BEEKEEPING

This has been one of those maddeningly elusive topics that we run into once in a while. Four years ago, for example, we were told that Terrell Lamb's old beegums were still set up in his field. When we checked it out, though, we found that they had all disappeared. That began a search for an old beegum still in use that just ended this year in Farish Kilby's back yard over on Persimmon.

The same thing was true with bee trees. We finally located one, and we had Lon Reid's assurance that he'd cut it with us this spring so we could see how it was done; but he got sick and never was able to complete the job. Mrs. Mellinger's companion article, meanwhile, sat in our office for over a year while we followed one false lead after another—or made contact with men who could add pieces to the story, but never quite enough to complete it.

Now, however, with the help of people like Esco Pitts, Lawton Brooks, Elb McClure, Farish Kilby, Lon Reid, and many others, we think we've about got it. We still don't have those pictures of a tree being cut, but we're going to have to wait until next spring before we can try again. Meanwhile, here's what we have so far.

BEEGUMS

In the early days of beekeeping, the hives were nothing more than

PLATE 10 A hollow tree trunk used as a beegum.

twenty-four to thirty-inch long sections of hollow black gum trees—a fact that has caused even modern hives in the mountains today to be called "gums," "beegums," or "plank gums." Some peculiarity special to the black gum almost invariably caused it to be hollow and thus perfect for hives (and, incidentally, for dripping lye for lye soap).

Hollow sections of the tree would be brought home and the inside rounded out smooth and uniform with a long chisel. "Middleways" of the gum, four holes would be bored—one at each point of the compass—and two sticks run horizontally through the gum at right angles to each other. These sticks acted as supports from which the bees would suspend their brood combs. The bees would automatically save the top half of the gum for their honey and would hang those combs from the plank lid, or "head," that was set over the top of the gum. The head was often held in place by a stick run through two wooden eyes (visible in several of the following plates). Then a slanted, easily removable lid was usually set above the head to keep rain from running into the gum.

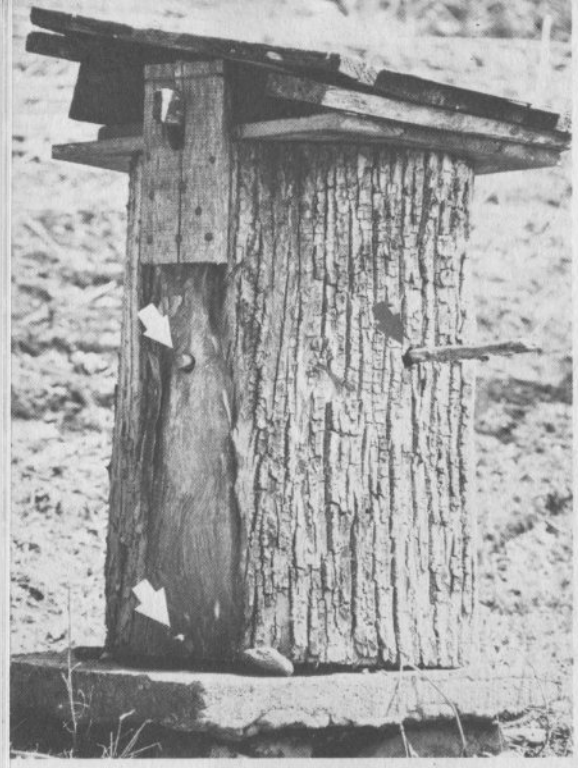


PLATE 11 Farish Kilby's bee-gums are of the earliest type. The two arrows in the middle show the ends of the crossed sticks that pass through the middle of the hollow gum. The arrow at the bottom points out a bee about to enter the gum. Note the wooden eye at the top of the gum. It holds the stick that clamps the head on.

