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**Barry's Bees** 



# Preserving Bees for Our Future

### FEBRUARY NEWS LETTER

There will be intermittent days of warm sunshine throughout the otherwise cold and foggy February, but don't be caught out. The temperature is still too cold to be inspecting the colonies at this point, although you can observe the colony for flying activity on these rare sunny days and should see some cleansing flights taking place. This is a good gauge that the colony is still alive but by no means out of the woods. "Heft" the hive to ensure there are still sufficient stores in place for the colony. If not feed them with fondant. This can be applied through the hole in the crown board. The bees will be found near the top of the frames, as this is where it's warmest. They will be covering small patches of brood and should appear to be tightly clustered. They should be visible over the tops of 4, 5 or 6 frames. If you are overwintering on a brood and a half; (the term used to describe bees over wintered on a brood box and single honey super,) then the bees will be in the top of the honey super. Where two hives are pushed together you can guarantee the bees will be clustered on the sides of the hives and frames that are closest together.

Inspect the exterior of the hive for damage and repair it as necessary. Ensure the hive appears dry, well ventilated and pest free.

**Right** – Several out apiary hives fully protected from the extremes of winter weather by using straw bales, wind breaks and winter hive wraps.

Well ventilated warm hives that should come through the most normal British winters!

Emergency Feeds, Winter Treatment for Varroa, Hive Checks for food and jobs for the month

**Topics for this News Letter** 



**Above** - Overwintered Hives in bee wraps catching late February Sun.



**Emergency Feeds**:- Even when the bee keeper has taken all the precautions to ensure their colonies will come through a winter successfully, things can go wrong. Fluctuations in winter day time temperatures, prolonged periods of extreme cold, unripened food stores can all play havoc with the bees.

**Contributory factors**:- There can be many more factors involved than the ones mentioned above. But these are the ones we will deal with.

**Fluctuation in day time temperatures** will cause the bees to break the cluster and move about more. The cluster loses heat rapidly and any brood will chill off. The more the bees move the more stores they consume and they can quickly consume a lot. When the cluster reforms as it gets cold, it uses vast amounts of energy rewarming the hive and again burns up valuable stores.

**Prolonged period of extreme cold** will cause the colony to cluster hard to enable them to generate the necessary heat. If they are too cold to effectively move over the frames or get to the nearby stores not already consumed this causes the colony to "freeze" and starve in situ.

**Unripened stores;** if the bees have to consume unripened stores it will give them dysentery. The colony will be unable to generate any heat to sustain warmth and the hive bottom (floor) quickly becomes fowled with bee faeces. The colony will be reluctant to move to find new stores as they are trying to generate heat in the cluster and they will eventually die out.

**Conclusion**:- When the bee keeper recognises the need for an emergency feed it is best administered through the crown board. Fondant is the feed of choice, as its moist and can be easily consumed and used by the bees. Try to avoid where possible going into the hive to feed. This will cause the colony to lose excessive heat. However, where this cannot be avoided like feeding a poly nuc, place the feed directly over the frames and cluster.



Left - Feeding Fondant through the crown board

**Right**- One of the treatments for Varroa. Easy to prepare and administer



Winter Treatment for Varroa:- Varroa destructor is probable the single biggest threat to the honey bee. Once established in a colony it can reverse the colony strength, structure and capability to combat other viruses and bee infections in a very short space of time. Most treatments for Varroa are given when the bees have little or no brood in the colony (winter months). We treat with other Varroa medication at peak brood times of the year to help supress the numbers of Varroa mites, and this also limits when and how we take off the honey harvest.

**Colony behaviour -** During winter the bees will cluster around the queen and any small pockets of brood they are nursing. The cluster will be tightly formed and very small amounts of brood will be present in the colony. The bee keeper should have already treated for Varroa as part of the pre wintering treatment. Selecting a warm day in February, the beekeeper could consider administering a Varroa treatment to their hives. It's been 9 - 12 weeks since the last treatment and hopefully you can knock off any mites that were missed. Api-Bioxal is a useful treatment to consider as it's easy to prepare, not restricted by temperatures, easy to administer to the bees and exposes them to a loss of heat for a very short time. An emergency feed could be given at the same time!

**Hive Checks and Food Stores**:- Continuously "Heft" your hives to gauge their weights. If they are getting light provide them with an emergency feed. Remember where possible the emergency feed should be given to the bees on top of the crown board to prevent substantial heat loss to the colony. However, where this cannot be achieved apply it directly over the cluster and on top of the frames.



#### Jobs to Complete in February

**1.** Inspect your bee site (apiary) to ensure all the hives are still secure and firmly attached to their hive stands.

**2.** Ensure the hives remain waterproof, dry and ventilated. Replace any plastic sheets or waterproofing as needed. Ensure nothing is blocking the entrance or ventilation holes.

**3.** Ensure the hive entrance is protected with a mouse guard and that no vermin damage has occurred to the outside of the hive walls. If damage is noted, it must be repaired straight away. Leaving it will encourage further damage to occur which will lead to the potential loss of the colony.

**4.** Heft the hive corner to ensure there is still sufficient weight within the colony and therefore sufficient stores. Remember, this "heft" will be based on your earlier seasonal physical and visual check.

If the weight has dropped significantly or you suspect the colony is running short of stores, give them another emergency feed using fondant. Don't open the hive fully as this will expose the colony to the cold. They will need to use up twice as much energy and food resources to return the hive to its temperature. Feed them through a crown board or modified crown board with good insulation and ventilation. Continue to monitor your bees throughout this month as they are now at their most vulnerable!!

**5.** Picking a warm day towards the end of February you could consider treating the colonies for Varroa using either a vapour or liquid treatment. This will potentially knock down any mites that may have survived previous treatment and give the colony a good head start as they start to expand into March.

## Preparing for the New Season

Ensure all your bee equipment has been checked, cleaned, repaired or replaced before the end of this month. You will not have time by the middle of March and will kick yourself for not doing so. Consider placing the wax in the newly built frames but only if the temperature is warm enough. Plan your new season and work out where you want to go with the bees and how you plan to get there. Do you have all the equipment and resources available to you?

# **SPRING IS COMING!**