

Asian honeybee Surveillance Report

April - June 2013

This publication has been compiled by Corey Bell of the Asian honey bee Transition to Management program, Department of Agriculture, Fisheries and Forestry.

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Current Situation

The Asian honey bee Known Infested Area (KIA) covers over 500 000ha; restricted to an area around Cairns; north to Bonnie Doon (near Mossman), west of Atherton and Mareeba and south to South Johnstone.

In the current phase of the Transition to Management program operations have ceased within the Known Infested Area (KIA), unless;

- the report is considered a new incursion or
- there is a risk of aided spread or
- it is on the edge, or outside of the KIA

In these instances officers respond in accordance with “Responding to public notifications of Asian honey bee” policy.

The programs current emphasis is on transitioning the response of AHB to Apiary Officers in line with the Cessation Strategy.

Since the first detection of Asian honey bee (AHB) in Cairns in May 2007, a total of 833 swarms or nests have been detected.

During this reporting period 9 AHB swarms and nests were detected – 4 nests and 5 swarm. 2 nests were detected in June 2013 beyond the previous KIA that had not changed since October 2012.

Surveillance

Reports from the public

The public made a total of 94 reports during the period, 8 of which were confirmed to be positive detections.

- 35 public reports in April
- 35 public reports in May
- 24 public reports till 21 June

Edge surveillance

Surveillance beyond the KIA was undertaken between April and June 2013. This involved floral surveillance and collection of Rainbow Bee eater pellets in residential areas of selected towns between 2 and 50km from the KIA (refer to Table 1 for a summary and Appendix 2 for more detail).

No AHB were detected as was the case when the previous round of edge surveillance was undertaken in October-December 2012.

Rainbow bee eater pellets were collected from 2 sites beyond the KIA.

- Pellets collected from Wonga on 23 April were negative for AHB
- Pellets collected from Wonga on 7 May were negative for AHB

Area relative to KIA	Towns surveyed	Distance (km)	Time (hours)	EHB	AHB	Rainbow bee eater pellets (result)
Western edge	Mutchilba, Dimbulah, Ravenshoe, Herberton	24.29	10.83	201	0	No (NA)
Northern edge	Mossman, Cooya Beach, Wonga, Newell, Daintree Village	34.02	14.16	201	0	Yes (negative)
Southern edge	Kurrimine Beach, Wongaling Beach, Bingil Bay	30.7	10.83	81	0	No (NA)
	Total	89.01	35.82	483	0	

Table 1: Summary of edge surveillance conducted between April and June 2013

Detections

A total of 4 nests and 5 swarms were discovered. These detections included 2 nests and 2 swarms. The public reported 7 of these nests or swarms while 1 nest was beelined from foraging AHB beyond the previous KIA at Mutchilba and 1 swarm was detected by DAFF staff in the Redden St car park (see table 2 below for details of all detections for the period).

IP Number Address	Location	Swarm/Nest	Detection Date	Detection method	Found by	Date destroyed
IP825 433 Russell Road, Gordonvale	Inside Meter box	Nest	03/04/2013	Public report Client to call Ergon to destroy	Bell, Corey; Docherty, Glen	Not destroyed
IP826 Cnr Tingira and Aumuller, Portsmith	Around Beech Almond tree	Swarm	23/04/2013	Public report 5 bees given to Aqis - Looked for swarm around the almond beech tree but swarm had moved on	Docherty, Glen; Hancox, T	Not destroyed
IP827 21-23 Redden Street, Portsmith	On a melaluca tree trunk	Swarm	24/04/2013	Former AHB staff member noticed swarm in car park	Ghafari, Shirin	24/04/2013
IP828 41 Tingira Street, Portsmith	Inside door of old shipping container	Nest	09/05/2013	Public report Less than 800m of port so given to AQIS. Nest was not in container 1 week ago	Docherty, Glen	09/05/2013
IP829 Smithfield Shopping Cnt Smithfield	Swarm on pole of Trolley bay outside Woolworths	Swarm	3/06/2013	Public report. Killed because it was a public nuisance.	Docherty, Glen	3/06/2013
IP830 52 Comport Road Portsmith	4m high in roof of a carport	Swarm	14/06/2013	Public report. Killed because it was within 800m of Cairns sea port.	Bell, Corey	14/06/2013
IP831 4 Comport St Portsmith	On fence at ground level	Swarm	18/06/2013	Public report. Killed because it was within 800m of Cairns sea port	Bell, Corey	18/06/2013
IP832 Leadwood's Farm Demis Rd, Mutchilba	0.5m high in hollow of a fallen tree	Nest	19/06/2013	Beelined from foragers detected outside of the previous KIA.	Bell, Corey; Leeon, Lisa; Giblin, Arthur	19/06/2013
IP833 7 Wakeford Rd, Malanda	0.3m high in the wall of an old dairy	Nest	20/06/2013	Public report by a local beekeeper	Leeon, Lisa; Giblin, Arthur	20/06/2013

