

Asian honey bee Transition to Management Program

Progress Summary Report, April 2013

This publication has been compiled by Russell Gilmour of Biosecurity Queensland, Department of Agriculture Fisheries and Forestry.

© State of Queensland, 2013.

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 3.0 Australia (CC BY) licence.



Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.

You must keep intact the copyright notice and attribute the State of Queensland as the source of the publication.

For more information on this licence, visit <http://creativecommons.org/licenses/by/3.0/au/deed.en>

The information contained herein is subject to change without notice. The Queensland Government shall not be liable for technical or other errors or omissions contained herein. The reader/user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using this information.



Contents

This document is prepared for the Transition to Management Group meeting on 16 April 2012.

| | |
|---------------------------------------------------------------------------------------------------------------------------------------|----|
| Program Highlights | 1 |
| Detections | 1 |
| Public reports | 1 |
| Industry engagement | 1 |
| Community engagement | 1 |
| Science | 2 |
| ADAFF | 2 |
| Current and future program activities | 2 |
| Community engagement | 2 |
| Operations | 3 |
| Science | 3 |
| Appendix 1 Cessation Strategy progress | 4 |
| The general community has an awareness of AHB and their role and responsibilities in its management | 4 |
| Transport companies are alert to actions that will limit the spread of AHB | 5 |
| Pest control operators know how to identify and safely respond to reports of AHB | 6 |
| Indigenous rangers and government officers have knowledge, tools and training in AHB identification and management | 7 |
| Scientific and environmental community increase their research interest in AHB and increase collaboration with Biosecurity Queensland | 8 |
| Beekeepers understand and actively manage the risks and impacts of AHB | 9 |
| Appendix 2 Current Known Infested Area | 11 |

Other relevant documents provided separately include:

- Asian honey bee Surveillance Report, January – March 2013

Program Highlights

Detections

There have been 824 detections of Asian honey bee (AHB) nests and swarms since May 2007.

Note: The known infested area of Asian honey bee is restricted to an area around Cairns; north to Bonnie Doon (near Mossman), west of Atherton and Mareeba and south to South Johnstone. The program has ceased surveillance and responding to public reports in the Known Infested Area (KIA), unless the report is considered a new incursion, or where there is a risk of aided spread, or 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. These detections are referred to as Detections of Interest and since the last TMG meeting they are:

Outside the KIA

Nil.

On the edge of the KIA

Nil.

Public reports

91 public reports of AHB have been received since 11 December 2012 bringing the total number of reports since 1 July 2012 to 449.

Industry engagement

- Continued to meet with industry at a local and state level.
- The Cairns Bee Keeping Club has approached the AHBT2M Program to fund a general bee pest and disease workshop in Cairns. As the program is specific to transitioning the management of AHB to industry and the community, it would be inappropriate to use program resources to deliver a workshop on broader bee pest and disease issues. Program resources are also fully committed to completing the schedule of work detailed in the agreed Cessation Strategy between now and the end of the program on 30 June 2013. The Program would however be in a position to participate and provide input on AHB and its management to any bee pest and disease workshop for industry.

Community engagement

- Filming commenced and completed for the Asian honey bee nest and swarm destruction techniques video.
- Procedures for the detection and destruction of AHB are being incorporated into a manual for use by relevant stakeholders following cessation of the AHBT2M Program. A group consisting of ADAFF, industry and apiary officer representatives has been formed to review and provide comment and input to the manual so that a comprehensive tool is developed that meets the needs of key stakeholder groups.

- Transport posters have been distributed in a staged approach around the Cairns region working out from the high risk port area to high risk transport hubs towards the edge of the known infested area. Apiary officer in Townsville assisting in delivery of transport posters in that region.
 - Cairns region 290 posters to 240 transport businesses.
 - Townsville region 30 posters to 26 transport businesses.
- Draft 'Apiarist Survey Report' regarding the impact of AHB on apiarists in the Cairns area. Currently out for internal review.
- AHB website identification page has been updated with new and improved pictures of AHB and other relevant bee species.

