

Patterson's Page

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Roger Patterson urges us to read our bees and question what we are told. This, he says, can only make us better beekeepers.

How many times at beekeeping meetings do we hear someone use the well-worn saying: 'bees never read the books' or a variation of it? I tend to turn it round and wonder if beekeepers read the bees, something that in my opinion needs to be done much more. Why has the saying become commonplace anyway? My guess is because in recent years there has been much 'cut and paste' done in books, magazines and websites, as well as the modern practice of following researched information almost without question.

Say it enough times and it becomes 'fact'

There are many things that have crept into beekeeping in recent years that, due to repetition, are now taken as being mainstream information and advice. But is it always accurate and is it good, sound advice? One example that crops up regularly is to leave two queen cells. The reason usually given for doing this is that if one is dud, you have the other as insurance. That might sound logical to an inexperienced beekeeper. However, it is false logic to anyone with a little experience who will know that if the colony and conditions are right a swarm is likely to issue with the first queen to emerge. This may well happen even if one queen cell is not viable, because in my experience it takes several days, perhaps 4–6, for a colony to realise a queen cell is dud, in which case the colony can still swarm leaving no viable queen. This warning is rarely given by those who give the advice, hence the beekeeper is not expecting it, so thinks the bees have got it wrong.

Inherent variability will always be there

I have little knowledge of how the scientific community works, but I have concerns about some of the results I see. I reckon I am an observant beekeeper with a lot of experience of handling different bees in different areas and under different conditions. Sometimes my experience with managed bees is not the same as the results the researchers get. That does not make them or me right or wrong, it simply shows variability. This is not surprising when you consider that, if the same experiment was carried out in California, Poland or Greece, using different races of bees under different conditions, the results may also vary.

The number of colonies the average beekeeper owns in England and Wales is thought to be around four. This, together with the short time the average beekeeper has kept bees, means that many have not built up enough experience to realise that a colony of bees is, effectively, an animal, so will behave as an individual and not always how we are told it should. The more experience you have, the more you realise that if you have two colonies in the same condition, in the same apiary, at the same time and you treat them the same, at the next inspection they may have responded quite differently. It is after you witness this on several occasions that you realise that what you are told may be right in some circumstances, but not in others. The close following of 'standard' information leads to 'beekeeping by numbers', instead of beekeepers understanding their bees and managing them based on what they observe, which I wrote about in an earlier *Patterson's Page* article.

Questioning leads to better learning

I constantly encourage beekeepers to challenge what they are told, but of course you can only do this if you have gained enough knowledge and experience yourself. This will come with time at the hive by watching bees closely. If you have the ability to interpret what you see, you will know that a colony of bees is telling you something all the time. The best teachers of beekeeping don't have two legs, they have six legs and four wings.

I have made many simple experiments that, although they may not be accepted because they may contradict what is 'in the book', have shown me there is often something worthy of further investigation. To show reliable results you need a reasonably large number of colonies. Many beekeepers do not have this, so why not work with others? One experiment I often quote is one I did when open mesh floors (OMF) were first advocated as being good for monitoring and controlling varroa. We were told by some that leaving the floors open during the winter would force the bees away from the floor and retard colony development in the spring. I had eighteen colonies, so I overwintered nine of them on OMF fully open and nine on solid floors, as I had done for many years previously. I made sure the strengths and conditions of colonies in both groups were fairly equal. They all survived, but in the spring the results were not what I expected. The strength and condition was very similar, so during that winter there was little difference in results, but I noticed that all colonies on OMF had much less chalk brood. This was only done for one winter on a fairly small number of colonies with no measurement other than visual inspections, but it told me more than I originally set out to discover.

An example of something the ordinary beekeeper can try might raise a few doubts about some 'standard' information. When you take a queen away from a colony try checking the colony closely at the same time every day. This will give you the opportunity to observe a number of things. If you look at the eggs, I think you will find they do not always move over in the base of the cell as they get older. After nearly three days you may find some eggs are still perpendicular to the base of the cell. I have marked individual cells and noticed they seem to move about quite a bit, leaning over one day, upright the next. Checking the youngest brood every day will help you to tell their ages; always a useful skill. Observing the building of emergency cells has told me that some colonies start them much earlier than others, usually over several days and not all at the same time as often stated. Yet I have observed that if you cut some out after several days, as is often advised, the bees build more, which are all started together and often on older larvae. We all know that worker brood emerges after 21 days, but at 22–23 days there is often un-emerged worker brood.

Simple experiments can easily be done by any beekeeper, but you need to take into account that not all colonies behave the same, which is why I encourage beekeepers to question what they are told. You will often find that 'facts' are not always facts. Go on, try it. You will learn new things and enjoy doing it.