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OKLAHOMA A. & M. COLLEGE—EXTENSION DIVISION
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METHODS BY WHICH, WITH A FEW COLONIES OF BEES, HONEY MAY BE HAD THROUGHOUT THE YEAR

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Introduction.—In the past twenty years, honey conditions in Oklahoma have changed greatly. With the increased acreage of alfalfa, cotton, sweet clover and the advancing growth of locust and fruit trees, as well as ornamental flowering plants, we now have an assured source of honey.

One man living near Stillwater increased his average annual honey yield from thirty-five to sixty pounds per colony by sowing his fence rows to sweet clover. (For sweet clover culture see Extension Circular No. 11.)

Bees Are Easily Managed.—A great many persons fear the sting of bees. It is much as in the western country years ago when there were large herds of cattle, but very little butter was made because the cows were so wild and kicked so much that only one or two cows per family were used for dairy purposes. At present, however, with the improved breeds, nearly every farmer has butter and cream for his family throughout the year and receives a nice profit from the sale of these products. The same conditions apply to bees. The stinging black and hybrid bees have given place to gentle Italians.

Practical Bee Men Are Seldom Stung By Bees.—The following up-to-date plan was outlined by an experienced, practical beekeeper in Oklahoma. It is one which any person living either in the country or city can use with a very small outlay of money or time and will provide honey for the family throughout the year:

In the first place, do not bother with black bees any more than you would attempt to run a dairy with long-horned Texas cows. Get pure Italians. In the second place, do not waste time and money with boxes or hollow logs. Obtain modern hives and fixtures. The hives should be placed near the house where stock will not bother—in the shade of a peach

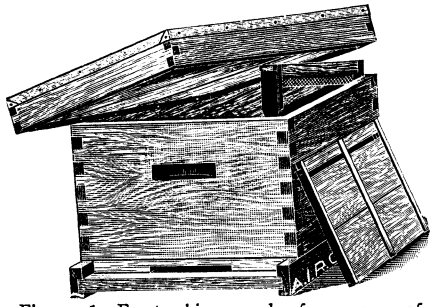

Figure 1—Empty hive, ready for swarm of bees, excepting that full sheet of foundation should be shown instead of starter.

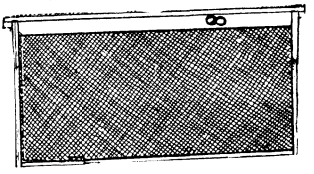

Figure 2—Frame with full sheet of foundation

tree, if handy, though this is not absolutely necessary, since bees can sit in the sunshine without much discomfort on account of the improved hive covers. By being near the house they will be noticed when they swarm and new swarms are thus more likely to be saved. Bees do best in hives placed four to six inches above the ground. Arrange a foundation of four bricks with short pieces of 2x4's on top for the hive stand. The hive should face the east or south, be level crosswise, and about one inch lower in front than behind.

New Swarms—Swarming Time.—During May or the first part of June, generally in the forenoon, new swarms should be looked for. Do not get excited when the bees swarm or show ignorance by beating on a dishpan or ringing the dinner bell. Watch them until they settle in a cluster, which they will probably do on the very peach tree the parent hive is under. They will stay there an hour or more, which will be all the time needed for hiving them. After the bees have clustered, move the hive from which they came ten feet or more away from its foundation, place a new hive on the foundation, slope a short board from the ground to the entrance, cut off the limb with the cluster (wear a bee veil) being careful not to jar the bees from the limb. Carry them to the hive and lay them gently on the sloping board. If they settle on a limb which you do not care to cut off, get the dishpan and, with some kind of brush, rake them into the pan. When you have brushed them into the pan, or have filled the pan, carry it to the hive, pour them on the board and, with a small stick, drum gently on the hive. Sometimes it is necessary to make two or three trips with the pan, but if a few are left on the limb they will generally come to the hive later. A brick or stone should be placed on the hive cover to prevent the wind from blowing it off.

The whole family will be interested in this manipulation, and if the bees are not suddenly jarred they will be very quiet and the family can gather round and watch them march into their new home.

When to Place Supers on the Brood Chamber.—In about three weeks, by the aid of a smoker (later described), blow a few whiffs of smoke into the entrance of the hive, raise the cover and look in. If sealed honey is present, place a super on the brood chamber. As soon as the super contains sealed honey, place another between it and the brood chamber. When the honey is entirely sealed over it is ready to eat. Whenever desired, take a frame from the super and cut the comb out so that about half an inch is left along the top bar. This can be used by the bees as a starter in refilling the frame.

The Art of Reducing an Oversupply of Colonies.—When the bees have increased to four colonies, choose a nice evening during the latter part of October, about an hour before sundown, smoke two of the colonies, remove the cover of one, raise the other from the bottom board and place it on top of the uncovered one. Do this with both sets of hives. Remove all supers at the same time and place in a dry storeroom.

Storage.—Honey and bee apparatus should never be stored in a damp place, such as a cellar or cave. About the first of the following March, or as soon as the bees commence to gather pollen, remove the lower half of each double hive and place in the storeroom. Later these hives can be used for new swarms, and are much better for this purpose than any other kind, since the combs are already prepared.