Science

- Efficacy trials have been completed.
- Continued report writing & editing
 - Efficacy Report
 - Behaviour and ecology Report
 - Bait station/attractant improvement Report
 - Apiarist survey Report
 - Spatial modelling Report.
- Collaborated with Dr. David Guez re using orchid as an AHB attractant.
- Collaborated with NAQS re data analysis of efficacy trials in high risk port areas.
- Three casual science staff employed to assist with remaining data entry, data analysis and report writing.
- All results received for samples sent away for parasitological tests were negative for *Varroa*, tracheal and *Tropilaelaps*. Some results received for *Nosema* disease testing were positive.


ADAFF

- Continued collaboration with NAQS science staff for the AG5 project goals, especially the High Risk Area around the Cairns seaport. The surveillance trial in the High Risk Area was altered and ADAFF commenced distributing 'bee on the lookout' public awareness flyers to businesses within the 800m AHB surveillance zone.

Current and future program activities

Community engagement

- Production of detection and destruction video to commence with scripting, cutting and editing, and audio recording being worked on. The video is scheduled to be published on the website late May - early June.

- 
- Final draft of new website content developed and in review process in preparation of handover and maintenance by QDAFF Apiary officers post 30 June 2013.
 - Completion of Apiarist survey report.
 - Final draft of Asian honey bee manual content that incorporates detection and destruction procedures completed and sent for review by next meeting.

Operations

- Engaging with transport companies while delivering AHB poster.
- Surveillance for AHB around the edge of the KIA.

Science

- Analysis of data from various trials.
- Report writing is on track.
- Continue collaboration with external researchers.

Appendix 1 Cessation Strategy progress

The general community has an awareness of AHB and their role and responsibilities in its management

Stage 1

| Key Performance Indicator | AHB T2M Project No. | Due Date | Status | Comments and activities since last report |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Produce and distribute a 'Fact Sheet' about AHB and how the public should respond to AHB nests and swarms. | AG1 D. (i) | 31.12.11 | COMPLETED | <ul style="list-style-type: none"> New AHB T2M brochure printed and in use. Brochure is available on the internet, used at community engagement and industry events and delivered as a letterbox drop to premises in high risk areas and on the edge of the KIA. It is also provided to people throughout Queensland. |
| Update the Biosecurity Queensland website with comprehensive details on Asian honey bees, including identification, how to manage them, produced and available. | AG1 A. (i), B. (i) | Ongoing to 30.06.13 | ON TRACK | <ul style="list-style-type: none"> Website has been routinely evaluated and updated <ul style="list-style-type: none"> ~ October 2011 ~ December 2012 (online reporting tool added to website) ~ April 2012 ~ June 2012 Updates include embedding links to the Remote Nest Treatment video on YouTube, adding completed reports, updating the Known Infested Area (KIA) map and adding a new image gallery. The website continues to be maintained and updated. Discussions held with BQ Apiary Officers on transfer of responsibility for maintenance of the AHB website following cessation of the AHB T2M Program. |
| Community engaged through a variety of methods e.g. media releases, TV and radio interviews, attending community festivals and regional shows. | AG1 D. (i) – (vii) | Ongoing to 30.06.13 | ON TRACK | <ul style="list-style-type: none"> Awareness material developed and in use includes brochures, identification cards, variable message signs on roadsides and a poster for display at transport companies. |

Stage 2

| | | | | |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ensure the community and industry are informed and up-to-date regarding the status of the transition to management program and | AG1 D. (i) – (vii) | 31.12.11 – 30.6.13 | ON TRACK | <ul style="list-style-type: none"> Cessation Strategy developed and approved by T2M Management Committee December 2012. Implementation of Cessation Strategy commenced. |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



| | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| where they can access assistance. | | | | |
| The Customer Service Centre processes are updated to provide a clear decision tree regarding AHB, new incursions, those inside and outside the KIA and reflect the current status of government intervention. | AG1 D. (i) – (vii) | 31.12.11 – 30.6.13 | COMPLETED | <ul style="list-style-type: none"> Customer Service Centre procedures developed approved and implemented. Apiary and Animal Biosecurity & Welfare staff informed and participating in reporting process including response to reports in preparation for cessation of AHB T2M Program. |

