



## Beekeeping tips for best pollination outcomes

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When working with your beekeeper or thinking about managed hives for the first time, here are some points to think about to make sure you achieve the best pollination outcomes.

### Hives in your crop

If you are in an area where Varroa is established or establishing, you may need to rethink how you use hives in your crops. You may need to secure more hives than existing industry information provides. This is because existing studies rely on the contribution of Wild European Honeybees, which will likely be decimated by Varroa. A discussion with your beekeeper about how many hives may be needed to replace the pollination done by the Wild European Honeybees may help prevent a poor or reduced pollination.

Changing how the hives are distributed throughout your crop may also help, traditionally hives have been placed in large numbers around the perimeter of the crop, alternate thoughts of smaller drops throughout the crop have shown to have better pollination potential. This will also help when weather is not ideal for bee activity and bees don't fly as far from their hives.

When your bees arrive is also critical to achieving great pollination, you don't want all your hives arriving at the same time, and at the other end of flowering you don't want all the hives to go at once either. On average, bees should start to arrive at 5% full flower across the crop, this will vary depending on the type of crop you are growing. If you can't avoid all your hives arriving at the same time then making sure you have something else for the bees to eat, not too nice though, as we want the bees to return to the target crop once enough flowers have come out.



Finally, when your bees arrive you need to make sure the hives are strong enough to do the job. Typically, you want either 8 frames of bees in a 10-frame hive as the minimum. You don't need to open the hive and check, but you do need to ask, it is your crop at risk.

Make sure the bees are safe while on your farm, good access to the drop of sites for the hives, don't use any chemicals during the pollination, talk to your beekeeper to make sure your spray regime fits with your pollination schedule.

Photo : Elizabeth Frost

*The top two hives would **not** be acceptable to complete pollination, not enough bees. The bottom two hives would be acceptable to complete pollination.*

### Bees in your crop



Once your bees arrive you need to make sure that they are doing their job. Take a stroll through your crop and look for the bees, you need to see them on your target flowers, and not just flying to one but flying to most of the flowers. Keep in mind that the bees won't be very active in the morning or if the temperature is below 15 degrees. So, you may need to do this check a couple of times across the day. An old beekeeper once said, "bees are a lot like people when the weather is nice, we are both active, when the weather is bad, we both prefer to stay indoors".

If you don't see your bees or see swarms, large numbers of bees grouping around a fence post branch of a tree or even on the ground, you need to contact your beekeeper as soon as possible.

Photo: Rebecca Sloan

*Swarm found on the ground.*



## **Beekeeper and records**

You are well within your right to check that your beekeeper has your business as their best interest. Ask if your beekeeper has a current certificate of compliance for the beekeeper code of practice, you can see the code here [The Code](#)

Also ask if they have completed the varroa training, have a sound pollination agreement in place, the below lists of apiary associations below will be able to help you navigate some of the ins and outs of doing this. Some things to think about when discussing agreements are biosecurity measures to help protect the beekeeper moving on and off your farm. If you are sourcing bees from different beekeepers, it might be worth asking each one about their infestation status and recent locations, also treatment intervals for varroa when this is to occur and how this will impact your pollination. The other beekeeper/s may ask you this to make sure their bees are not being put at risk.

For your own benefit it is time to start, if you haven't already, keeping track of how your pollinations are going, this won't help today, but it will help to develop a picture of how you may need to use hives on your crops. Types of things to record are:

- Crop Type/Variety
- Area/block/paddock
- Hives per hectare
- Hive condition
- Weather conditions during pollination
- Yield at harvest
- Bee activity during pollination
- Date flowering started
- % flowers when hives arrived
- Any chemical applications applied around pollination

This will be the perfect time to start creating your record keeping base line if you are in a region where there is yet to be an impact from varroa.

## **What's the alternative?**



For those of you who are looking for an alternative to the European Honeybee there are commercial pollination services using Australian stingless bees, which have been used previously for macadamia and watermelon crops.

Photo: Rebecca Sloan  
*An alternate to honeybees pollinating an onion flower.*

Below are some contacts for suppliers of stingless bees for pollination services.

**Australian Native Bee Crop Pollination, Maryvale, Qld**

Mark Grosskopf  
Ph: 0438 623 734

**Australian Native Bee Co, North Coast NSW**

Steve Maginnity  
Ph: 0404 831 659  
E: [steve@tanbc.com.au](mailto:steve@tanbc.com.au)

**Apiarists Associations Around Australia**

**NSW Apiarists' Association**

E: [info@nswaa.com.au](mailto:info@nswaa.com.au)

**Queensland Beekeepers' Association**

E: [statesecretary@qbabees.org.au](mailto:statesecretary@qbabees.org.au)

**Victorian Apiarists' Association**

E: [vaa@vicbeekeepers.com.au](mailto:vaa@vicbeekeepers.com.au)



NATIONAL

# Varroa Mite Management

PROGRAM



**South Australian Apiarists' Association**

E: [secretary@saaa.org.au](mailto:secretary@saaa.org.au)

**Bee Industry Council of Western Australia**

E: [info@bicwa.com.au](mailto:info@bicwa.com.au)

**Tasmanian Beekeepers' Association**

E: [secretary@tasmanianbeekeepers.org.au](mailto:secretary@tasmanianbeekeepers.org.au)

**Crop Pollination Association of Australia Inc**

E: [debbie.porter3@hotmail.com](mailto:debbie.porter3@hotmail.com)

Further detail on each of the above topics will be collated and provided over the course of the Program. If you need something more urgently, please reach out via [varroa.org.au/pollination](http://varroa.org.au/pollination)

The National Varroa mite Management Program is overseen by the Consultative Committee on Emergency Plant Pests (CCEPP) and the National Management Group (NMG). The NMG is made up of representatives from the Federal Government, every state and territory department and executives from relevant peak industry bodies and Plant Health Australia.