The Garden Farm Guide To Beekeeping

From **Gene Logsdon** (1985)
WIth Update - November 2008
Garden Farm Skills

I hesitate to describe the way I produce the 8 to 10 quarts of honey we eat every year (we use honey, maple syrup, and sorghum molasses for sweeteners but seldom use honey in cooking or baking). I ignore almost all the rules in bee books about producing honey, and I have done so for eight years without any ill effects at all. Commercial beekeepers will say I've just been lucky, and I suppose to some small degree that's true. But you, too, can easily be that lucky while reducing the complications of beekeeping to a very simple, low-cost, and low-labor activity.

The reason I can ignore the “right” ways of beekeeping is that I allow the bees to perform their natural functions as naturally as possible in the domesticated environment I provide them. Bees in the wild take care of themselves quite well, and so long as there are places for them to live and nectar for them to gather, they go right on living, even though individual colonies occasionally die out.

The “right ways” that I more or less ignore are the necessary steps the beekeeper must attend to when he is *manipulating this natural bee activity for the highest possible honey production*, that is, when he or she wants to produce enough honey to make the operation *commercially* profitable, possibly even as a way to make a living. Almost all how-to books consciously or unconsciously assume this kind of profitability as the ultimate purpose of home-based work: If the work is cottage industry, then it must make dollars and cents in the so-called real economic world. This assumption even insinuates itself occasionally into how-to gardening books even though the salvation of gardening is that it is a noncommercial type of agriculture. The reason I harp and carp on this point is because the very essence of traditional skills and crafts is the avoidance of and freedom from the profit motive. My bees do not make money for me. But being free of the time and equipment I’d need to manipulate them to “profitability,” my bees certainly do not lose money, either. The 10 quarts of honey would cost us, retail today, about $40. We bought a $150 extractor, an extravagance already paid for out of that yearly honey income. We’ve bought little else except honey frames and wax foundations and the usual veil, gloves, and hive tools. I made the hive bodies or received them free from other beekeepers simply by being patient and alert.

There are always bees in hives for sale in the fall in rural newspapers, or to be had for free from someone who went into the bee business for money and lost interest, or from swarms free for the capturing. Hardly a year goes by that I am not called to capture a swarm, usually by a frantic homeowner scared to death of the bees, although when swarming, bees seldom if ever sting. I got my start with a colony owned by a man who found he was becoming dangerously allergic to bee stings. He had three hives. I knew nothing about bees (still know very little). I called a beekeeper. Would she help me get the three hives in exchange for two of them? Gladly. The owner graciously gave us the hive bodies and supers (hive boxes), too (all were in bad shape). We wrapped up the hives in burlap sacks (I watched) and carted them off in a pickup truck. I was in the bee “business.” The old saying is that you have to move a colony either just a few feet, or you have to move them a few miles so that the bees will not return to their old location. We were beyond the 3-mile limit, so no worries.

