a great feature of the pool area.



One many Coral Creeper infestations dealt with

A total of 56 advanced plants and 26-tubed Callistemons were planted out all at the Eurong resort over the two days since collecting the stock at Kingfisher. However during the course of planting there was quite a deal of mutual identifying of

priority areas for more planting. The front of the resort area adjacent to Reception is to be a priority for future planting after the area is purged of Clivia lilies and Mother-in-law's tongues. It would seem appropriate that a World Heritage site would have Fraser Island native plants surrounding it rather than exotic and invasive introduced plants.

In the meantime Robin and Jeremy assembled 8 more monitoring stations that can be planted next time when we have rulers to place on them.

The afternoon program was quite an adventure starting with a walk from Central Station to Pile Valley. Unfortunately the serenity of Pile Valley was destroyed by a bus driver who kept the engine and air-conditioning running for at least half an hour while he served out the 40 or more on the bus afternoon tea while they couldn't hear the wind in the trees.

We got quite a surprise when we stopped at our first Lake McKenzie (Boorangoora) monitoring site, Gunda, to measure the sediment washed off the road. The first surprise was that the lake levels had risen by close to one metre since 28th November and the datum pole is now in water and the ruler was completely submerged making it impossible to get an accurate reading. Although the ground around the lake showed little evidence of wash down the slope the bar below wasn't visible and at least 60 mms of sediment had built up to completely obscure the cross bar. A more accurate reading may need to wait until the water subsides.

Near the eastern toilet block we were able to see the sediment continue to wash over the coir logs below the car park and the reading at the Billai monitoring site ($25^{\circ}26.654'$ S and $153^{\circ}03.104'E$) showed 10 mm of sediment accumulation. A pleasant surprise awaited us at Yirra monitoring station in the swale near the main stairs. There was nil change in ground level in the three months.

Surprisingly our group had the lake and the lake shore to ourselves between 3.30 and 4.30 in the afternoon and we had a pleasant swim and took photographs of the beach before arriving back at Talinga at 6.00 pm where work on the monitoring poles and tidying up continued as long as there was light.

Hours worked: 26 on bush regeneration work and 20 hours on monitoring 5 hours on the nursery. Total: 51

Details of the monitoring will be included in two separate reports — one for sediment and the other for the Lake McKenzie (Boorangoora) beach and placed on the FIDO web site:

www.fido.org.au

Day 7 Saturday, 16th March Return to Brisbane

The trip home was uneventful there was an early start to pack up and clean up with trips to the dump and consulting the resort but we were away by 8.15 am. We discovered Mossman River grass and other weeds at the Wangoolba Creek barge landing and most were removed in a flurry of activity before boarding the barge. We resolved that we should plant some of Kingfisher's plants there when we returned in April to try to make the entrance to Fraser Island less like an industrial site

Hours worked: 5 on bush regeneration



Summary

There was an amazing output of work for the week: The number of hours worked:

Bush Regeneration:	171
Monitoring:	41
Nursery:	25
Total:	266

86 plants were put in the ground helping to make the northern side of Eurong Resort especially the Surfside more natural in keeping with the OUV of Fraser Island.

Eurong landholders cooperated by allowing us to enter most properties to remove Brazilian cherries. The complete removal should be finalized in the next weeding trip in April.

The Fraser Island Defenders Organisation acknowledges with appreciation the support given by many sources.

Acknowledgements:

The degree of collaboration that has enabled us to achieve such a productive outcome for the week is best illustrated by a summary of those who have contributed to the program in some way.

The crew — 8 volunteers: Joh & Su, Robin and Michael, Garrett and Jeremy, Pam and Cathy;

Eurong Resort: Contributed cooperative collaboration. They allowed us access to treat troublesome weeds in the resort and replace them with natives:

Kingfisher Nursery: This hidden treasure was able to supply us with a good stock of plants native to the island, with propagation material collected from the island with the prospects of more to come;

Kingfisher Barges: Again we were able to extend our budget because of the exemption from barge fares generously always provided by Kingfisher; OPWS: Chainsaw and

QPWS Eurong: For all of the FIDO operations this centre has been most supportive and cooperative providing chemicals and other for supplies. This time the cooperative support extended to physical assistance with a ute and chainsaw as well as operators that added another valuable 8 hours to the overall effort. FIDO (Particularly Michael Lowe) continues to assist the development of the QPWS nursery

Fraser Coast Regional Council: FIDO has been most appreciative of the long-standing arrangement that has allowed us to store the equipment we need for these operations in the Council's secure storage area under the toilet block:

Fraser Island Association: The assistance of David Anderson both in removing waste and securing support from island landholders is especially valued.

Fraser Island Taxi Service: While Lisa and Steve have always been supportive, their rescue of Supe when our vehicle broke down so far from home was exceptionally generous, helpful and most appreciated.

The Eurong Police: The assistance of the police in our embarrassing and difficult predicament was also appreciated.

BMRG: Finally, since the Queensland Government withdrew its financial support for FIDO It is doubtful whether FIDO would be able to continue mounting these working bees without the funding under the Coastal Community program.



For the first time in many years new sandblows have begun to appear on Fraser Island (Near *Maheno*)