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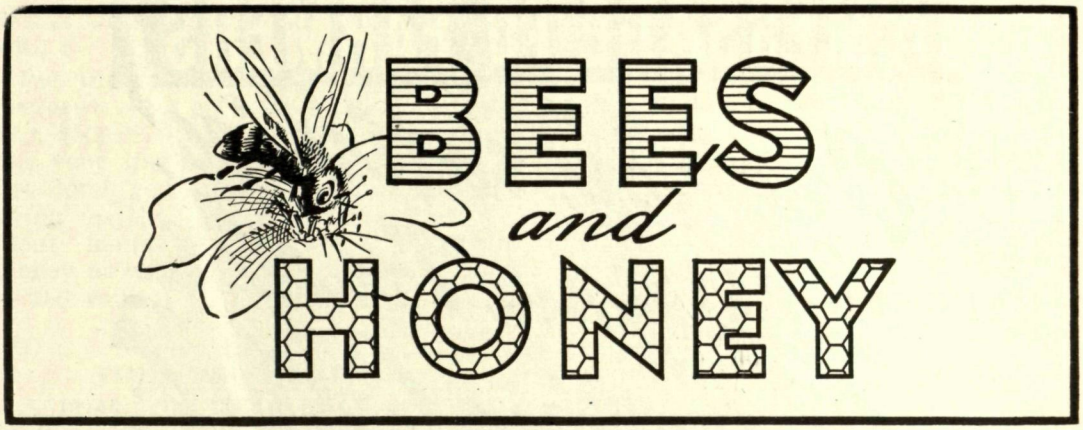

EFFICIENCY IN THE APIARY

By R. S. COLEMAN, R.D.A., Government Apiculturist

EFFICIENCY is a word that most people associate with factories and city life, but it is just as important, if not more important, for the primary producer. Reduced to everyday English, efficiency means more goods produced with less labour and with lower capital investment for the unit of produce sold. Efficiency can be called planned business commonsense designed to save time and money.

All progressive farmers aim to achieve efficiency whether they realise it or not. Their aim is to make profits as comfortably as possible and with the least possible expenditure so that they can gain still greater comfort and extra efficiency by means of the advantages which their increased buying power can obtain. To the apiarist in particular, efficiency can mean the difference between a poor living and a relatively comfortable way of life.

It is not proposed in this article to set a plan, according to which each beekeeper must work or be called inefficient. The aim is rather to suggest a few avenues by which greater production may be obtained with less expenditure of capital and energy. Each individual beekeeper has his own method of working which he has adapted to suit himself, his equipment and his finances.

Obviously the first job is to make the invested money work harder. That is merely sound business, so when planning to buy new equipment, ask yourself these questions:—

1. **"Do I really need it?"** If you cannot keep the equipment busy, do not buy it. A common example of overcapitalisation is the beekeeper with 200 hives using an extractor which would suit a plant of 1,000 hives. As one old hand remarked, "It is quite easy to buy extra equipment but very frequently it takes an extra man to look after it."

2. **"Is there anything I can use in its place which is far cheaper initially and more economical to run?"** Be like a careful housewife and "shop around" before buying.

3. **"In buying this or that, am I following a fashion or using my own judgment?"** Always remember that the leader of the fashion may be wrong and that fashions change very frequently.

4. **"Is this equipment for my own comfort, or is it to increase production?"**

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If it is for comfort, do not debit the bees with it.

Put the depreciation and interest at overdraft rates on the debit side against any capital equipment before working out your increased profits. If this is not done, you are apt to find yourself living on the interest of your investment money and working for the money as well—in effect paying for invested capital twice over.

TIME-MOTION STUDY

A prominent factor in present-day business efficiency is what is commonly termed "Time-motion Study". This new science has made possible large increases in the productive ability of the factory worker, and the principle behind it can be definitely helpful to the farmer.

Basically, the idea is that every movement costs money. Any movement takes time and effort which have to be paid for, so all unnecessary movements should be eliminated as they tend to reduce profits and increase working costs.

These unnecessary movements, especially in repetition work, add up to an amazing total at the end of a working day. If 500 factory operatives are making 10 to 12 movements 20 or 30 times in an hour when the work could be done just as effectively with six movements, the total amount of time and energy wasted has a marked impact on production costs. Apart from the fact that they must all be paid for in time, unnecessary movements cause fatigue which slows down the worker and adds still more to the costs of production.

Most beekeepers, though they may never have heard of time-motion study, try to carry out the basic ideas outlined and one encounters many labour-saving devices in carefully planned apiaries and extracting outfits.

In the apiary itself, a big gain in labour can be made by the careful arrangement of the hives when they are unloaded from the trucks. As they are taken off, they should be placed directly on their sites without unnecessary carrying, so that the hives will be in two lines after the truck has passed.

It is during the extracting period that the need for time-motion saving is most obvious. Much can be done by a re-arrangement of the equipment in the extracting caravan or shelter. The man taking the honey from the hives should not have to lift it more than once, but should be able to transfer it straight from the hive to the barrow. It can be said that one extra lift of the supers means he has to lift an extra ton or two during the ordinary working day, which adds considerably to his fatigue and tends to slow up the work.

The man with the decapping knife should never be required to release the knife from his right hand. Full combs should be placed in such a position that he should be able to pick up the individual combs for extracting without bending or reaching very far. The decapper should never have to pick up full supers of honey.

The uncapped comb should then be placed in such a position that the man operating the extractor can pick them up without having to bend or reach and he should be able to replace the wet combs in the boxes to return to the hives, also without unnecessary effort.

When points such as these are closely observed, it is possible for one man to uncap and extract 600 hives on a reasonable flow with another man moving the supers to the honey house, all without undue strain or long working hours.

WORKSHOP EFFICIENCY

The beekeeper who produces the most honey for his labour usually has a well-equipped workshop. It need not be large or expensive, but by using this workshop properly such a man has beekeeping equipment that never fails him in an emergency. The basis of the

workshop is a simple home-made circular saw, possibly augmented by a buzzer and disc sander.

On entering the workshop, one notices that there is a place for everything and everything is in its place. The cutting tools are sharp, because they are never put away in a blunt condition. The building is clean and neat so that tools are not lost. Time spent looking for tools is time wasted.

Put the acid test on your apiary management and check up on the room for improvements. Improve what is already good so that it becomes excellent.

The biggest threat to success is apathy, so never be complacent or contented about past successes.

System and organisation are even more important to a one-man business than to a large concern, as the owner is executive and labourer, salesman and purchaser. Less time spent on the labouring jobs means more time available as an executive.

The simplest schemes are best if they do the job successfully. Always be ready to realise that the mere fact that you have done the job for a long time does not mean that your methods cannot be improved.

Use slack times to reorganise, and endeavour to have all your hives and equipment standardised throughout the apiary.

Plan carefully. A leading producer once said to me, "I am not a brilliant man but I succeed, because every night I put my feet up on the mantelpiece and plan for tomorrow."