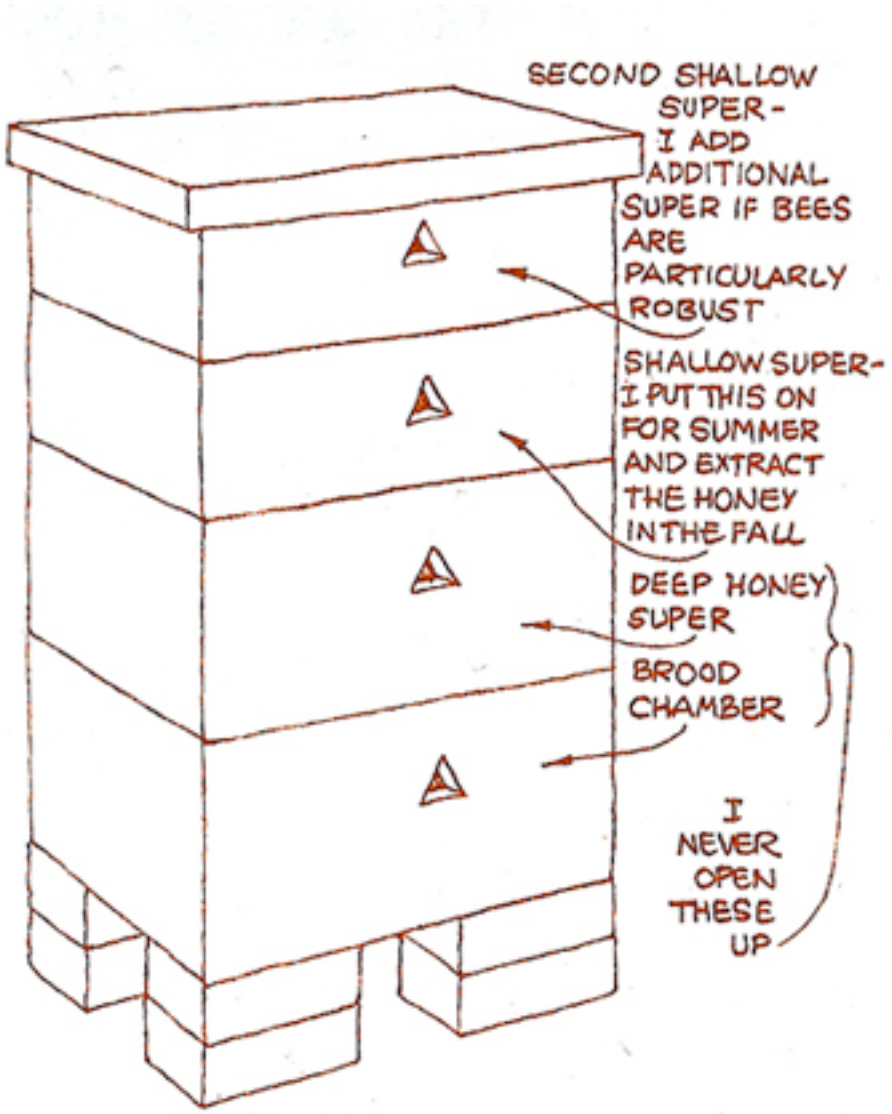
I put my hive up on bricks and doused the bricks with used oil to discourage ants from raiding the hive. I cleaned and refurbished the honey supers that I would

eventually add on top of the brood chamber. I must confess that in eight years I have never looked into the brood chamber. To be quite honest, I've been afraid to root round down in there and get on a first-name basis with the queen, or do any requeening or such complicated maneuvers. My theory is that she will do her job if I just don't bother her too much. And I never have. Every June I add a shallow super over the original brood chamber and original deep honey super that I never monkey with. In recent years I've added a second shallow super. In late October I take off this top super and remove the honey. Next June I put it back on again. That is the entire extent of my beekeeping efforts.

What happens, of course, is that when the colony gets overcrowded, because I do not add more supers in the summer, they swarm. The commercial beekeeper goes to great lengths to avoid swarming, so that hive population increases and produces more honey. I welcome swarming. It is the bees' *natural* way to increase themselves. The old queen and old bees leave the hive. A new queen and new workers build up in the hive — renewing the vigor of the colony, and, I'm now quite sure, helping to avoid diseases and other problems that come with the unnatural buildup of huge colonies.

The reason my careless beekeeping methods work is because there is always plenty of honey in the hive for the bees. I'm convinced that feeding them sugar water is not a healthy substitute.

But since I've never taken very good care of the hives (I don't even insulate them for protection in our often subzero winters), I've believed that sooner or later my hive would develop problems — at least needing the brood chamber cleaned or replaced. Rather than do that, and also so that I would have to take even less honey out of the one hive, I started a second by capturing a swarm (see below) that issued from the first one. Now, if something goes haywire in the first hive, I will simply destroy it, clean out the brood chamber, and start a new hive from another swarm from the newer colony. But nothing has gone haywire in eight years, as I've said, and the two-hive arrangement works well for me. When production is down in one due to a recent swarm, production seems to be up a little in the other. So now I'm preparing a hive to start a third colony, after which I will (I tell myself) destroy the oldest one right after it swarms, since two healthy hives is all I wish to keep.



My two hives are not up to professional standards. In one there is no hive cover under the lid as the books say is necessary. One hive has a queen excluder over the brood chamber; the other does not. In neither of these cases does there seem to be any difference in bee activity or honey production. I don't have a proper bee entrance on either hive — just a little piece of wood to block part of the entranceway so the bees have less doorway to defend in case of intruders. Ants try to get in the hives (which are not up off the ground far enough) but when I've watched an ant raid, it always seems to fizzle. The bees carry the ants away as fast as they try to come in. I suppose some day I will get wax moths, but not so far. There's a buckeye tree nearby, the pollen of which is supposed to be poison to our to bees (although the honey bees make from it is OK), but this has seemed to pose no threat either. I continue to operate on the theory that the bees know what they are doing.