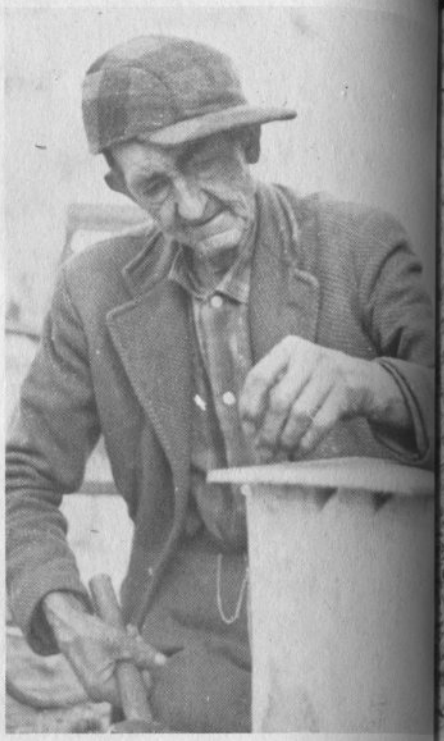
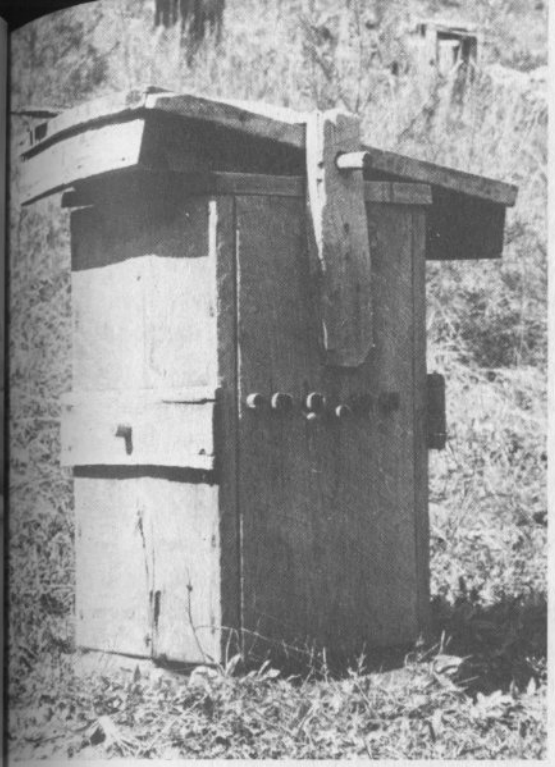


PLATE 12 Ed Ramey nails the base onto a new gum. Note how the base extends beyond the entrance holes to provide a landing platform for the bees.



PLATES 13–15 Lon Reid's plank gums are the next step in the evolution from hollow tree trunks to modern supers. Lon's gums also have the wooden eyes for holding the heads on tightly (*13*), and the crossed stick design (*14*). To make sure the lids stay on, Lon piles rocks on most of them (*15*).

Beekeepers always set the gums on flat platforms raised well above ground level. Small rocks could be set under one edge of the gum tilting it slightly so the bees could enter; or "V"-shaped notches were cut into the bottom on one side to serve the same purpose. The platform extended several inches beyond the entrance to provide a landing area.

These gums were so satisfactory that even when the early beekeepers began using plank gums, they used the same "crossed-stick" design. The hives were childishly simple to build, and they could be easily "robbed"; one simply removed the slanted roof, eased the head up a crack, slid a long-bladed knife in the crack and sliced the comb from the head, removed the head, and cut out the honey.

There were some disadvantages, however, that became obvious when the modern "supers" were introduced. One disadvantage was

that since no comb foundations were provided for the bees, as in modern hives, the bees simply hung the combs in random fashion from the gum head. Removal was a sloppy, sticky job that fractured the combs and often drowned masses of bees. The honey thus removed was also often cluttered with debris such as dead bees, eggs and larvae from the brood chambers below, splinters of wood, ashes from the wads of burning rags used to smoke the bees, and so on.

Another disadvantage was that there was no control over what type of honey the bees collected. With supers, when the sourwood began to bloom, the beekeeper could simply add a new, empty super, and he could pretty much count on getting it filled with the almost colorless sourwood honey. The honey collected in gums, however, represented nectar from everything that had bloomed from spring to the time the gum was robbed. It was dark in color and not as delicate in flavor.

Yet another disadvantage was that since the comb stayed in the gums "from one robbin' to another"—i.e., twelve months—it was tougher and older than that of the supers which were changed regularly.

The gums sufficed, however, and it is a tribute to their usefulness that people like Farish Kilby and Lon Reid still use them today.

BEE TREES

When the new gums were ready, the next step was finding a bee tree. Sometimes one was stumbled across by accident out in the woods. More often, however, beekeepers either found a watering place or set out bait and then followed the bees home. For bait, Esco Pitts's father used corn cobs soaked in honey. He would choose a spot somewhere in the woods, chop out undergrowth and low-lying limbs to create a small clearing (or just find a natural one), place the bait on a piece of bark in the center of the clearing, and then sit down nearby to wait. In short order, if bees were anywhere in the vicinity, one would find the bait, fly back to the tree to tell the others, and soon have a supply line set up from the bait to their tree. The bees would light, fill up, rise and circle once or twice to gain altitude, and then head in a "bee-line" for home. All one had to do then was note the direction and head that way. As Esco said, "He'd course'em from that."

