



NATIONAL

Varroa Mite Management

PROGRAM



On Farm Reference Guide for Honeybee Management

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The aim of this guide is to aid in providing a safer environment for honeybees during pollination on farm. Year-round contributions are needed to provide a better environment for honeybees to complete your pollination needs.

This is a guide only and may be adapted as required to suit your crop time and pollination needs.

Harvest

- Begin conversations with beekeepers and/or bee brokers with next seasons proposed pollination requirements e.g. hive numbers. This will encourage the beekeepers to prepare their hives for the pollination season.
- Discuss any issues that arose from the previous pollination.
- Enact any improvements that need to be put in place.
- Maintain access to hive sites and the hives. This may include mowing, spraying and fixing potholes. Other operational considerations can include unimpeded turn around points and height clearance for hive loaders.
- Implementing pest management programs with the aim of reducing the use of pesticides once the hives arrive for pollination.
- Register your spray application with the BeeConnected app to ensure that your regime is not harmful to other local growers still using pollination services.
- Check with neighbouring properties whether pollination services are still present before spraying near boundaries.

Post Harvest

- Consider planting cover crops or allowing voluntary weeds, such as clovers, to grow. These will come into flower around the same time as your target crop to help provide extra floral food sources and maintain the health of the honeybees while the crop bloom commences and declines. It may also help encourage alternate pollinators.
- Contact your beekeeper/broker to confirm pollination agreements. These need to include the expectations from both parties such as hive strength and number, location and distribution of the hives, water sources, audit arrangements, timing of hive movement in and out, agreements around hive harm/loss, weather implications, notification of lead times, access to hives during the pollination period and agreements around short-notice pesticide applications.
- Finalise a price based on the agreement.
- Arrange for the third-party auditor/beekeeper to perform the hive health assessment.
- Create a pesticide plan in consultation with agronomists, beekeepers and other agricultural specialists. This plan should focus on pesticides that will not have detrimental health effects on honeybees. Have this plan ready for spray operators or any other staff involved in pest management.



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- Speak with neighbouring properties about their pesticide plans and consider implications for bee hives that will be placed on your property.
- Ensure access to the hive locations is suitable and maintained correctly and all improvements have been implemented.
- Ensure first aid practices and equipment is up to date. Speak to staff and ensure that all staff are aware of anaphylaxis and allergic reactions. Training should be provided for the use of EpiPens if needed. Consider positioning of hives to minimise interaction with farm staff.

Pre-Bloom

- Begin the execution of the pollination agreement.
- Obtain from your beekeeper a current copy of their certificate of compliance with the National Bee Biosecurity Code of Practice.
- Notify neighbours of the upcoming arrival of your hives and the pesticide plan while bees are on farm and contracted for pollination.
- Adhere to the pesticide plan ensuring that there have been no pesticides applied within the pollination area 10 days prior to the arrival of the hives.
- Monitor the pollination area for the presence of buds and the stage they are at.
- Arrange for hives to be delivered at the targeted percentage of flowers within the pollination area eg. 5-10%. The speed that this can happen will vary depending on the temperature.
- Arrange for an inspection of the hive sites with your beekeeper/broker to be completed prior to the hives arriving, during daylight hours, to ensure any hazards can be identified and marked.

Bloom

- Be prepared for the arrival and unloading of the hives during night hours. Ensuring after hours access arrangements are clear.
- Upon arrival of the hives inspect vehicles, machinery, equipment and hives for any sign of potential biosecurity hazards. Consider establishing a sanitisation point where pressure washers can be used to clean down and dispose of potential hazards as appropriate.
- Notify your third-party auditor of the hives arrival and confirm the hive health assessment has been completed within the first few days of arrival. Update the beekeeper with the timing of the audit so they can assist with assessing the hive to minimise disruption and death of bees.
- Maintain the water points ensuring there are landings or floats for the bees to utilise while resting and drinking. If water sources become contaminated or are potentially contaminated with pesticide replace immediately.
- Adhere to the pesticide plan and communicate regularly with the beekeeper/broker if pesticides must be used.
- If fungicide must be sprayed during pollination this must be done outside of daylight hours. Spraying must be completed well before sunrise to ensure that there is sufficient time for the spray to dry before the bees begin to forage.
- Notify your beekeeper/broker a minimum of 48hrs if there is to be any changes to the pesticide plan or if a “toxic or harmful to bees” insecticide or fungicide needs to be used on



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the pollination area for preservation or crop yield.

- Walk through your pollination area daily to observe honeybee activity taking note of bees having pollen on their legs as this is an indication of paid pollination taking place. Note: This is not always applicable i.e. avocados are pollinated by nectar foragers.
- Monitor the area around the hives and notify the beekeeper/broker of any signs of dead or dying adult bees around the hive sites or any noticeable damage to hive equipment.
- Monitor the flowering rate and regularly update the beekeeper/broker with the progress of flowering. Ensure the hives are removed once 90% of the latest flowering variety has passed its pollinating potential. If this cannot be achieved ensure that there are alternative floral sources available for the hives until they can be removed.
- Ensure hives are collected late in the afternoon once foraging activities have been completed and the bees have returned to the hives.
- Allow trucks/machinery/equipment to clean down before leaving the site to minimize the risk of spread of contaminants.

Post Bloom

- Review your pollination season, update pollination records, document any issues that need to be addressed and any improvements that need to be completed prior to next pollination season. Communicate these findings with your beekeeper/broker to ensure they are enacted early.
- Settle financial commitments in a timely manner so the beekeeper/broker is happy to return for the next pollination season.