I have no very professional way to remove the supers and frames full of honey. I wear protective clothing and use a smoker, of course, puffing smoke all over myself, as well as at the entrance to the hive before i pry off the lid. I puff more smoke over the exposed frames, but not too much. Too much just upsets the bees. I've never found an easy way to drive the bees down into the hive farther, since I have no air blower. I merely pry up a frame at a time, shake the bees off of it, or brush them with my gloved hand (I have no bee brush, either), and carry the frame back to a pan or bucket sitting beyond the range the bees consider their own private territory — about 30 feet away. Then I go back and take out another frame, and so on until the super is empty. Then I lift off the empty super and put the lid back on the top of the super below.

Then I carry the pan full of frames to the house. The bees remaining on the frames I can now brush off with impunity and they fly away. There's always a couple that get crushed in this transfer. Back at the hive you should be very careful to try not to crush a bee. This can arouse coworkers. But never panic! I've injured bees at the hive, without disaster. I puff a lot of smoke if they start up that certain angry kind of buzzing you soon learn to recognize. I've only been stung twice in eight years.

The caps have to be cut off the combs. We don't have an electric decapper either, but use a butcher knife, the blade kept reasonably hot by dipping it into hot water now and then. The hotter the blade, the easier it cuts through the combs in the decapping process. It's a messy job no matter what, and you should put down newspapers everywhere, because no matter how careful you are, honey will drip on the floor, you will step on it, and then track it elsewhere.

Some of the frames are filled with sheets of foundation wax reinforced with wires that run through them; other frames have wax sheets that are not reinforced. The former are stronger and better, but with the latter, we can cut out large squares of comb honey. I use these unreinforced sheets for comb honey rather than fussing around with the little boxes and special supers used for production of comb honey in commercial apiaries. I first read about this in the books by Ormond and Harry Aebi, *The Art and Adventure of Beekeeping* and *Mastering the Art of Beekeeping*, which are, in my opinion, the two best and most readable books on bees (the former now published by Rodale Press, 1983, the latter by Unity Press, 1980, now out of print). The sizes of the squares, once cut from the frame, are just about right to fit on a saucer. We put a piece of wax paper over each square, so they are protected until they are eaten.

The frames with the "windows" cut out for comb honey can be put back in the hive, and the bees will fill them in with comb and honey again so that I can extract the honey from them. If I want more comb honey, I cut out the entire comb

in the frame, rather than leaving enough margin around the “windows” for the bees to work from, and I put a new sheet of foundation wax in the frame.

Most of our honey gets extracted in our stainless steel extractor. This operation is very simple. Two frames that have been capped are placed in the wire basket inside the extractor (one at each end). A few twists of the hand crank begins the centrifugal force that throws the honey out of the outside combs of each frame. Then the frames are turned around, the process repeated, and the other sides of the combs emptied. The honey flows slowly down the sides of the extractor to the bottom and then is drawn off through the spigot into jars. Bits of comb wax in the honey float to the tops of the jars and can be skimmed off. The only honey that we strain is that from the comb cappings taken off in the decapping.

In some frames, the honey is occasionally of such poor quality that it crystallizes right in the comb, something none of the books warned us about. As far as we can learn, this is honey from certain wild weeds and flowers. You can’t do much with it, and the taste is not very good, so we put it back for the bees to eat. We also put back the cappings and old combs and the bees clean up every bit of honey on them. We then use the wax for an occasional candle or to coat thread for sewing or for grafting. Fortunately, that poor-quality honey is a rarity, and in most years we don’t find any of it in the frames. The best source of good honey in my area is now soybeans, vast acreages of which are a great boon to beekeeping, so long as the crops aren’t sprayed with lethal insecticides.

But the honey is different every year. Some years it tends to crystallize in storage more than in other years. Some years it doesn’t crystallize at all. When it does, we put a quart as needed in a pan of water and set the pan on the wood stove. It takes about half a day to melt the honey back to a clear liquid.
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Capturing a Swarm of Bees
If you decide to start beekeeping by capturing a swarm, have your empty hive, smoker, and veil ready at all times. After you have informed local beekeepers and everyone else that you are looking for a swarm, you will almost surely get more calls than you want. But if you follow my advice, be patient and choosy. I believe you should wait for a swarm that is clustered close to the ground. Those high in a tree are too difficult to capture. Banging on a pan will not bring them down after they have clustered, although strange as it seems, there are beekeepers who insist a swarm in the air can be brought down by this ancient custom. Also if there is a hive of bees in a house or building, leave their removal to experts, I say. Such bees are usually not swarming but are a working colony, and they will not take kindly to capture the way a swarm will. In these cases, you can often get a beekeeper to capture the swarm for you (or move the housebound colony).

