

Season to Season User Guide

You have purchased a **BACKYARD POLLINATOR** and your package has arrived in the mail. What steps should be taken to ensure the bees will hatch, fly and thrive?

THINK & PLAN

Before unpacking the Backyard Pollinator, some careful thought will go a long way. Place the nesting block in a cold room, cool garage or in the refrigerator and make a good plan before you begin.

Watch the video https://www.youtube.com/watch?v=IRjJBuQdqv4&t=2s

which explains the dual purpose of the box and demonstrates several ways to hang the unit. If you've purchased the DIY wood surround kit, follow the instructions on how to build and hang it up.

<u>Sufficient temperatures</u> and <u>blossoming flowers</u> must coincide with the <u>hatching</u> of your Leafcutter Bees. Read below for advice on how to achieve this happy medium.

SUFFICIENT TEMPERATURES

As outdoor temperatures increase and flower buds on plants begin to form (go looking for the tiny buds), place the nesting block in a warm environment to begin the hatching process.

Leafcutter bees need warm weather to hatch. The warmer the better (26C would be ideal) but direct sunlight (outside or through a window) will cause the bees to get too hot. Male leaf cutter bees will hatch first. They have small, green eyes and dots on their rear-end. The females should emerge within a week, depending on the outside temperature.

The outside temperature must be above 15C <u>everyday</u> and above 10C at night before you place the Backyard Pollinator outside. Consistent temperatures of +20C is better, +25C to +30C is ideal. Above +40C most plants tend to drop flowers, so pollen and nectar are not as readily available for hatched leafcutter bees.

BLOSSOMING FLOWERS

The range of leafcutter bees is approximately 100 metres. Ensure there are flowers within this distance of the placement of your Backyard Pollinator, otherwise the bees will stray. Expect to find circular shaped cutouts in nearby plants once leafcutter bees begin to work and pollinate. Rose bushes and pansy plants are special favorites for their nesting material.

WHERE LEAFCUTTERS NEED TO BEE

Having success with leafcutter bees is similar to selling prime real estate... LOCATION, LOCATION!

- 1. Leafcutter bees need a semi-shaded spot, they don't like all day direct sun. Leafcutter bees are intelligent and will find a new place to nest if the Backyard Pollinator is placed where it's too hot.
- 2. The nesting block must be sheltered and kept dry from all rainfall and all water (ie. sprinklers). Wet cocoons get moldy very quickly. Leafcutter bees know this as well and will relocate.
- 3. Place the Backyard Pollinator where you and others can **easily view** and observe the leafcutter bees for the length of their flying life (approximately 5-8 weeks for each generation).
- 4. The nesting block should be at least 10 feet from very busy foot traffic.
- 5. Watch from a distance of two feet and stay very still.
- 6. Try to synchronize your adult emergence with sufficient local blooms to give your new friends flowers to forage on.
- 7. Please post some *Facebook pictures* of your adventure to the Backyard Pollinator page. We would love to see where our babies end up in the world, and what their new homes look like!

THE "GO TO" PLACES

- Under your widest eve or in an outdoor covered area (ie. a gazebo, pergola, veranda or porch).
- Higher is better = more shade, less water.
- Against a window where it is shaded and dry so the bees may be observed from inside. Even people who are nervous about bugs will still receive enjoyment from the experience.
- Close to where you relax outside and drink your morning cup of coffee.

WHAT TO EXPECT THIS SEASON

Adult emergence will normally take 30 - 40 days (in hot weather maybe less, if it's cold maybe longer).

Don't expect flying action until the dew has dried off in the morning or in the 2 hours before sundown. Leafcutter bees will stay inside their nesting block on cool or rainy days. Bees are <u>solar powered</u> and love warm, sunny weather.

A large portion of the value of your Backyard Pollinator will come from your observations and interactions with the leafcutter bees. Be sure to spend some time with them and take a friend along too. Curious children will be fascinated and inspired!

WINTERIZING YOUR BACKYARD POLLINATOR

As summer winds down and autumn days approach, the bees will cease to be active around the Backyard Pollinator. Most or all of the holes in the nesting block will be "capped off". There will be larvae within the nesting block tunnels, waiting for next season's warm weather.

Be aware that birds (such as woodpeckers) find bee larvae to be a tasty treat. Keep watch in late summer as a bird attack can lead to extensive damage to the styroam nesting block.

Take your Pollinator down from the window or from under the eave. Place the styrofoam nesting block inside a cloth bag (available for purchase). This unit should be stored for the next 9-10 months at a temperature that is between 5C and 15C. A cold room for vegetable storage or a semi-heated garage area would be perfect. You can also place the Pollinator inside a cloth bag and put it inside your fridge.

Remember that within the tunnels the bees have created semi-permeable cocoons. The larvae enclosed will receive oxygen, excrete carbon dioxide and will remain perfectly moist.

For the winter months and until next April or May, the bees will remain in a dormant phase. Once daytime temperatures are consistently in the +20C range the Backyard Pollinator can once again be placed outside to hatch.

HATCH AND RELEASE LOOSE CELL COCOONS

The leafcutter bee cocoons should be hatched within the cloth bag in a sheltered, warm location outside. The warmer the better (26C would be ideal) but direct sunlight will cause the bees to get too hot.

Male leaf cutter bees will hatch first. They have small, green eyes and dots on their rear-end. The females should emerge within a week, depending on the outside temperature.

The outside temperature should be above 15C <u>everyday</u> and above 10C at night before you place the loose cell cocoons outside. Consistent temperatures of +20C is better, +25C to +30C is ideal. Above +40C most plants tend to drop flowers, so pollen and nectar are not as readily available for leafcutter bees.

Bees do not hatch inside plastic bags as the larvae need air flow hence the cloth bag.