Table 2: List of AHB detections for the period

Detection at Mutchilba

Summary

- IP832 was detected by beelining on 19 June 2013
- It is the first detection beyond the western edge of the Restricted Area (RA) although only by 500m.
- Extension of the Known Infested Area (KIA) by 2 2612ha up to 513 298ha.
- Distance from the previously KIA is 7.6km.
- Distance from nearest IP is 13.4km (IP681 a nest detected and destroyed in July 2012).
- This detection is 8.7 km east of the town of Mutchilba where floral surveillance conducted in April 2013 did not detect AHB.

Public report of foragers

On 5 June a local beekeeper noticed unusual bees foraging on the ground in front of his EHB hives in use for pollinating Avocados at Demis Road, Mutchilba. The suspect bees were foraging on sugar syrup that had been spilt on the ground in front of the hives whilst preparing it to be fed to the EHB. The beekeeper estimated there were 50 of these suspect bees along with EHB feeding on the spilt syrup and he collected 7 samples and supplied them to the President of the Cairns Beekeepers Association.

The samples were then brought to the DAFF office for identification by the President of the Cairns Beekeepers Association who believed they were AHB and that they were robbing commercial EHB hives. They were confirmed by the entomologist to be AHB.

A Biosecurity Officer inspected the area where the AHB were collected with the beekeeper but the sugar syrup was empty and there was no foraging activity immediately around the hives. 3 of 15 hives were opened and no AHB were observed in them. The owner of the hives did not see the AHB robbing or entering the EHB hives and that all the AHB seen were foraging on the spilt syrup on the ground in front of the hives.

Surveillance was also conducted nearby on flowering Avocados and 2 AHB were observed and confidently identified in the field by the Biosecurity Officer. A sample could not be collected but GPS location and other details were recorded.

Detection of nest (IP832)

On 19 June at 10.15am an officer visited the property reported above and bee lining of AHB that were foraging at the base of commercial EHB hives commenced. A sugar station with a steady flow of AHB foragers was moved 5-20m at a time in the direction of the bees flight. At 1:00pm the nest of AHB (IP 832) was detected and then destroyed in a hollow of a fallen log about 0.5m above the ground and 270m away from where the bee lining commenced.