A swarm you can reach from the ground is fairly easy to coax into a super. Set the super on the ground next to the swarm and take the lid off. Bend over the branch the bees are clustered on (or cut it off) and gently shake and brush the bees over the super and in front of it. Keep your smoker handy but use it

sparingly. Swarming bees rarely sting. I was scared to death the first time I hived a swarm. They were on a fence post, and the best I could do was brush them into a cardboard box and then pour the full box over the open super. Don’t waste time trying to locate the queen. She’s down in the middle of the cluster and is difficult to pick out. Usually she crawls right on in the hive with the other bees. You will soon be able to tell, because if she inadvertently crawls under the super or is still back on the post or wherever the cluster formed, the bees will come out of the super and crawl or fly around aimlessly and eventually back to wherever she is. When I had most of the bees in the super — don’t try to get all of them — I closed it up and carried it back to the stand I had prepared for the occasion. I was amazed at how easy the undertaking had been. And more than anything else, the adventure cured me of being overly afraid of bees. After you have raked fistfuls of them into a box right under your nose, they just don’t ever seem so awesome again. Bystanders will think you tremendously courageous or possessed of some gift. They will never believe that bees in swarm are so gorged with honey they hardly ever think about stinging.

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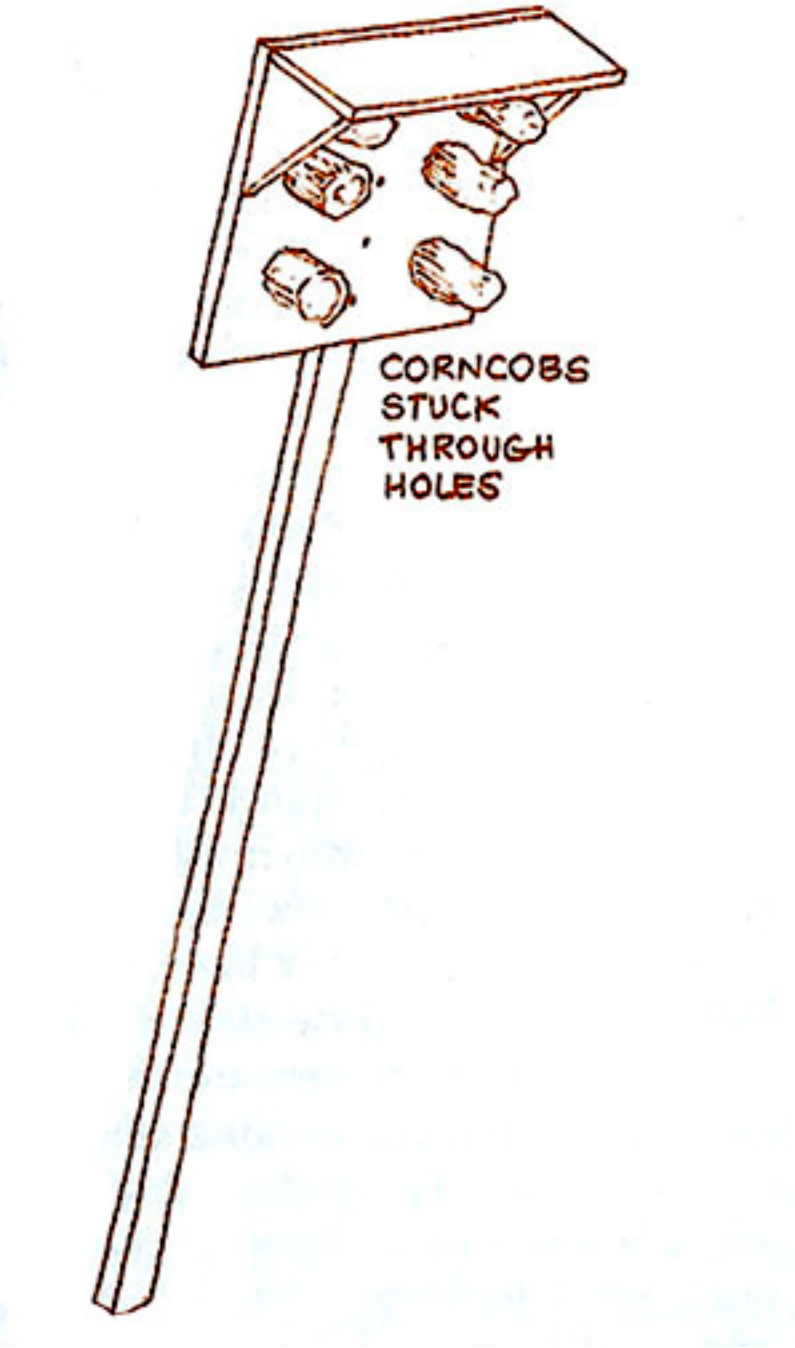