Often the bait was carried along and reset somewhere along the line to check direction and to see whether or not the tree had been passed yet.

Variations in style and bait abound. Some used a drop or two of

sweet-smelling anise. Elb McClure used sugar water (one part sugar to one part water) or pure comb honey. Lon Reid's father used corn cobs soaked in salty water for bait, and Lon still keeps salt water near his gums: "You put the salt on th'cobs and then put water, and they suck th'salt out of th'cobs. There's not many folks, I guess, that know that, but they'll search for salt. I never did know what they done with it. Daddy said they fed it t'th'young bees. I never do put much salt. Liable t'get it too salty. I don't know, but they'll suck at it. They will. They'll just cover them cobs up if y'put salt in'em."

Joe Kilby claims that some old-timers used to put corn cobs and dirt in a bucket, urinate in it, and then leave it for a few days. When they got back, the bees would be there. And Elb agrees, saying the old-timers used to call that "stinkbait." At times, he adds, they would even feed it to their bees in early spring before the honey flow started. Soon after it started, however, "th'bees wouldn't fool with it."

Lawton Brooks used a different bait: "Well, now, t'make your bait up, y'take a little honey and some vinegar and warm water, and stir it up together—not too much—and then y'just go and get a bunch a'leaves, or find y'a stump'r'somethin' out in a kindly open place in th'woods. I bet y'a dollar I can put some out where you live in your yard and have a bunch a'bees on it in five minutes. They'll come to it. And then y'watch'em, and when one gets loaded, he'll make a circle'r'two, and then when he starts, he'll go just as straight t'his tree as you can shoot a rifle. Then y'just go th'way he went, and y'just look at th'trees when y'get out t'th'distance you think he went.

"I'll tell y'what I do when I think of it. I fix me a little can a'bait. I generally keep a can wi'me in th'summertime in my car. And when I fish, I put some out and get t'watchin' it.

"Th'best place—if you can find'em a'waterin', you can find their tree 'cause they water at th'closest place to their tree. I went down there in th'pasture one day and found some a'waterin', and they went right up across th'road and right in by a poplar tree. I sat there and, 'Know you ain't high on that hill, son, 'cause you went into th'woods too low down.' So I got my little ol'hatchet and went right down th'road. At th'little ol'tree I turned up in th'woods and I looked around a little bit—up three'r'four trees—and they'uz a big ol'dead tree a'standin' up there on th'mountain, and he went straight for it. I said, 'Oh, he's in that'un.' He was in a big ol'black oak that had a bulge on it—looked like a maul. And they'uz a split place about that big in it, and buddy, they was just a'fillin' it full goin' in and out. I found it in ten minutes. It's still up there."

PLATES 16–18 Lon found a bee tree for us, but we didn't have a chance to cut it. In *Plates 16* and *17*, the arrows show where the hole is (the arrow in *Plate 17* points out a bee entering the hole). In *Plate 18*, Lon and Merle, his grandson, sit at the bottom of the tree watching the hole.

Joe Kilby often left his bait set up overnight. When he got back in the morning, the supply line would be set up. Sometimes he would set up two bait locations—one a short distance from the other. When the lines from each were established, one had simply to follow each to the point where they intersected, and there would be the tree.

When the tree was located, a deep "X", "※", or "///" was almost always cut into the bark. Such a mark was understood by the whole

community as meaning that that particular tree was already someone's property and thus should not be cut or interfered with. It rarely, if ever, was. As Lawton said, "They ain't supposed to [bother your tree]. Now they hardly ever do, but they's some people'll come in and cut your tree. But if you hack three marks on it, it's supposed t'be your tree. I started t'hack that'n I'uz talkin' about before, and them little devils come out and they just run me wild. I hit that tree three times. By th'time I done it, them woods was full'a bees zippin' around my head, and I took off. I went back t'see about it, but I never did cut that'n.

"I like t'hunt'em. If you ever got started t'huntin'em, you'd be a'huntin'em all th'time. It's somethin' t'do."

The time when the tree was cut depended on several things. If the beekeeper wanted the honey from the tree, he often waited until September to cut it. Then he could rob both honey and bees. This meant, however, that he would have to feed the bees during the winter months.

If he cared only about getting the bees themselves, he would cut the tree in the spring (Elb always cut them in April, and Lawton always cut his when the apple trees started blooming), get the bees, and give them plenty of time to rebuild inside their new home.