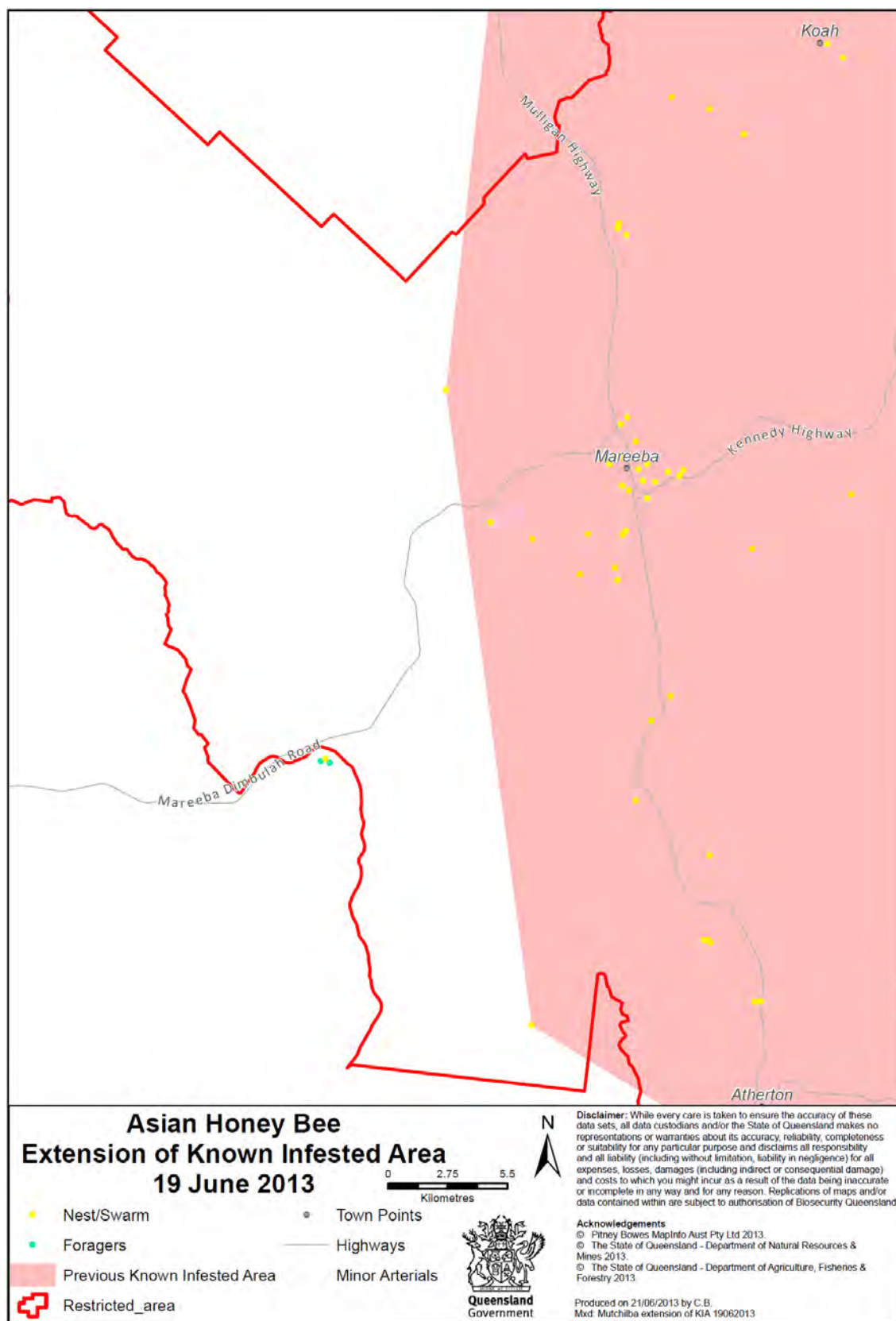


Figure 1: Mutchilba AHB in relation to the RA, previous KIA and other AHB detections.



Detection at Malanda

- IP833 was detected and destroyed in the wall of an old dairy in Malanda on 20 June following a public report by a local beekeeper.
- Outside the previous KIA by 2.25km and the first nest of AHB detected in Malanda. It is not, however, a big increase in the KIA because the previous KIA intersected Malanda as it runs between Arriga and South Johnstone.
- Extension of KIA by 8 824ha bringing the total KIA to 522 122ha.
- The detection is within the RA.
- Nearest previous detection, 8km away, was a nest (IP577) detected and destroyed in March 2012.