Transport companies are alert to actions that will limit the spread of AHB

Stage 1

| Key Performance Indicator | AHB T2M Project No. | Due Date | Status | Comments and activities since last report |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intensively engage with transport industries inside the KIA and surrounding edge. Consult and develop a method to incorporate the awareness of AHB into the transport industries to reduce the risk of aided spread of AHB through commercial transport pathways. | AG 6 D | 30.06.12 | ON TRACK | <ul style="list-style-type: none"> Extension materials such as ID cards, brochures and posters supplied to transport companies. Contact ongoing with the main shipping, rail and freight transport companies in Cairns. |

Stage 2

| | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Produce and develop a poster with targeted messages for transport industries. | AG 6 D AG1 D. (v) | 31.12.12 | COMPLETED | <ul style="list-style-type: none"> Transport poster printed and currently being distributed inside the KIA with plans for wider distribution. |
| Develop and deliver awareness campaigns for transport industries within a 200km radius from the edge of the KIA. | AG 6 D | 31.3.12 | COMPLETED | <ul style="list-style-type: none"> Information and training package developed and provided to transport businesses throughout the KIA and beyond to Townsville. |
| Engage and increase awareness with transport companies and their industry groups Queensland wide. | AG 6 D | 30.6.12 | ON TRACK | <ul style="list-style-type: none"> Transport poster printed, distribute inside the KIA completed and commenced for the edge of the KIA. Planning is underway for state-wide distribution. |
| Engage and increase awareness broadly within the Australian transport industry through the peak industry body and national publications. | AG 6 D | 30.6.12 | ON TRACK | <ul style="list-style-type: none"> Collaboration and input into numerous external articles for national and international magazines regarding Asian honey bees. |



Pest control operators know how to identify and safely respond to reports of AHB

Stage 1

| Key Performance Indicator | AHB T2M Project No. | Due Date | Status | Comments and activities since last report |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consult, develop and make available a guideline for pest controllers on what tools are available and how to use them when responding to an AHB call for help. | AG 1 D (v) | 31.12.12 | COMPLETED | <ul style="list-style-type: none"> Guideline for destruction of AHB nests and swarms published, provided to industry and available on internet. Published on Biosecurity QLD website. |
| Build awareness of available identification tools on the Biosecurity Queensland website with comprehensive details on Asian honey bees, including identification and how to manage them. | AG1 B. (i) D. (vi) | Ongoing to 30..6.12 | COMPLETED | <ul style="list-style-type: none"> Biosecurity website has been promoted at over 30 community and industry events, social media and media interviews. The website continues to be updated and promoted and will be available post 30 June 2013. |
| Provide hands-on training workshops to pest control operators that are within and on the edge of the KIA. | AG1 AG3 AG6 | 30.6.12 | COMPLETED | <ul style="list-style-type: none"> Hands on training has been provided to pest controllers in the KIA and as far south as Townsville. |
| Engage and increase awareness with pest management industry in north Queensland, including hands on training | AG3 AG6 | 30.6.12 | ON TRACK | <ul style="list-style-type: none"> Pest control industry representatives have been engaged. Pest controllers are destroying AHB nests and swarms where requested. |

Stage 2

| | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Develop training videos showing methods of swarm and nest destruction that the industry can use to help train other members in their business. | AG2 B. (i) | 31.12.12 | ON TRACK | <ul style="list-style-type: none"> Filming commenced in February and has been completed. Editing, narration etc to commence. The video is scheduled to be published on the website late May - early June. |
| Engage and increase awareness with the pest controller industry Queensland wide. | AG6 D, | 30.06.13 | ON TRACK | <ul style="list-style-type: none"> Pest control industry representatives have been engaged. Pest controllers are destroying AHB nests and swarms where requested |
| Engage and increase awareness broadly with the Australian transport industry through peak industry body and national publications. | AG6 D, | 30.06.13 | ON TRACK | <ul style="list-style-type: none"> Collaboration and input into numerous external articles for national and international journals regarding Asian honey bees. |



Indigenous rangers and government officers have knowledge, tools and training in AHB identification and management