On the day the tree was to be cut, the beekeeper would carry the empty gum (and a tub if he wanted the honey) to the site. Then, using a crosscut saw or an axe, he would fell the tree—hole up if possible—wait for the bees to settle—sometimes overnight—and then cut into it. The bees, of course, would go crazy. Lots of smoke from burning rags, pine needles, or dry locust bark helped somewhat, as did protective clothing; but, as Elb said, "You can just figger on gettin' stung."

The method of cutting into the tree varied. Sometimes the tree split open when it fell, and it was easy to open it up even further. At other times, it was more difficult.

Esco Pitts told us his father usually waited a short while until the bees settled somewhat, then cut into the tree with an axe across the grain both two feet above and two feet below the hole. Then he would split with the grain and lift out a four-foot long, several-inch wide slice of trunk. Usually it would be chaotic inside with broken comb, drowned bees, and splintered wood. He would get out what honey he could—splinters, dead bees and all—bring his gum over and set it up on a platform beside the tree, find the queen in the brood chambers, gently pick her up (other bees would immediately gather on that hand), and then shake her off in front of the new gum. Both she and

the attendant bees would immediately crawl into it, and the others from the tree would follow shortly.

If it was in the spring, he would then return that night or early the next morning when all the bees were inside, put a sack over the gum or plug up the hole so none could escape, and then carry it home and set it up on its platform. If it was in the fall, he would leave it in the woods until some cold fall morning when the bees were either sluggish or hibernating, and take it home.

Elb McClure used almost exactly the same method, but instead of picking up the queen, he would "herd" her toward the gum. He stressed repeatedly the need to find the queen for "that's th'mother of 'em all," and the other bees would invariably join her in the gum. To hold them there, he always cut out a slice of the brood comb or a large chunk of honey and put it in their new home with them. At "dusky dark" when all the bees were in, he'd plug the hole. The next morning he'd haul it home and, with a little luck, the bees were his.

Farish Kilby, on the other hand, when cutting a tree open, would cut three holes in a straight line about a foot apart each into the hollow, bee-filled area. The smoke was pumped into the upper hole, the honey was removed from the middle hole, and the bees (who came out the lower hole from the brood chamber) were urged into the waiting gum.

Lawton had still another method: "You can guess about how far that holler part goes. Saw it off up fer enough where y'know it ain't holler. Then come back and shave off another little part and another, and you can tell where it goes t'gettin' rotten just a'lookin' at it. When it does, quit there.

"Then go down and start on th'other end and saw up that way till it looks like it's gettin' rotten. You may not have a piece over that long [arm's length], and you may have one eight foot long." Some, he continued, if the piece was short, would simply carry that home and set *it* up as the gum. There was almost no way to get the honey out, though, when you wanted to rob it. And sometimes the impact of the tree falling made such a mess of the comb inside that it was almost impossible for the bees to rebuild.

SWARMS

Whenever a hive gets overcrowded, some of its bees set out in a "swarm" with a queen to found a new hive. This often happens in

April and May, and if a beekeeper is alert, he can easily add another gum to his holdings.

If the swarm was flying, old-timers in the mountains "settled" it in a number of ways. Some beat on dishpans with wooden spoons or metal forks, or rang cowbells to make them light. Esco Pitts thinks the reason this worked so well is that the queen, he thinks, emits a high-pitched noise to keep all the bees together. The ringing and clashing so confuses them that they settle to regain their bearings. Esco himself has often thrown handfuls of loose dirt in rapid succession both into and in front of a flying swarm. He claims they light and settle immediately.

Sometimes the swarm has already settled in a giant cluster when discovered. Once Esco carried a swarm that had settled on a limb, limb and all, several miles to his gums at home. Lon often carries a burlap sack and a gum to the swarm, spreads out the sack, sets the gum on it, and shakes the bees off their perch so that they land in front of the gum and go in. "Once," he says, "they'uz some settled out yonder, and I just shot th'limb smooth off with a rifle. But they flew back up and settled on th'body of a little ol'simmon tree. I didn't have nothin' but a ol'dull axe up there, and I wanted t'get'em down quick as I could as I'uz afraid they'd leave me. I've lost several swarms. That tree never did bear anyway, so I cut that just to where I could push it, y'know, so it wouldn't fall hard; and part of'em fell off on th'ground. They moved back up though. And I just spread out my cloth, and after while I just took my hand and put my fingers close t'gether, and I just raked'em off by th'handfuls by th'gum."

Lon apparently knows what he's doing. He has about sixty gums, all full, and all of the bees in them have come either from bee trees in the area or swarms that he has captured.