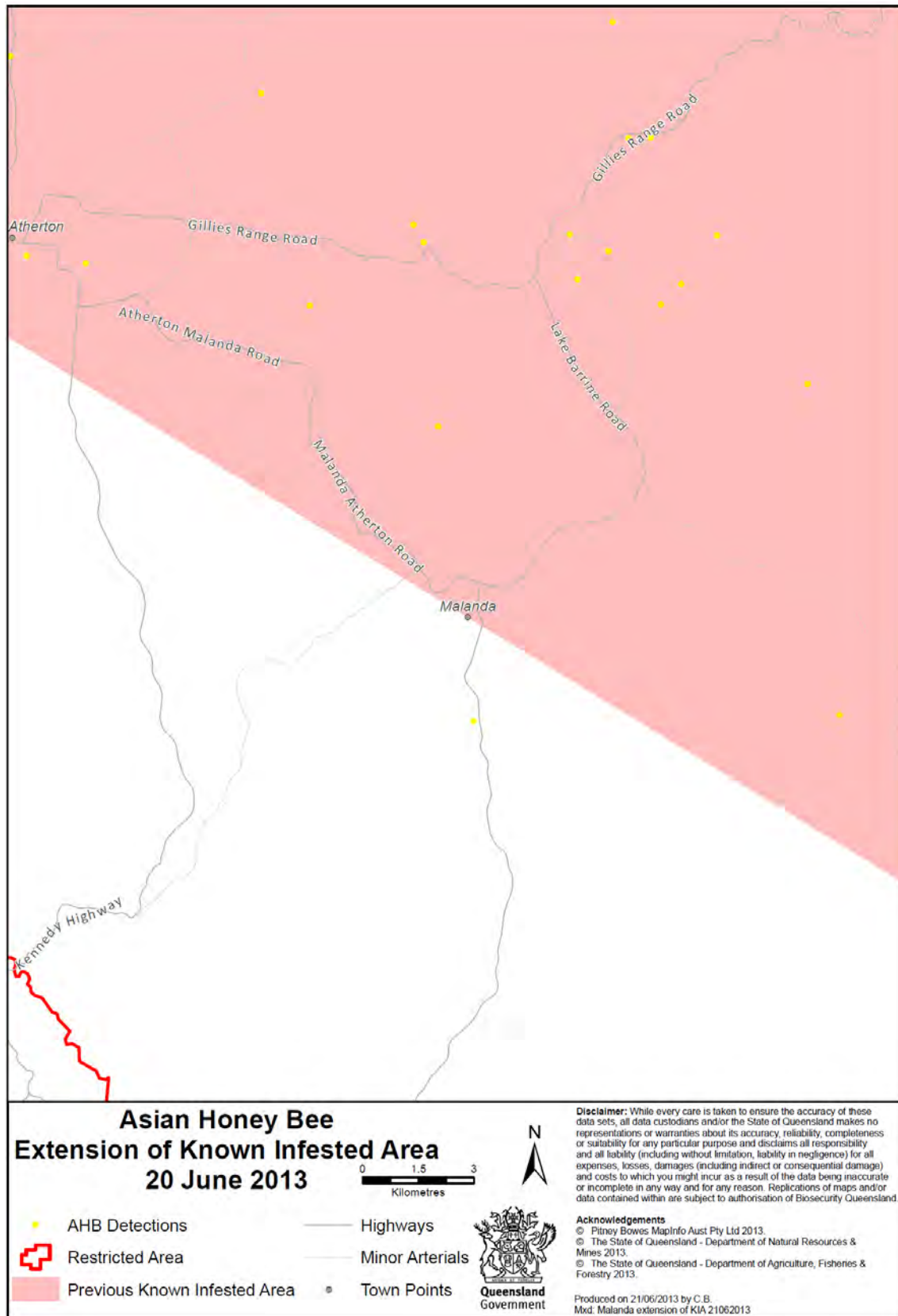
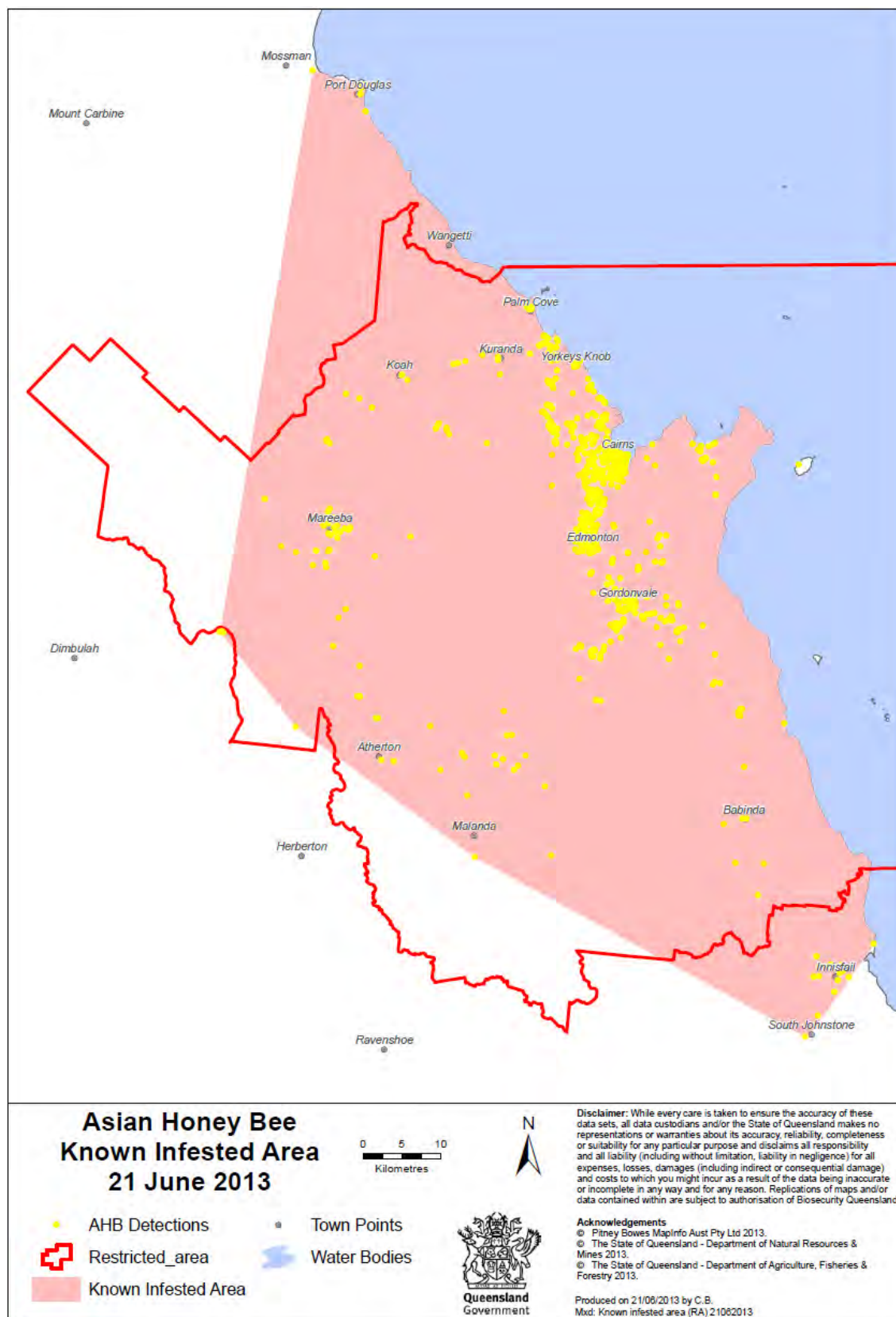


