

*** WINTER 2017 ***



2017 RESULTS

Around 70% of our Guardians and volunteers have been able to return filled and partially-filled Nesting Tubes to us this year, which is a big improvement from 2016. The average number of cocoons contained per tube is, however, down from 2016.

Many of you dated the tubes sent in to us, which is a great help for our analyses. Tubes that were filled earlier in the season contained larger cocoons - and more of them. This is what we would normally expect to see; large cocoons are produced at the beginning of the season when pollen is plentiful.

There is a strong correlation between the size and weights of cocoons and the sex of the bee inside. As a general rule, the largest cocoons will contain female bees and the smallest will be male. This means that large female bees are almost always produced first, then as the season progresses (and the pollen supply reduces), smaller females and males are produced. By the end of the season, we will find almost entirely male cocoons in the tubes.

Unfortunately, the smallest and lightest of these cocoons are generally regarded as unusable for the following season. Research shows that these cocoons will almost always contain weak male bees that are unlikely to have the energy reserves to survive through the winter and/or emerge successfully in Spring. In addition, using too many small cocoons in a population can distort the male to female ratio and greatly reduce the bees' productivity.

Cocoons that do not meet our size and weight requirements are discarded and not used again in either the Guardian scheme or for agricultural pollination. This year, we will lose around 35% of the cocoons we have received, either because they are too small or predator-damaged. This is far from ideal, but actually a small improvement on 2016 where we lost over 40% of cocoons returned to us.

NEW PRODUCTS

Bee 'Hotels' have become very popular in recent years, but most become very risky places for bees to nest if they can't easily be cleaned from season to season.

In order to provide a bee-friendly alternative, we launched our Bee Lodge $^{\text{\tiny TM}}$ this December. Crafted from high-grade Birch plywood, it will make a great addition to any garden or green space - and a perfect temporary home for visiting bees.



Unlike many similar products available, the nesting space in our Lodge is comprised of MasonBees Nesting Tubes which can be removed, cleaned and re-used. This allows for a chance each season to get rid of predators and parasites that would ultimately harm



the cocoons. Bees even seem to show a preference for nesting in re-used tubes!

Our Lodge also features a Perspex-topped inspection drawer in the lower section for safely observing bees, making it a fantastic learning tool.



The channels in the drawer are sized perfectly for Red Mason bees (Osmia bicornus), Blue Mason bees, (Osmia caerulescens) and Leafcutter bees, (Megachile centucularis) – these are all non-stinging species so there's no need to worry about getting in close! The top is clear and easily removable, allowing you to see how the bees are progressing during the season and to clean the drawer when it is over. 48 standard size Nesting Tubes are provided with each Lodge, which is available now at masonbees.co.uk/shop, priced at £49.95.

NB: We are offering a 20% introductory discount on the Lodge for a limited time! Use the code LODGE20 at the checkout to receive this discount.

2017/2018 SEASON

Due to the over-wintering problems and the difficult season in 2016, we dispatched new cocoons to every member of the Guardian scheme in 2017. This has led to much better returns this year, although the quality of the cocoons is not quite what we had hoped for.

All Guardians who returned capped Nesting Tubes to us in 2017 will receive cocoons in March. It is **essential** this year that those Guardians who were unable to send capped tubes email us - contact@masonbees.co.uk - if they wish to remain in the scheme. We are not

able to send out cocoons to Guardians in 2018 who have not returned tubes or contacted us.

If you still have capped tubes to send us, the closing date for this season's submissions is **31st Jan 2018**. Send your tubes to:

MASONBEES UK
FREEPOST RTEX - CCET - YREH
5 MELROSE DRIVE
SHREWBURY, SY2 6QS

EXPOSED SITES & UP-SIZING

For exposed and windy sites, we have found that using an over-sized Nesting Tube holder for the Nesting Tubes will increase the number of cocoons produced by the bees, i.e. a 250mm holder with 165mm tubes or a 330mm holder with 260mm tubes. NB: 165mm tubes in a 330mm holder is not as effective as the tubes are too hidden and the bees struggle to locate them.

If your bees were successful using the standard size Nesting Tubes (as supplied with the Guardian scheme), you might consider switching to using a longer tube length next season. In our commercial trials, bees seem to display a preference for using the longest tubes available to them. This is possibly because upwards of 30 cocoons can be laid in a single 295mm tube, compared to just 8/9 in our standard (165mm) size. Further research in this area is planned for 2018.

If you are an existing Guardian and wish to up-size your kit, please get in touch via email - contact@masonbees.co.uk - and we will be happy to offer a discount on any additional equipment you wish to purchase.

NEW YEAR WISHES

We'd like to take this opportunity to thank you for your membership of the Guardian scheme and your valuable contribution to it in 2017. Here's wishing you and the bees all the best for 2018 - we're hoping for consistent weather, more Guardians and plenty of healthy bees – please join us in raising a glass to this over the festive period!