Caution.—Now just a word of caution. Do not try to produce comb honey in pound boxes because Oklahoma conditions are not adapted to such production. An expert beekeeper is required to make a success of the pound section production. Do not imagine that you can get rich at this business just because you take off, say, from 200 to 300 pounds of honey during your first year's experience. Follow the plan outlined, and read a

bee journal and a good bee book. Answers to every question that may arise can be found in such literature.

How to Obtain a Start in Bees and Bee Supplies.—Buy from a neighbor, if you can buy from him cheaper than from a dealer. Bear in mind, however, that when you sell a cow, for instance, you do not always sell your best one, but more likely one with a peculiarity that you do not like. Such conditions hold true with bees; for which reason it is often better to buy from a dealer. He will be inclined to sell you something good because he must have a good reputation in order to sustain and increase his trade.

Cost Price of Bees and Apparatus.—A colony of Italian bees in complete, standard, one-and-a-half story hive will cost about $10.00. One empty hive, ready to place a new swarm in, supplied with full sheets of foundation in the brood chamber, and starters in the upper story, or super, will cost $3.70. See Figures 1, 2 and 3. A standard smoker, which is one of the necessities in handling bees, will cost 85 cents. See Figure 4. A bee veil, used for protecting the face from stings, is made mostly of cotton, but some veils, such as No. 2, have a small observatory square of silk tulle on one side. This is a good one and costs 60 cents. See Figure 5. A book containing general information concerning bees—how to transfer from soap boxes, nail kegs, etc., to standard hives, and, in fact, all that a bee-keeper needs to know—costs about $2.50. See Figure 6. A total of about $17.85 will cover the cost in starting with bees. Additional expense is hardly necessary unless it is desirable to keep four or five colonies instead

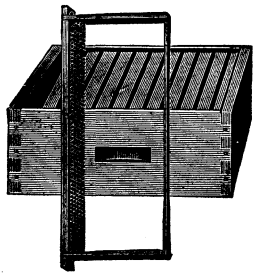

Figure 3—Super with starters in the frames

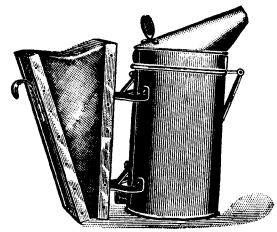

Figure 4—Bee Smoker

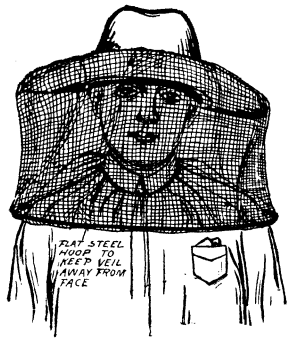

Figure 5—Bee veil

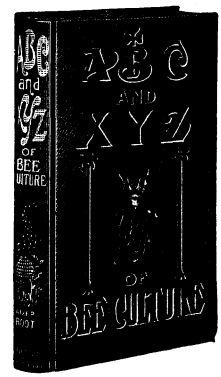

Figure 6—Bee book. Tells everything about bees

of two. The additional expense in such cases would be only for the hive, the cost of which has already been given. As a result an average of 100 pounds or more of fine honey can be harvested each year to advantage.

Colonies for Farmer.—There should be from two to five colonies on every Oklahoma farm, except in the extreme prairie and arid localities, where neither alfalfa nor sweet clover will grow. The nectar of plants should not be wasted. It can be saved through the agency of beekeeping. Enough honey in the raw state goes to waste annually in Oklahoma to more than supply the people of the State. Tons and tons of cane and beet sugar are annually consumed in Oklahoma at the rate of about eighty pounds per person. Sugar is not easily digested, and is one of the sources of impaired bodily functions. Honey is easily digested, and contains, in addition to its highly nutritious predigested food elements, other valuable ingredients, such as iron, that are not found in ordinary food or sugar. Two ounces of honey is as much as a person should eat at one meal. With the moderate use of this commodity the average person can eat it every day to great advantage, provided other foods, such as bread or milk, are used with it.

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GENERAL RULES FOR BEE CLUB FOR YEAR 1917

Honey Bee Club members should have one or more colonies of pure Italian bees, in modern ten-framed, dovetailed hives; one hive tool; one bee veil; one bee smoker; and one bee book (preferably the A, B, C and X, Y. Z of Bee Culture, by Root). A report shall be made to the county or woman agent every month in which the bees gather honey and pollen. A list of all the plants from which the bees gather honey and pollen should be made, if possible, showing the dates that the plants yield. Among important topics of the report to mention are, time of placing supers on the hives for surplus honey, the presence of drones, increase in numbers, swarming, etc.

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REQUIREMENTS FOR COUNTY TEAM

Each member of team shall exhibit two combs of honey in super frames.

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SCORE CARD FOR HONEY BEE CLUBS

Surplus yield of one hive	30
Profit on one hive	30
Exhibit of two combs from one super	20
Written account of the honey, the personal management and required reports	20