Patterson's Page

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Making colony increase is more enjoyable than buying bees, with many methods to suit different situations. Roger Patterson briefly describes one method that can be easily expanded to produce several nuclei from the same parent colony in a season. This may be suitable for BKAs to supply beginners with bees.

A group making up 5-frame nucs from one donor colony. Photo Courtesy The Animal and Plant Health Agency (APHA), Crown Copyright.

There seems to be an increasing number of bees being bought by beekeepers compared to what there used to be. I am the auctioneer for the West Sussex BKA annual auction where bees usually sell well, often to beekeepers of several years standing. Why is this, when making increase from your existing colonies is so easy, cheap and with so much to learn from doing so? There could be several reasons, including lack of knowledge, lack of time, bees being needed early in the season and no queens available. But all these potential obstacles can be overcome quite easily.

I advise new beekeepers to have more than one colony as soon as they can. Once you have prepared everything for inspecting one colony, the second does not take double the time, so there is little extra effort needed. If you can look after one, you can look after two. The extra colony is readily available, so if you have a colony loss or a problem with a queen you are able to deal with it yourself, without seeking help from another beekeeper, or being without bees.

For some reason beekeepers often think it is difficult to increase their colonies. I suspect this is because the topic may not be taught by many BKAs, perhaps because tutors are too busy dealing with the large numbers of new beekeepers to teach it.

There are many ways to make increase, with many variations of them. Those that suit the beekeeper who only wants one extra colony may not be the best for the one who wants thirty. The principles remain the same, but the methods may change.

If the usual precautions of hiving on foundation, not feeding for several days and isolating by distance, barrier or direction are taken, I see nothing wrong in taking in swarms to make small increase. In most years there is a surplus (or the BBKA office thinks there is!) and there is so much to learn from hiving a swarm and seeing it develop. Even if there is a problem with it, there is a lot to observe and learn. For a beginner, a colony that is preparing to swarm will provide an excellent opportunity to increase, perhaps by artificial swarming, the removal of a nucleus or using one of the methods that use a board, such as Horsley or Snelgrove.

Those who need more increase are likely to have a reasonable number of colonies already. This could be someone who is looking to expand their operation, producing nuclei for sale or perhaps a BKA supplying new beekeepers. They have methods available to them that may involve taking bees and/or combs from a number of colonies. That approach may not suit the smaller beekeeper, although it is always worth knowing and understanding the various methods; you never know when you might need them.

Some BKAs have problems producing enough nuclei or colonies to satisfy the needs of their beginners. I do not wish to be critical, but I think it is a pity that beginners have to source bees elsewhere, because they could be on their own when they inspect their colony for the first time and they know little about them. If bought online, without inspection by an experienced beekeeper, there may be problems that a beginner would not spot. I have seen some very poor nuclei that were bought online, with faults that include drone-laying queens, not enough bees to cover the brood, sheets of foundation instead of comb, food shortage and the bees being riddled with varroa.

If done at a teaching apiary, there is so much for a beginner to learn from making up their own nucleus and seeing it develop under tuition. It could provide several opportunities for teaching more advanced beekeepers too; this is what you call 'added value'.

I do not have the space here to describe colony increase in any great depth, so I refer the reader to the relevant pages on Dave Cushman's website http://www.dave-cushman.net/bee/increase.html where there are at least a dozen methods given, together with the principles of making increase and subsequent management. There is one page specifically written to help BKAs provide bees for their members with lots of tips.

For making rapid increase, there is one method that involves the bringing together of several other techniques all of which could be used alone. For the purposes of 'identifying' this combination method I am going to refer to it as the 'Roger Patterson Method'. Using this method, it it possible, if everything goes well, to build up from one strong colony in the spring to

as many as ten colonies that are strong enough to go into the following winter and survive. The success does, of course, depend on conditions, which in our fickle climate can vary somewhat.

Making three colonies from one

I will briefly describe the first stage here, as it can be used on its own, making three colonies from one. It is simply the moving away of a strong colony 'A' and placing it on a new stand in the same apiary. Distance does not matter much, but ten feet or more is ideal. Frames with adhering bees, but without the queen, are taken away from 'A' to make two nuclei, 'B' and 'C'. I usually make these up in nucleus boxes into what I call 'two-frame nucs', being one frame of largely sealed brood and one of food, the remaining spaces being taken up by drawn comb if available. This ensures quicker build up, where foundation rather than drawn comb would hinder progress.

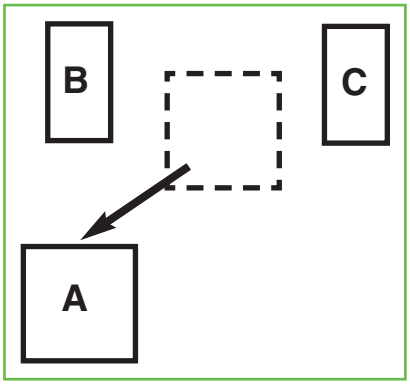
These nuclei, 'B' and 'C', are placed at the side of the site of parent colony 'A' to collect the returning foragers. I prefer placing them slightly in front as illustrated in the diagram, but I do not think it is important. It is best if done on a good flying day when there are still a couple of hours or more of flying time left. Make sure the two nuclei are balanced in bee numbers, because the one that is fanning most at the entrance will attract more returning bees, as will a nucleus if you leave the queen in it. This will be spotted within a few minutes and can easily be dealt with by moving the one with most activity a little further away for a few minutes, then back again. This saves adjusting later.

Acquiring queens for the nuclei

Queens or queen cells will be needed, but they can be raised separately, perhaps in a queen rearing programme, that will give a BKA another topic to teach. I prefer queen cells, but it does not matter. I advise against buying queens as they may be imported, running the risk of introducing pests and diseases, and possibly not being best suited to our conditions. The raising of queens from good local stock is so easy and enjoyable.

If a good colony is preparing to swarm, then use queen cells from that, but remember you may have to remove some emergency cells. If colony 'A' is preparing to swarm, then you are effectively artificially swarming it, but creating two nuclei, not the normal one.

If drawn comb replaces the combs removed from 'A', the queen will lay in them quickly. In a few weeks the population will build up and the colony can take advantage of the nectar flow. This method was used at the Wisborough Green BKA teaching apiary to provide queen mating nuclei on three occasions during 2015, then united in the autumn. It works well, especially if carried out early; the earlier in the season the better, because this gives more time for all colonies to build up. The subsequent management of this method and lots of variations can be seen from Dave Cushman's website where there is a printable PDF. I hope the above and the links will give enough information to help local BKAs provide all the bees their members need.



A simple way of splitting one colony to make three, leaving them in the same apiary. Diagram by Roger Patterson.