



Choosing your bees

Lancaster Beekeepers advisory leaflet No 7

There are over 250 species of bee found within the British Isles, all but one of which lives a fairly solitary life. The exception is *Apis mellifera*, the honey bee, which lives in large social colonies.

There are six main sub-species of *Apis mellifera*, four of which are native to Europe and the other two to Southern Africa..



Apis mellifera carnica (the carniolan bee) is native to a huge area including the southern Alps east into Hungary as far as the River Danube and throughout the Balkans and into Greece.

Its positive characteristics, from a beekeeper's perspective, are that it is gentle to handle, over-winters well of few stores and is resistant to brood disease. On the negative side, it builds up very quickly in Spring then swarms, and swarms and

swarms! However queens are not very prolific and the bees do not seem to like drawing out comb. Adult bees also seem to be prone to the bee diseases Acarine and Nosema.



Apis mellifera lingustica (the Italian bee) occurs natural only in the Italian peninsula and nearby islands.

Its positive characteristics are that it is very gentle, can produce huge honey crops, is not prone to excessive swarming and produces good comb. On the other hand they go into the winter as very large colonies and, in a climate like ours, can often find themselves starving to

death in a long cold and wet Spring. However, *A. m lingustica* and its strains are the most popular type of bee worldwide.



Apis mellifera caucasica (the Caucasian bee) occurs naturally in the mountainous region between the Black and Caspian seas, Southern Russia and southwards to Georgia and Azerbaijan.

It is gentle, does not have a very strong swarming instinct and needs few stores to over winter. However, it is very susceptible to Nosema, is slow to build up in Spring, produces large amounts of brace comb and

prodigious quantities of propolis.



Apis mellifera mellifera (the black or dark bee) occurs naturally throughout Northern Europe, including the British Isles and into Western Russia. It is found north of a line where the average July temperature is 15°C or less.

Its positive characteristics are that it over-winters well on few stores, is extremely hard working, can forage in conditions too cold or windy for other sub-species and produces high quality combs. On the other hand, it is slow to build up in Spring, honey crops are not huge and some strains can be quite defensive.



Apis mellifera scutellata (the East African honey bee) is native to the south-eastern tropical parts of Africa. As they have a great many predators to contend with they are aggressively defensive. They have a tendency to swarm frequently when there is a nectar flow and will often move to a new location if they do not like the conditions. This is the sub-species of bee introduced into South America where it hybridised with the previously introduced *A m linguistica* to produce the so called "killer" bees).

Apis mellifera capensis (the Cape honey bee) only occurs naturally in a small area in the Cape region of South Africa. It has a number of unique characteristics that enable it to thrive in the harsh environment in which it has evolved and which set it apart from other *A mellifera* sub-species. Attempts to cross breed it with *A m scutellata* have proved disastrous.

Over the last two centuries, in a quest to produce the "perfect" bee, beekeepers have hybridised most sub-species, not always with positive outcomes!

So what characteristics should you look for in choosing your bees?

Docility

Gentle bees are so much easier to handle than very defensive ones and are far less likely to cause problems with family members, neighbours and the general public. If possible you should visit the beekeeper from where you are getting your bees and ask to handle them in his apiary.

Suitability for locality

Although not particularly cold, winters in the Morecambe Bay area can often be long and wet, confining the bees to their hive for extended periods. Spring can often be a stop-start affair with a long gap between the Spring and Summer nectar flows. Some strains of bees can cope well with these conditions whereas others cope markedly so. **Bees raised in the locality will have adapted to the local climate and forage.**

Disease resistant

Some bees are genetically more resistant to certain diseases than others. Whilst it is rarely possible to identify the degree of resistance any colony might have, it is possible to ensure that you only acquire healthy bees from a known source. Seek advice from your local bee club.

Tendency to swarm

Although a problem for the beekeeper, swarming is a perfectly natural process for bees. Whilst good husbandry can minimise some of the factors that trigger swarming, some strains of bees have a far greater tendency to swarm than others. Wherever possible, choose bees from a strain with a low swarming tendency at least until you gain the experience of dealing with frequent swarms.

Productivity

If a good crop of honey is important to you then you will need to select an appropriate strain of bees. However, if you only want sufficient honey for family and friends then any strain should produce sufficient in any reasonable season.

Despite all the effort, the perfect bee does not yet exist and probably never will! Until it does, the best course of action is to obtain your stock of bees from a reputable, local beekeeper.

There are four ways of acquiring bees, a swarm, a nucleus, a colony or a package.

Swarms

A swarm occurs when a colony decides to split and the existing queen departs, together with anywhere up to 30,000 workers, to start a new colony. Whilst the beekeeper from where the bees originated will collect the swarm if possible, in many instances the bees travel some distance and are effectively lost.

The advantages of obtaining a swarm are that they are usually free and are likely to produce a honey crop. The disadvantages are that the bees are likely to be of unknown temperament, may be carrying disease or varroa, and may decide to move on! Cast swarms occur when the original colony decides to swarm for a second or third time. Cast swarms are often too small to be viable and need careful attention to survive.

Nucleus

As a measure to prevent swarming or to create new colonies, a beekeeper may create a nucleus. Effectively this is a mini-colony with its own queen and workers.

The advantages of obtaining a nucleus are that the bees are from a known source, the relatively low numbers of bees make the colony much easier to handle whilst experience and confidence is being built up, and the bees are very unlikely to swarm in the first year. The disadvantages are that they will have to be bought and are unlikely to produce a honey crop in their first year.

Colony

A colony comprises a queen bee, a few thousand drones and anywhere up to 60,000 worker bees.

The advantages of obtaining a colony is that you get a fully viable group of bees from the outset and can expect a honey crop. The disadvantages are that they will have to be bought along with their hive at a not inconsiderable cost, and there will be a lot of bees to manipulate which could be difficult for an inexperienced beekeeper and the colony might swarm.

Package

A package comprises of around 1.5 kilos of bees, which may come from a variety of sources, together with a marked, but usually unrelated, mated queen. Packages are often offered with a choice of queen types such as Carniolan or Buckfast. Packages are ideal for starting setting up alternative hives such as Warré hives or Lancaster Long Hives.

Inexperienced beekeepers are recommended to start with a nucleus for a conventional hive or a package for an alternative hive if at all possible.

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