Stage 1

| Key Performance Indicator | AHB T2M Project No. | Due Date | Status | Comments and activities since last report |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Provide hands on workshop training sessions to indigenous rangers, local government officers, other government agencies and Biosecurity Queensland staff in the management of AHB. | AG4 A. AG2 | 31.03.12 | COMPLETED | <ul style="list-style-type: none"> Hands on training has been provided to indigenous rangers, local government officers, other government agencies and biosecurity Queensland. 'An evaluation of Asian honey bee workshops conducted in the Known Infested Area for Critical Stakeholders' report has been published. |
| Increase awareness and availability of produced materials that they can use to deal with AHB situations. | AG 4 B. | Ongoing | ON TRACK | <ul style="list-style-type: none"> Awareness campaigns were conducted through workshops held with indigenous rangers and government officers. AHB knowledge, tools and training were delivered to these target audiences at workshops and are being used where necessary and appropriate. AHB manual in development covering detection and destruction techniques. The manual will provide affected stakeholders with tools they can use to manage AHB following cessation of the T2M Program |
| Conduct presentations at local and regional pest management forums to engage with large numbers of local government and state government staff to increase awareness. | AG4 | Ongoing | ON TRACK | <ul style="list-style-type: none"> Awareness has been generated at quarterly FNQ Pest forums throughout Nth Queensland regions. A presentation and nest and swarm removal demonstration was held as part of the Northern Exposure Pest Conference (Townsville). |
| Provide hands on AHB training to the north Queensland Apiary Officer in AHB surveillance and destruction. | AG1 AG2 | 31.12.12 | COMPLETED | <ul style="list-style-type: none"> Apiary Officer has visited Cairns and worked with program staff on 2 occasions. Nth Queensland Apiary Officer has conducted intensive engagement 3klms around the Port of Townsville after the detection of AHB at the port in January 2013. |
| Involve and consult all Queensland apiary officers and provide them with the tools to | AG1 AG2 | 30.06.13 | ON TRACK | <ul style="list-style-type: none"> Monthly meetings are held with Apiary Officers. Consultation and joint developments of processes to |



| | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| implement their responsibilities under the Responding to public notifications of Asian honey bee policy. | | | | ensure smooth handover of Web, CSC, AHB materials and knowledge is occurring. |
| Stage 2 | | | | |
| Information is made available to environmental and agricultural departments in other states and territories and the federal government regarding how to manage and control Asian honey bees. | AG5 B. (i) | 31.03.12 | ON TRACK | <ul style="list-style-type: none"> AHB information generated to date has been provided to a range of environmental and government stakeholders via the internet and meetings. The AHB response manual is being drafted and will be completed when research trials have been completed. |
| Integrate and document methods of validated detection and destruction techniques into an AHB manual to assist Biosecurity agencies with a toolkit to respond to and manage AHB incursions. | AG5 B. (i) | 31.03.12 | ON TRACK | <ul style="list-style-type: none"> AHB manual in development covering detection and destruction techniques. The manual will provide affected stakeholders with tools they can use to manage AHB following cessation of the T2M Program. Some training provided to ADAFF and Biosecurity QLD officers in North Queensland. |

Scientific and environmental community increase their research interest in AHB and increase collaboration with Biosecurity Queensland

Stage 1

| Key Performance Indicator | AHB T2M Project No. | Due Date | Status | Comments and activities since last report |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Literature review finalised and published. | AG2A | 31.7.12 | COMPLETED | <ul style="list-style-type: none"> TMG group signed off on 19 February 2013. |
| Undertake research as outlined in the AHB T2M Operations Plan. <ul style="list-style-type: none"> Efficacy of detection and destruction methods, including edge and port surveillance Effectiveness of bait stations Analysis of all nest and honeycomb | AG2Bi-iii AG2C(v) AG5A AG5B(i-iii) QG2B QG2C QG2D QG2E | 30.6.13 | ON TRACK | <ul style="list-style-type: none"> New target dates agreed to by SAG and TMG. Efficacy trials completed & data analysis on track. Bait station trials completed & data analysis on track Nest and comb data collection completed, data analysis on track. Other behavioural and ecological data analysis on track (incl. nest and swarm attributes, drone flight times, nest observations, floral preferences) |
| Collaborate with external research scientists on AHB research. | AG2 | 30.6.13 | ON TRACK | <ul style="list-style-type: none"> Regular collaboration with external researchers including Prof Ben Oldroyd, Dr. David Guez and Prof Caroline Gross. |



