

Steps involved in getting ready for your native stingless bees in Sydney.

Step 1: Work out if you are in a suitable area in Sydney

Coastal, Eastern portion of The Sydney Basin, sheltered from winds, not too exposed. For more information https://elkeh.com.au/what-is-involved-in-keeping-native-stingless-bees/

Step 2: Work out and set up the exact location in your garden/outdoor space to install your hive. (this is SUPER IMPORTANT to get right)

https://elkeh.com.au/what-is-involved-in-keeping-native-stingless-bees/Summary:

- The hive can't move once installed (see link above for reasoning/details why).
- The hive needs to have a minimum of 4 hours of morning sun hitting the hive all year around (especially important in winter).
 The more sun the better in Sydney; but please site your hive to get afternoon shade in summer – so the hive, wax etc doesn't melt down.
 - <u>Hint</u>: it is easier to set up additional shade than to create more sun onto a hive.
- I have found that when there are problems with a hive, most people haven't put their hive in a sunny enough location. (winter sun/warmth from the first light of the morning is critical in Sydney).
 - Note: there is a bunch of contradictory information on the internet as well as different sun/shade requirements for hives located north in Qld.
- Make sure your hive is not exposed to prevailing winds. Note:

 exposed rooftops are usually not that great for this reason. If locating on a balcony, make sure it is no higher than 4 storeys, as more can be too far for the bees to fly down to get food (and bees can also easily fly off

course in a breeze as they only carry enough energy for a predetermined flight distance).

- The hive should be set up off the ground for good air flow, to reduce moisture. (waist or chest height is good height also for viewing).
- The hive should face east or north and get the first early morning sun

Step 3: Order your hive

If you would like to order your hive, email elke@elkeh.com.au or call Elke 0410 456 404.

Please let Elke know your:

- name,
- email,
- address /delivery address,
- phone number, and if you have any specific delivery instructions (as we use a 3rd party delivery contractor)

Elke will then email you a deposit invoice. The deposit payment will confirm your booking. The remainder will be invoiced and due just prior to Spring (September).



Step 4: Get ready and set up ready to install.

Install your bees according to the information sheet provided (tips and examples from page 3). You'll need to install your bees as soon as you can (within say 12 hours of receiving them), so it is best to be ready and set up for your bees well in advance such as:

- get your post in the ground, brackets drilled in, or the stand/platform for your hive set in place and ready to receive your hive.
- get your electric bug zapper (ready in case of summer bembix wasps or syrphid flies) (see info sheet for more info on the zapper and the wasps/flies).



Step 5: The Delivery

The delivery will be in spring time (October through to December) Note: the spring seasons/climate can vary which can impact breeding timing, but I will keep you up to date when we get closer to this coming spring. I will communicate (email/phone) to work out a suitable delivery date and time with you.

I can usually do that 1-4 weeks out from the delivery day.

The bees' entrance will be closed up with the bees all inside (we close them up either early that morning or the night before when the bees are all inside) and the bees and hive will be carefully packaged and ready to be delivered to you so there is minimal disturbance to the bees.

If you are not able to be there for the delivery, please provide any instructions for the delivery person about where your package of bees is to be left if no-one is at home (as packages can't be taken back once sent out). If the box needs to be left, then somewhere off the ground and in the shade is the best. e.g. delivery instructions 'leave on front verandah on chair'



Figure 1. The bee hive entrance with bees inside is closed up for transporting it to you. Only remove this entry 'plug' once the hive is installed in its final place. Leave the black strap on.

Step 6: Enjoying your bees and looking after them.

Read the information sheet provided for information about keeping your bees happy and healthy. Get the electric bug zapper tennis racket (ready to keep on top of the wasps/syrphid flies) and keep the hive dry and warm on extreme weather days with either an awning you create or some bubble wrap as a winter jumper/raincoat.

Figure 2. The electric fly swatter/tennis racket. I get mine from eBay. such as at this link (seller based in NSW): 2x Bug Zapper

Electric Tennis Racket Mosquito Fly Swatter Killer Insect



How should I install my hive?

On a stand? on brackets on a wall? Or on top of a post?

Tips, photos and details for mounting and installing your hive:



Step 1: Find the best place for your bees, then work out how you're are going to install/fix the hive.

A summary of the hive siting criteria is:

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- The hive needs to have a **minimum** of 4 hours of morning sun hitting the hive all year around (especially important in winter). The more sun the better in Sydney; but please site your hive to get afternoon shade in summer so the hive, wax etc. doesn't melt down.

 Hint: it is easier to set up additional shade than to create more sun onto a hive.
- I have found that when there are problems with a hive, most people haven't put their hive in a sunny enough location. (winter sun/warmth from the first light of the morning is critical in Sydney).

 Note: there is a bunch of contradictory information on the internet as well as different sun/shade requirements for hives located north in Qld.
- Make sure your hive is not exposed to prevailing winds. Note: exposed rooftops are usually not that great for this reason. If locating on a balcony, make sure it is no higher than 4 storeys, as more can be too far for the bees to fly down to get food (and bees can also easily fly off course in a breeze as they only carry enough energy for a predetermined flight distance).
- The hive should be set up off the ground for good air flow, to reduce moisture. (waist or chest height is good height also for viewing).
- The hive should face the hive east or north and get the first early morning sun
- Acknowledging that the hive can't move once installed (if needed: see link below or the 'information sheet' for reasoning/details why).

