

## CHOOSING AN APIARY SITE

In the act of positioning one or more beehives an apiary is created and of these there are three main types:

- Garden or Home Apiary - Usually one or two hives sited on land associated with the beekeepers home
- Out Apiary - One or more hives set-up on land not associated with the beekeepers home
- Seasonal or Temporary Apiary - One or more hives set-up on land not associated with the beekeepers home for only part of the honey crop season

Regardless of which type of apiary that will be set up a brief assessment of sites safety, suitability and access should be undertaken before moving in the first colony or hive.

The assessment can be as follows:

### Food

- Bees will gather food from anywhere up to 3miles (5km) from the hive and need a good source of nectar and pollen through the foraging year (Late-February to Late October). Particularly as a bee colony needs 120kg Nectar and 20kg Pollen (Seeley 1995) per year to survive.
- It is difficult to assess the foraging potential of a specific location but some idea of the potential can be gained by observation of the flora. This is best done by walking in the area being considered a couple of times throughout the spring, summer and autumn (Late-February to Late October).
- If this is not possible a Landranger map or aerial photograph, such as Google Earth, of the area may provide a good indication of what may be about.
- Look for variety both temporal (throughout seasons) and spatial (over the wider area).

### Water

- Bees need water for two reasons; to regulate the hive temperature and to feed.
- To produce honey bees drive off the water from nectar until the water content falls below 20% making the sugar concentration high enough to prevent fermentation by natural yeasts. At this concentration bees cannot eat the honey; so bees need water to dilute their own honey to a 50:50 mix of sugar and water before they can eat it.
- The worker bees also use water to help regulate the temperature of the hive by releasing water inside which evaporates to cool the hive.
- They don't always go for the cleanest waters and are often found drinking at drains, soil pipes and sewage works. This is believed to be because these waters have extra minerals that are key to the diet of the bee.
- A colony requires approximately 25 litres of water per year to survive (Seeley 1995).





Notes prepared for:

## Access

- Site access will be required come rain or shine and the closer a vehicle can get the better as bee hives, and supers full of honey are heavy (30lbs or 13.5kg (average weight of a 2-3 year old child) and bulky so easy access to the site makes beekeeping much easier.

## Security

- If the access of a site is good for the beekeeper then it is also good for others of honorable and less honorable intent and the best precaution is to place the hives out of sight of public roads and make them unobtrusive through screening and colour and making sure all gates are locked.
- If the apiary is to be sited on a farm where livestock may gain access at some stage, a barrier should be erected by the beekeeper (if one doesn't exist already). As a hive that is knocked over can result in bees stinging the animals, the colony dying if the hive is not put back together quickly and potential legal ramifications with the animals owners.
- Depending on the location of an apiary, a beekeeper may also have to consider whether or not a farmer is likely to spray crops with something harmful to bees. Therefore, this should be a question that is asked of any farmer or land owner who allows hives to be placed on his/her land.
- A Beekeeper should ask the land owner to call them a week or so before they begin to spray so that the hives can either be closed up the night before or moved to another location.

## Size & Competition

- There is a limit to the number of hives an apiary can support and this will depend on the food sources available and the competition for that food.
- The beekeeper will find out, over time, what his or her apiaries limit is by watch the honey crop; if there are too many hives the honey crop will drop.
- On average it is estimated that an acre of land will support two hives of bees. As bees forage up to 3 miles (5km) from their colony then they can cover an area comprising 17,892 acres. This does not mean that a bee keeper can get 35,784 hives in an apiary.
- Don't put a new apiary next to an existing one.

## Shelter

- Hives will need to be sheltered from both wind and water.
- A strong wind can chill the colony causing the loss of brood during the season and loss of adults during the winter, blow the hive over or the roof off also killing the brood and adult bees but also damaging the hive, and will also hinder foraging.
- To prevent these things the hive entrance should point away from the prevailing wind, the hive should be sited in the lee of a hedge, fence or wall and a heavy weight such as a rock or brick on the hive roof to prevent it from blowing off.
- Soon after any gales a beekeeper should visit their apiary to check its condition.
- The roof of a modern hive provides shelter from the rain but despite this a hive still needs to be kept out of areas where water can drip or pour into and on the hive.
- Areas known to flood should also be avoided.





Notes prepared for:

## Topography

- It is not essential but a south facing slope or the south side of a hedge or forest will receive maximum winter sun and shelter from the coldest winds.
- Valley bottoms although sheltered from strong winds are often susceptible to frosts, flooding and damp air, all of which effect brood and can kill off the colony.

## Public Safety

- Each person is different and reacts in a different way to bees; some people like them, some indifferent, some against them and some have allergic reactions if stung.
- Ideally an apiary should be sited an appropriate distance 7-8m away from the nearest footpath or similar area with a barrier (fence, wall or hedge) between the hives and the public. If there is no barrier, such as a hedge, or one cannot be install this distance should increase to 14-15m.
- Bees usually fly at about 5m above the ground but they can fly low (particularly on windy days) and get caught in the hair or clothing of passers-by. A very high wall, such as those typically associated with walled gardens, may be enough separation for most apiaries, even with a path directly on the other side.

## Land Owner Permission

- If a Bee keeper intends to put bees on land that is not theirs then they must get permission from the land owner.
- Permission agreements are usually very informal and often based on trust. Occasionally there will be a simple formal agreement to lay out what both parties will offer and undertake but for a small number of hives a rental agreement is struck with a quick chat and a handshake with the offer of a traditional payment of 1lb of honey per hive per year to the landowner.
- Regardless of the agreement, it is up to the beekeeper to prove themselves as reasonable and reliable for the contract to continue.

## Laws

- There are no nationally ratified laws in the UK that restrict or promote the keeping of bees.
- However under the Environment Protection Act 1990 beekeepers have a duty of care to ensure that they and their bees do not cause a nuisance or spoil other people's enjoyment of the environment.