A Bee-Hiver

A very old tool can be helpful in capturing a swarm. It is called a bee-hiver and is easy to make. Take an 18 by 14-inch board of regular ¾-inch thickness. (This size of board fits easily inside a super.) Drill about half a dozen holes in the board, sized to accommodate a corncob tightly. Make a sort of hood on the board by nailing another small board, 3 or 4 inches wide and 14 inches long, at one end of the bigger board, with two little triangular wood braces at each side to strengthen the connection between the two boards and to complete the hoodlike

structure. Then nail or bolt a long handle to the back of the hood. The handle can be from an old broom, or even better, a longer piece of 1 by 2-inch lumber. Stick corncobs through the holes you have made in the original board. The tool is now ready for use.

Lift the hood up to the swarm and gently work it in amongst the bees. Or tap the branch they are on with it. Invariably, the bees will begin to crawl onto the corncobs, which have a very nice texture for them to hold onto tightly. When the swarm has clustered onto your bee-hiver, lower it to the ground, lay it flat, and set the super over it. The bees will go up into the frames and then you can set the super back on its base.

The original use of bee-hivers was more to lure a swarm than to capture one. Two or three were kept stuck into the ground at a slight angle in the vicinity of the beeyard. When a swarm left a hive, it would most often alight on the bee-hiver.
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Some Bee Wisdom
Since there is almost always some grain of truth in the most ridiculous of folklore, I have often wondered about the ancient superstition that when someone dies in the family (i.e. who has been caring for the bees) the bees have to be told. Although literally the notion is ridiculous, I have a hunch it began as a sort of clever or droll way to underline the much less ridiculous belief that bees know their keepers quite well and even distinguish friendliness in humans from fear, if not dislike. This kind of differentiation is well documented in animals, particularly dogs, so why not in so intelligent a being as a honeybee? The hive I started from the swarm I capture has always been friendlier to me than the other hive. Or perhaps I unconsciously am more comfortable around this hive, and so the bees respond in kind. In any case, folklore that teaches us, however drolly, to treat bees as if they were almost human is not ridiculous in the least.

Locate hives in an area where they are protected from harsh winter winds, but where in summer they are shaded in the afternoon. Nearness to water is not as important as some books insinuate. Bees can get plenty of water from dew. But it is important to have your hives located near nectar sources. The farther a bee has to fly for nectar, the less nectar it can gather. Bees are in bad humor on cool days when they can’t find much nectar, but when there is a good flow of nectar, as from an apple tree in full bloom, you can brush the bees in the blossoms without fear. They are too happy to sting. Around the hive, however, try not to get between the hive entrance and the airways the bees generally travel. Approach the hive from the rear.

To lessen the danger of being stung when working around the hives, as in mowing grass and the like, hang a piece of your clothing — any cloth with our

scent on it — close to the hive so that it flaps in the wind. The bees get used to this “intruder” in their midst and are less wary when you walk close. Don’t wear perfume, after-shave, or anything of that sort around bees; they’ll go right for you, thinking you’re a big, juicy flower.
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Update November 2008: I still take care of my bees the way I described twenty some years ago, that is, by just leaving them alone. Every year I take off the top frame for our honey and every spring put the empty one back on again. I have not had any problems with the new diseases that are plaguing beekeepers. However, I am now down to one hive again, and the bottom brood chamber really does need to be replaced or cleaned up. The hive seems to be declining a little and I fear wax moths will attack. That is one of my jobs for this winter: to get another brood chamber ready and put it on top of the old one or replace the old one next spring. ~Gene

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