Figure 2: Malanda AHB detection in relation to previous KIA and other detections.

Appendix 1- Map of KIA (and all detections)



Appendix 2 - Edge surveillance summary table

Suburb	Date	time	hours	distance (km)	Weather	staff	no. of EHB	observed on	no. of AHB	flowering species observed	bee eater pellets	result
Bingil Bay	3/04/2013	0900-1100	2	4.17	windy, overcast, surveillance stopped due to rain	Glen and Corey	22	Singapore daisy, Tridax, Calliandra	0	Singapore daisy, Mimosa, Acacia, bottle brush, Ixora, Duranta, foxtail palm, Lantana Snakeweed, Tridax, Morning star, Calliandra	No	N/A
Kurrimine Beach	3/04/2013	1215-1315	1	5.23		Glen and Corey	0		0	Duranta, bottlebrush, cuphea, ixora, marigolds, snakeweed, blue top, pink coral vine	No	N/A
Kurrimine Beach	15/05/2013	0825-1000	1.58	3.73	partly cloudy windy, overcast, surveillance stopped due to rain	Glen and Corey	0		0	Tridax, mimosa, Singapore daisy, Callistemon, Duranta, Ixora, morning star, bottlebrush, blue top, flannel weed	No	N/A
Kurrimine Beach	5/04/2013	0900-0930	0.5	0.96		Glen and Corey	0		0	tridax, mimosa, morning star, duranta, callistemon, purple top, flannel weed, Singapore daisy, ixora	No	N/A
Tully	17/06/2013	0800-1230	4	9.07	partly cloudy	Corey	59	Marigolds, Sensitive weed, Basil, Dahlia, Calliandra, Cuphea, Morning star	0	Coral vine, Purple top, Praxelis, Ixora, Singapore daisy, Cobblers peg, Tridax, Bottle brush, Melastoma, Snakeweed, Navua sedge	No	N/A
Wongaling Beach	15/05/2013	1030-1215	1.75	7.54	Sunny	Glen and Corey	27	Coral vine, Singapore Daisy, Cuphea, Morning star,	0	Cuphea, morning star, tridax, Singapore daisy, khaki weed, ixora, Duranta, snakeweed, calliandra, praxelis, palm flower, golden penda,	No	N/A
Mutchilba	9/04/2013		0.5	1.4	partly cloudy	Glen and Corey	11	Coral vine	0	Tridax, duranta, ixora, purple top, coral vine, bottle brush	No	N/A
Dimbulah	9/04/2013	0900-1145	2.75	6.97	overcast	Glen and Corey	25	Calliandra, Duranta, Purple top, tridax, Morning star, palm, Callistemon, Singapore Daisy, Purple top, Cuphea, Calliandra, Banksia, Paper daisy, Cobblers peg, roses, Khaki weed, grevillia, Duranta, easter cassia, Tuckeroo, coral vine, lantana,	0	tridax, calliandra, duranta, lily pily, bottle brush, morning star, coral vine, foxtail palm, ixora, purple top, acacia, Singapore daisy, Callistemon, Singapore Daisy, Purple top, Cuphea, Calliandra, Banksia, Paper daisy, Cobblers peg, roses, Khaki weed, grevillia, Duranta, easter cassia, Tuckeroo, coral vine, lantana,	No	N/A
Ravenshoe	17/05/2013	0900-1250	3.83	10.51	partly cloudy	Glen and Corey	127	Cobblers peg,	0	Calliandra, Tridax, Mimosa, Duranta, Cuphea, Palm Flower, Purple top, black eyed susan, Banksia, Acacia, Frangipani, Gravillia, Bougainvillia, Praxellis, Callistemon	No	N/A
Herberton	4/06/2013	0855-1240	3.75	5.41	overcast	Glen and Loreley	38	Cuphea, palm flower, tridax	0	Mimosa, Singapore daisy, Tridax, purple top, clitoris weed, palm flower, coral berry, gloriosa superba, callistemon, Ixora, morning star, navua sedge, khaki weed, cordylines, purple top	No	N/A
Mossman	7/05/2013	1130-1330	2	3.99	overcast	Corey and Glen	4	Duranta	0		No	N/A