Native Stingless Bees Sydney Information Pack, FAQ's and How to Install tips. - Elke Haege Landscape Architecture

Step 2: Work out and prepare the installation of your hive. The options are:

- a) Place on a stand/table/plinth
- b) Mount it on brackets on a wall/fence/column
- c) Install a post in the ground and securely mount it on top of the post.
- a) Easiest method: Place your hive (permanently) on an outdoor table, stool, plinth, stand upside down pot (as photo below). (if you can fix the hive to the stand, (to stop cats/possums/people from moving or knocking it over), that is better.

if you think the hive might get knocked/tipped over (such as by a possum or cat) - Ideas to fix a hive down to its stand are: liquid nails/glue onto the stand, screw from below, screw or glue brackets onto either the base or back of the hive, strap it down with rope/strapping.

Note: This is the easiest option if you are intending to very incrementally (<15cm/day) move the hive short distances to gather the sun or shade between winter and summer. See information sheet on how to do that.



Example: simply place the hive (permanently) on an outdoor table (this placement receives the morning sun and is covered by the building eave for extra rain protection).



Simple placement of the hives: top left: on an upside down pot. Above right: glued on a set of masonry blocks and timber 'chocks' to level the hive and have it set up a bit so it doesn't sit on moist bricks.



Simple placement of the hive on an old IKEA timber box (this was a street throw out, and not really made for outdoors, but this can be swapped out for an old chair or stool in a few years). Easy! The pot plants around help shade the hive in summer and then the pots can be shifted to let more winter light and winter sun to the hive after summer

b) Mount the hive on brackets on a wall/fence/column

If you have a wall, fence that gets the right sun/aspect/shade, then you can install brackets ready for the hive.

I use metal **brackets that are 250mm** (vertical onto the fence/wall) **x 200mm** (horizontal) screwed onto the underside of the hive (see photos below for examples). Bunnings has a few inexpensive options. If you are located close by the ocean, then galvanized or stainless steel is best. If not, you can get away with powder coated metal (less expensive).

- If screwing into brick or masonry walls/columns, use plugs.
- If screwing into timber fence, drill pilot holes.
- Spacing of brackets: 100 150mm apart works well (the hive width is 200mm).
- The hive length is 250mm (+ roof overhang). Just make sure the horizontal length of the bracket is over the half way point of the hive (hence the 200mm horizontal bracket length).
- The hive height is approx.: 300mm with roof.

Screws: the base plate is about 22mm thick, so **screws approx. 20mm long** are fine to use, screwed up into the base (it is just enough to hold the hive in place). Drill pilot holes to minimize disturbance to the base plate and bees.

When drilling/screwing brackets and you already have had your hive delivered, keep the hive off the ground and in the shade/cool to minimize disturbance and overheating (as their entry will be plugged up).





This hive is east facing and is 'undercover' yet receives 3 hours of direct morning winter sun. Long screws go up through the balustrade and just into the hive (so that it is secure/fixed). The same hive (right) to protect it a bit better from the rain, but still allow air flow (gap around the roof) and sun in to warm the hive





Above left: This nestled hive is attached to a screen fence. The deciduous, flowering climber is cut back in winter to allow extra light, sun and air flow to the hive. The summer foliage helps cool and shade the hive.

Above right, this hive is on an undercover, east facing wall – the rear courtgarden faces north. You can see the morning sun streaming into the hive – located about head height to get that sun and air flow in this sheltered courtgarden.





The hive on the left is located a bit higher up to get a bit earlier morning eastern sun. Palm fronds are pruned in winter to let more light, warmth and sun in.

The hive above right is mounted on an undercover, east facing wall. It gets morning sun all year around, afternoon shade and is protected from rain (an added bonus).



One way to make sure the brackets are level is to put one bracket in first, then line up the 2nd bracket to make it level.



Brackets on a timber fence in a gap between the lilly pilly hedge. The hedge can be allowed to grow around the hive in summer, and then cut back for winter sun. It is a good idea to keep foliage set off the hive (not touching) to increase air flow and help preserve the timber.

a) Install on top of a post.

Install a post in the ground and securely mount the hive on top of the post.

Make sure the top of the post is level.

If not using a concrete footing for the post, then as a guide, bury a minimum of 1/3rd of the post into the ground.

The height of the post (above ground) works well at between waist and eye height.

A 100mm x 100mm round or square post is fine. I then screw a base plate onto it and then use small screws 20mm or less up into the hive (alternatively, small brackets could be used).

The footprint of the hive is 250mm x 200mm, so a base plate smaller than that will mean you don't get water collecting and potentially exacerbating moisture/rotting at the base of the hive.

A post is a good option if you have lots of **ants** around as you can **create a barrier using grease** around the post (just under the hive/ as it is more protected there). I use Vaseline or chest rub/petroleum-based grease if needed.





Both these hives are set up on a base plate so they dont sit in excess water from rain. This helps prolong the life of the timber hive.



In a larger garden or within a garden bed with nothing else to mount the hive onto, a timber post fixed with smaller brackets or with the timber plate (described above) works well.



Detail example of how the base plate on top of the post (is smaller than the footprint of the hive to reduce the hive from standing in water), the base plate is screwed down onto the post from the centre then screwed up in the corners into the hive base. The posts here are 100mm x 100mm (treated and or painted).

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