| Stage 2 | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outcomes of the research are released. | AG2(i,iii) | | ON TRACK | <ul style="list-style-type: none"> Literature review released on PHA & BQ website Research updates presented to NAQS & AQIS |
| Validate the most effective methods of detection and destruction techniques. | AG2Bi-iii AG5A AG5B(i) QG2B | 30.6.13 | ON TRACK | <ul style="list-style-type: none"> Efficacy trials completed, data analysis and interpretation on track |
| Integrate and document methods of validated detection and destruction techniques into an AHB manual to assist Biosecurity agencies with a toolkit to respond to and manage AHB incursions. | AG2(i) AG5B(i) | 31.03.13 31.3.12 | ON TRACK | <ul style="list-style-type: none"> Awaiting finalisation of some of the above research. |
| Guidelines and toolkit are made available for stakeholders. | AG4A. | 31.03.12 Ongoing | ON TRACK | <ul style="list-style-type: none"> Awaiting finalisation of some of the above research. |
| Research findings are presented at scientific conferences and other suitable forums, e.g. Apiary industry meetings. | | | ON TRACK | <ul style="list-style-type: none"> Contact with industry occurs regularly. Contact with stakeholders occurs regularly e.g. Cape York Pest Management Advisory Group. |

Beekeepers understand and actively manage the risks and impacts of AHB

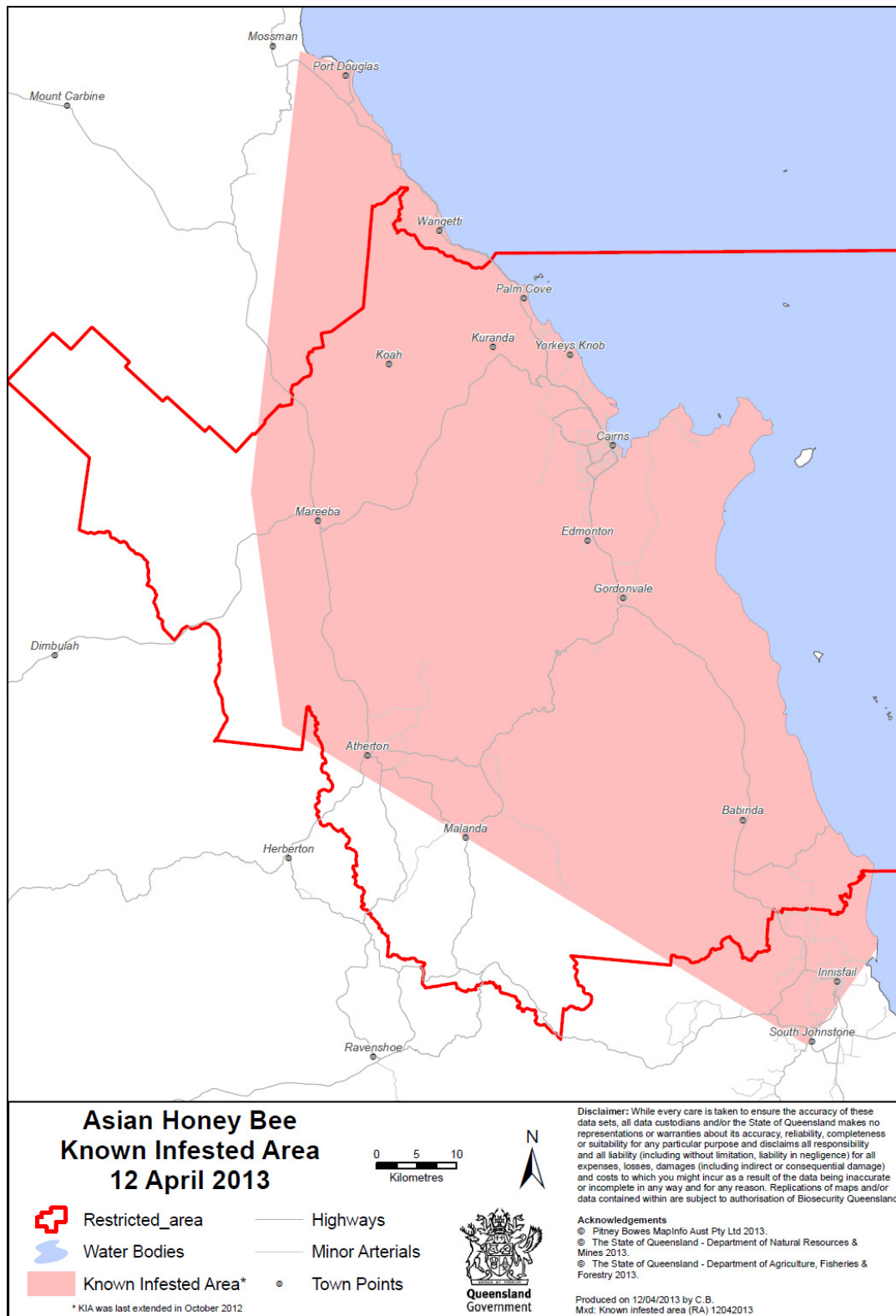
Stage 1

| Key Performance Indicator | AHB T2M Project No. | Due Date | Status | Comments and activities since last report |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consult with the beekeeping industry group and address issues that affect them and what tools they need to manage AHB. | AG3 A. (iii) | 31.12.11 | ON TRACK | <ul style="list-style-type: none"> Local and state liaison committees established. |
| Provide hands-on training workshops to beekeepers that are within and on the edge of the KIA as well as to beekeepers that may be called to assist in the identification and sampling of AHB in other areas of Queensland. | AG3 D. | 31.03.12 | COMPLETED | <ul style="list-style-type: none"> Training provided to members of the Cairns and Tableland Beekeepers Association and Townsville Beekeepers Association. |
