

Friends of the Honey Bee Newsletter

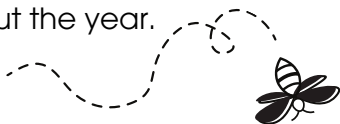
Vol. 5 Autumn Term 2024



Welcome back!

September marks the start of a new year in school terms, but for most insects this is the end of the season, as many complete their life cycle and others prepare to overwinter.

But for some, autumn is also a new beginning. Social wasps in the family *Vespidae* start their life cycle in autumn, with new queens emerging to mate before hibernating and establishing a new colony in spring. For honeybees it is very different, we will take a look at what's happening in the hive as well as what can be done to help insects throughout winter. We will also introduce another native species of bee to follow throughout the year.



'Friends of the Honey Bee' members are encouraged to share updates and photos of their environmental projects.

It is inspiring to know the next generation are actively taking care of the environment and protecting pollinators!

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What's Happening in the Hive?



In the wild, honeybees create hives in trees or other suitable spaces. Beehives are designed to replicate wild hives while enabling beekeepers to inspect the colony. [Click here to learn more about beekeeping.](#)

September: Beekeepers continue regular inspections, checking for healthy bees and plentiful honey stores. The bees have spent summer filling the hive with honey, an essential source of carbohydrates to get them through the winter. Pests and diseases are also monitored. In particular an invasive non-native mite, *Varroa destructor*, which can weaken a colony and reduce its chance of surviving winter.

October: Preparations for winter begin. The colony reduces in size as the queen bee lays less eggs. Beekeepers reduce the size of the hive and add insulation. Colonies can be fed with sugar or other honey substitutes to help them overwinter.

November: As temperatures drop the bees become less active. They don't hibernate and instead form a tight cluster, pumping their flight muscles to keep warm - an interesting example of thermal energy!

December: While the bees maintain the hive at 32-35°C. Beekeepers use this time to clean and prepare equipment for the following year.

Who's That Bee?

In Britain we have only one species of honeybee, but around 270 species of other bee! They are wild and many live solitary lives. This year we are following the: Buff-tailed Bumblebee, *Bombus terrestris*. [More info here.](#)



This is a large species with golden yellow bands at the front of the thorax and across the middle of the abdomen, with a white to yellow-brown buff-coloured tail.

Nests are usually established underground in old rodent holes in October-November. Workers can be seen foraging all winter on winter-flowering plants, before males and new queens emerge in early spring.

Gardening for Insects

- Plant autumn/winter flowering plants for insects which store food to overwinter or remain active throughout. [More info here.](#)
- Avoid cutting seed heads, dead stems and perennial grasses to provide shelter and hibernation sites for insects. [More info here.](#)
- Create piles of twigs and leaves, log stacks and upside-down pots for hibernating insects. Do not disturb throughout winter. [More info here.](#)

Does your school have a wildlife garden or any features for insects? Please share with us!



Protecting Pollinators

Honeybees are pollinating insects, alongside at least 1,500 other insects in the UK!

Pollination is an essential ecosystem service.

3/4 of crops grown in the UK require insect pollination.

Pollinating insects are in rapid decline, many factors contribute to this such as:

Climate change

Unusual weather patterns alter plant growth and flowering periods, which limits food for insects and reduces pollination. Additionally, heavy rain after drought causes flooding, this damages nests of ground-dwelling insects and disrupts their lifecycle.

Invasive non-species

An important topic when discussing species, interactions and interdependencies. Invasive species can compete with, predate, or spread disease among native species. This can disrupt ecosystems and the services they provide.

These issues affect all native wildlife, see the [State of Nature Report](#) for more information.



Asian Hornet Week 2-8th September

It's likely you're reading this after the official week, however, the yellow-legged Asian Hornet (*Vespa velutina*) can be discussed throughout the year in multiple subjects such as Science, Math and Citizenship.



Themed activities available [here](#)



The yellow-legged Asian Hornet is an invasive non-native species which threatens many native insects. Government action is taking place to control its spread and we can all help by raising awareness. Free posters can be requested from [NNSS](#). For more information and regular updates click [here](#).

National Honey Day 21st October

Honey has been enjoyed globally for centuries, it was found in Egyptian tombs and is depicted in ancient cave drawings. This day brings an opportunity to discuss where our food comes from, learn about [imported honey](#) and [try some local honey!](#)



Find your local Beekeeper's group



Visit the BBKA Apiary & Education Centre

Additional Resources

The BBKA has a range of free resources to link bees with the curriculum, [available here](#).

Contact us if you'd like more information on any topics mentioned or have questions. **Please share updates and photos as well as feedback.** schools.officer@bbka.org.uk

NATIONAL HONEY DAY



1. National Honey Day

A day to celebrate honeybees who give us honey to enjoy on toast and in porridge.

2. Unique

The taste and colour depend on which flowers bees forage on. Each nectar is different.



3. Nectar of the Gods

In Jewish, Christian and Muslim traditions, honey is often cited as a holy substance.

4. Bees stay local

Bees collect nectar from flowers near their hive and rarely more than 3 miles from home.



5. Types of Honey

In Honey shows honey is judged in classes depending on whether it is liquid or set!