



## **Beekeeping Equipment – Hive Tools**

### **Summary**

When starting out in beekeeping there can be a baffling array of different tools and equipment on offer. This article highlights the various options for hive tools available to the beekeeper and discusses the advantages and disadvantages of the different options available.

### **Hive Tools**

There is a larger number of different options of beekeeping tools and equipment for the beekeeper to choose from. For the beginner or novice beekeeper the number of options available can seem daunting and the easy option can be simply to buy a complete beginners kit, however, these do not necessarily contain the best equipment and with a little information you should be able to choose the right beekeeping tool and equipment first time.

Hive tools essentially have three main purposes and when choosing your hive tool you should bear these in mind. Firstly to slide in between the various lifts of your hives and gently lever them apart, breaking the propolis with which the bees will have glued them together. They are also used to separate frames within the hive and lift them slightly allowing the frames to be removed for inspections. Finally they can be used to scrape propolis, wax or other bee products from your hives and frames keeping them tidy during inspections, or when cleaning down at the end of the season. There are numerous other uses for hive tools within the apiary, anything from rubbing out queen cells to prodding a wooden hive to see if parts of it are rotten, but these are fairly general and do not really affect the design or choice of tool.

There are essentially two choices of hive tool types available from most suppliers, the standard hive tool and the J-type hive tool. Some beekeepers may have different unusual hive tools they have made themselves or inherited, and invariably they will claim that their tools is better than those available, however, to use one of these oddities you will generally have to make it yourself or acquire it from a retiring beekeeper. While the standard tools and J-tools are all similar, there are subtle differences from each manufacturer which make some more useful than others. The standard hive tool is a flat piece of metal bent through ninety degrees at one end to give a short stub section around 20mm (1”) long, both ends are tapered to a thin edge like a paint scraper. A J-tool is a similar flat piece of metal with one end tapered like a paint scraper, the other shaped into a J shape.

The long thin tapered “paint scraper” ends of both tools are used to gently slide in between the lifts of the hive, until it can be levered off the frames inside to separate the lifts. If the hive is well stuck down it may be necessary to lever from several sides to break the seal all the way around. When separating boxes you must lever off the frames and not the hive bodies as these can be damaged and cost considerably more to replace than the frames. The design of this element of the hive tool is fairly common across all manufacturers and there is little to choose between the two tool options from this point of view.

For separating the frames the bent end of the standard tool is placed between adjacent frames and then twisted to lever one frame against the next moving them apart. Once both

ends are free then the frame can be lifted from inspecting. The J-tool should have a wider square section at the paint scraper end (and not a gradual taper as for the standard tool), this is placed between the frames and twisted to lever the frames apart. The design of the J-tool does vary and some designs do not include this square end section, these are not as useful and therefore should not be bought.

Once the frames are separated the J-tool comes into its own, the J section is inserted under the end of the frame to be lifted, and the lug on the back edge rested on the adjacent frame. The J-tool is then levered backwards lifting the frame and making it easy to get hold of. This makes it much easier to remove frames without the possibility of squashing any bees that may be in between the ends of frames. The standard tool has no method of lifting frames, therefore the J-tool is generally considered to be superior for beekeeping. However, its more complicated shape makes it slightly more expensive and therefore it is rarely included in beginners kits.

For scraping and cleaning wax and propolis from frames and hive sections, or removing wild comb or drone comb harvesting, the scraper end of both tools is used, and they are both very similar in how they perform. For cleaning large flat areas such as hive sides, or scraping across the queen excluder to clean it up, the bent end of the standard tool can be used as it is marginally better and slightly less likely to dig in to the hive side than the scraper end. However, if used carefully the scraper end of the J-tool can be just as effective and this marginal improvement in scraping in no way makes up to the standard tools lack of ability to lift frames. In an ideal world the beekeeper would have both tools and many beekeepers with multiple hives do, however the novice beekeeper should start with the J-tool.

The material which the hive tool is important, it should be made of stainless steel. Painted steel tools are okay to start with but quite quickly the paint will scratch and the tool will start to rust. This will get rust on your white beekeeping suit, in your hives, on your frames and most importantly, it could end up in your honey.

Finally one end of the hive tool should be painted a bright colour red is ideal, this helps locate the tool when it has been dropped in the grass. Painting only one end also means that the shiny stainless steel end may glint in the sun further helping the search for your lost tool. The scraper end of both J-tools and standard tools should be left unpainted, these are the ends, which get the most abuse and are therefore most like to scratch the paint. Some hive tools are sold unpainted, some are completely painted, both of these should be avoided for the above reasons.