| Provide beekeepers in north Queensland with information and tools needed to identify and | AG3 D. | 31.03.12 | COMPLETED | <ul style="list-style-type: none"> Attend Tableland beekeepers association meeting monthly. |



| | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| manage AHB. | | | | <ul style="list-style-type: none"> Information provided to Townsville beekeepers Association meeting. Science update given to local beekeepers (Townsville & Cairns). |
| Stage 2 | | | | |
| Beekeepers from around Australia are advised and information is provided in how to undertake AHB surveillance through the beekeeper volunteer program. | | 30.6.13 | ON TRACK | <ul style="list-style-type: none"> Volunteer program is assisting in this. PHA and QDAFF websites contributing to this. Collaboration and input into numerous external articles for national and international magazines regarding Asian honey bees. |
| Compliance with movements controls required under legislation is achieved by issuing longer term movement licences. | AG6 A. | 31.12.12 | COMPLETED | <ul style="list-style-type: none"> The process of applying for movement licenses has been enhanced to reduce the regularity of applying for a license. |
| In consultation with the honey bee industry, develop and coordinate an industry response list that Biosecurity Queensland staff can utilise for assistance with suspect AHB detections. | AG6 D. | 30.06.13 | ON TRACK | <ul style="list-style-type: none"> An industry group exists and their assistance is limited due to legal liability issues. Where necessary pest controllers will be used for destruction of suspect AHB. |

Appendix 2 Current Known Infested Area¹



¹ The last detection which increased the spread of AHB was 15 January 2013.

For further information contact:
Russell Gilmour
Manager, Asian honey bee Transition to Management Program
Biosecurity Queensland
Department of Agriculture, Fisheries and Forestry
Location: 21 - 23 Redden St, Portsmith, Cairns
Postal Address: PO Box 652, Cairns Qld 4870
Telephone: +61 7 4057 3650
Mobile: 0417 791 421
Facsimile: +61 7 4057 3690
E-mail: Russell.Gilmour@daff.qld.gov.au

Customer Service Centre 13 25 23
www.daff.qld.gov.au

Call: 13 25 23 or +61 7 3404 6999

Visit: www.daff.qld.gov.au

