

National Bee Unit



Advice Note 2nd June 2011

Are your bees starving?

This year has seen exceptional weather with some regions having the driest spring for a century whilst others such as Scotland receiving far more precipitation than average. Especially in the south and east of England early spring saw good nectar flows but mid May saw the start of the 'June gap'. It has been particularly pronounced with bees consuming stores at a rapid rate. If drought conditions continue nectar production will be affected.

It is important that colony store levels are checked particularly if a spring crop such as oil seed rape has been taken. At this time an average colony should have at least 4-5 combs with honey/sugar stores, i.e. 9 kg. or 20lb. If not and there is still no significant nectar flow feed them sugar syrup. In extreme cases, if the bees are starving on the comb, spray them with a thin sugar syrup solution and fill an empty comb with sugar syrup. This can be done by pouring the syrup into the cells slowly using a honey jar filled with sugar syrup and closed with a lid having 3 mm holes on opposite sides, or using a squeeze bottle, e.g. a cleansed washing up fluid bottle. When filled, place the comb adjacent to the bees.

The effects of insufficient stores are at worst death of the colony and at best a reduction of bee production. Bees require a supply of honey or sugar, pollen and water to produce brood food. If any of these ingredients are in short supply it causes a reduction or stop of the brood nest and will impact colony productivity and well being through the remaining season and possibly impact on overwintering.

To make sugar syrup use white granulated sugar. With modern production methods it makes no difference if it was sourced from cane or beet. Do not use brown or raw sugars as they contain impurities. The syrup should be made up in the proportion of 1 kg. of granulated sugar to 630 ml. of water or 2 lb. sugar to 1 pt. of water. There is no need to boil the mixture but using hot water helps. Stir regularly to remove the air bubbles and dissolve all the crystals. When fully dissolved the mixture is clear and a very pale straw colour. It can be fed to colonies by using rapid or contact feeders.

Syrup used for emergency feeding at this time can be made using twice the quantity of water, commonly known as 'thin syrup'. This helps the bees as they do not have to collect as much water for brood food production.

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June 2011

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