Mossman	14/05/2013	0750-1030	2.67	9.49	sunny	Corey and Glen	70	mimosa, foxtail palm, morning star,	0	mimosa, foxtail palm, morning star, Ixora, Duranta, Callistemon, Tridax, Black eyed susan, Singapore Daisy, Clitoris weed, Cuphea, navua sedge, praxelis, purple top, Tacoma stans, khaki weed, Centro pubescens, roses	No	N/A
Cooya Beach	15/04/2013	0825-1130	3.08	6.14	fine and sunny	Corey and Tara	91	Navua sedge, flannel weed, Mimosa, Ixora, Tacoma stans, Tridax, Duranta	0	Foxtail palm, Tridax, Duranta, Mimosa, Ixora, Tacoma stans, Singapore daisy, Snakeweed, Callistemon	No	N/A
Wonga	23/04/2013	1010-1145 & 1308-1450	3.08	8.04	fine and sunny	Corey and Tara	33	Khaki weed, Tridax, Yellow bells	0	ixora, mock orange, tridax, mimosa, foxtail palm, morning star, duranta, Singapore daisy, Navua sedge, praxelis, Cuphea, yellow bells, khaki weed, acacia, melaleuca, snake weed, clistemon, tecoma stans, calliandra	Yes	Negative
Wonga	7/05/2013	N/A			N/A	Glen and Corey	N/A	N/A	N/A	N/A	Yes	Negative
Daintree Village	15/04/2013	1430-1515	0.75	1.59	overcast	Corey and Tara	0	N/A	0	Callistemon, Calliandra, Ixora, Cocos palm, Cuphea, Duranta, Tridax, Singapore daisy, Tacoma stans.	No	N/A
Daintree Village	7/05/2013	0830-0920	0.83	1.28	partly cloudy	Corey and Glen	0	N/A	0	Caliandra, Ixora, Palm flower, Callistemon, Tridax, Mimosa, Duranta, Cuphea, Singapore Daisy, Clitoris weed, Cordyline, Navua sedge, purple top, morning star, Tacoma stans		
Newell	23/04/2013	0800-0945	1.75	3.49	fine and sunny	Corey and Tara	3	Tacoma stans	0	Duranta, tridax, pubescens, Ixora, Mock orange, cuphea, morning star, Singapore daisy, mimosa, navua sedge, snakeweed, Tacoma stans, callistemon, foxtail palm		
TOTALS			35.82	89.01			510		0			

