December bulletin

As your bees overwinter it is normal to worry and wonder about how they are managing. Here are a few questions you may be asking yourself, and some reassuring advice.

Frosty December morning

Will my bees survive the cold temperatures?
Honeybees can tolerate the cold, even when temperatures fall below freezing. The bees will be in a tight cluster. Those on the outer surface form an insulating layer allowing the bees at the centre to move around to access stores, keep the queen safe and warm, and raise brood.
So, provided the colony was strong going into winter, and is provisioned with sufficient stores, the bees will survive the cold temperatures.
September Bulletin: Healthy Bees for Winter
https://dunblanebeekeepers.com/wp-content/uploads/2024/10/Healthy-Bees-for-Winter.pdf

In fact, damp conditions are more harmful than cold because the bees will struggle to regulate the humidity within the hive.
Check that roofs are watertight, entrance blocks have not fallen out of position, and hives are secure, especially after stormy weather.

Deep roofs

Ann Chilcott, The Beelistener, offers an interesting insight into the winter cluster in her blog:
https://www.beelistener.co.uk/winter-bees/the-winter-cluster-the-insulation-question/

How do I know when to supplement with fondant?
With milder temperatures throughout October and November, it is possible that colonies were larger, the bees more active, and the queen's laying rate may not have reduced as much as expected. This activity would have increased demands on stores.

Heft every couple of weeks to gauge the (decreasing) weight of your hive. Whenever possible choose a milder day when you are less likely to disturb the cluster.
If in doubt about the weight, it is better to err on the side of caution and feed.

What is happening inside the hive?
We can satisfy our curiosity a little by placing an inspection board under the mesh floor for a few days. Don't leave the board in for prolonged periods as the detritus can attract wax moth.

- Biscuit coloured cappings from brood show the position and spread of the cluster. This can be helpful for placing fondant.
- Lighter coloured cappings tell that stores are being uncapped.

Brood and stores cappings, and a few varroa!

- There will be varroa in the hive and the drop count will let you know if treatment is recommended.
- Mouse droppings in a scattered pattern are likely to be from a mouse visiting the inspection board, whilst concentrated droppings are more suggestive of a mouse that has taken up residence.

What is happening outside the hive?
Bees will fly in temperatures above 7 or 8 degrees (or lower!) to go on cleansing flights and to collect water. On milder days, you may also see activity at the entrance as undertaker bees remove corpses. If there is no activity at the hive entrance, check that it is not blocked with dead bees. Clear any dead bees with the hook end of your hive tool.

Bees at entrance

Should I treat for varroa?

We have seen that milder winters may not reduce the queen's laying rate as much as expected. Another consequence is that varroa will have had more opportunity to reproduce. There is still a window of opportunity to treat for varroa before the end of December and before the queen is laying for the season ahead. If you have a daily mite drop (DMD) of more than 2 in December, treatment is recommended.

[October bulletin: Winter Varroa Treatment](https://dunblanebeekeepers.com/wp-content/uploads/2024/10/Winter-Varroa-Treatment.pdf)
https://dunblanebeekeepers.com/wp-content/uploads/2024/10/Winter-Varroa-Treatment.pdf

Common Pests

Check your stored comb and equipment regularly for signs of wax moth or mouse damage so that you can deal with the pest sooner rather than later.

Greater wax moth (Galleria mellonella)

Lesser wax moth (Achroia grisella)

Of the two, the greater wax moth is more destructive. The developing larvae burrow into equipment making boat-shaped indentations for their cocoons. The larvae also consume wax, particularly in drawn brood comb.

Wax moth damage

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Stack boxes on flat surfaces and fully cover them, and close over nuc box entrances to prevent mice setting up a winter home.

All that remains to say is have a Merry Christmas and Happy New Year.

The Bee Healthy Team
December 2024
Email the Bee Health Team. We would love to know about any topics you would like covered in future Bee Healthy bulletins.
You can read previous bulletins and find useful links on the DSBA Bee Healthy web page.
Remember the DSBA Mentoring Team can be contacted via the 'Members Only' section of the website for further advice.