ROBBING

Bees were robbed at various times during the spring and summer. The important thing, of course, was to leave enough honey for the bees to get through the winter. If robbed in late spring, the beekeepers often took almost all the honey that was there since the bees would have the rest of the summer to replace what was taken. In the fall, those robbing the hives would take only a small amount of that honey that was available.

Esco Pitts's father always robbed his bees at the new moon in June. He had a long knife made from the blade of a broken crosscut saw. He would warm the blade in a fire, lift the head of his old-style gums up a crack, slice the comb free of the head with the warmed blade, and then take the head off. Then, taking another knife that had a right-angled crook in the blade's end, he would reach in between the narrow combs, slice them free at the crossed sticks and lift them out.

Farish Kilby sometimes robbed his hives three or four times a season, drawing sixteen to twenty pounds of honey from each hive each season.

Elb McClure maintained that for him, it depended on what kind of hive he had. If the hive was a gum, he'd rob it only once a year, in June, since it took the bees so long to rebuild the comb. Combs in the patent gums, however, could be rebuilt so quickly by the bees that they could be robbed whenever they were full. Elb, for example, would usually rob the early, red honey in June. Then, when the "white honey flow started around June 20," he would have the new super in place to catch the sourwood honey.

The honey from the hives was usually packed, comb and all, into cans or jars. Some was always saved for the family's use as sweetening during the winter. The rest, if a market existed, could be sold to provide a little extra spending money for the family.

ENEMIES

Bees are subject to a host of diseases and natural enemies, all of which mountain people responded to as best they knew how.

Some were harder to deal with than others. Skunks sometimes parked themselves in front of hives and gobbled the bees whole as they flew out. Bears were addicted to the honey. As Esco said, "A bear'll *sure* rob a beehive. Their wool's s'thick a bee can't sting'em." And just recently a bear overturned and destroyed a group of Elb's hives on Patterson Gap. The only remedy they knew for that was to fence in the hives.

Other natural enemies could be dealt with easily by a strong hive. A weak one, however, was in trouble. Ants, bumblebees, or weevils, for example, sometimes got in, attracted by the honey. Perhaps the worst enemy was the wax moth. It laid eggs in the gum walls that produced terribly destructive larvae. Almost the only thing that could be done when that happened was to burn the gum, bees and all, to keep the pest from spreading. If caught early enough, some mountain men either poured scalding water over them or burned sulfur in a saucer

inside the gum. It killed the moths and bees both, but at least the gum itself was saved.

Kenny Runion spent some time discussing the latter curse. In his words: "There's what they call a weevil. He's about that long [half inch] and he's a worm. And he gets in there and he goes to work. He webs in there—looks like a spider web.

"Now he commences at th'top and goes down; and when he does that, you just take that gum out and set it afire. He just puts that web over there and th'honey sours. There's a miller causes it. That's a miller—like you see flyin' around a light. He goes in there and lays these eggs and this ol'worm, he'll hatch out. Then he'll go spin that web. And there never have been nothin' that I know of ever invented that would stop that. It's just a dead stand of bees when they hit.

"I've tried everything in th'world t'get shed of'em. I had a stand one time like that, and I took a razor and cut every one a'them weevils out of there. They had already went about half way runnin' th'bees out. And I put th'lid back on and I said, 'By th'way, I've got you'uns now!' In a month I looked back in there and it'uz as white as cotton. Bees done dead. Killed'em.

"And you can scald that gum. You can burn it out. And you put your bees in there and see how it'll be. Them weevils'll be back on th'same bees. Yes, sir. I went back and looked and I said, 'Great goodness!' I just took it out and set it afire. Burnt th'honeybees and all. You can't keep a miller out.

"Now when they get so far, there's another thing—what they call a roach. You know what that is. An old, slick flat bug. That thing'll run whenever you raise that lid. He goes with these weevils. And you can't spray t'kill them things. If y'do, you'll kill your bees. He follers that there worm outfit—them weevils. He may do part a'that webbin'. Keep th'strands straight, y'know.

"Now they generally hit a weak stand a'bees. They can't do much with a big stout stand. But now a weak stand is what they'll hit. And they're gone. That web, hit's stout. And that thing—he's just a little feller—he goes back'erds and for'erds that'a'way from one edge of th'box t'th'other. When he gets that done, he starts toward th'bottom. And when he gets through, them bees are shot. They're just took. There's no way a'gettin' out."

Another problem described by Esco Pitts and Elb McClure was something known as "foul brood"; so named because such a terrible odor escaped when the lid of the gum was raised. The disease, the cause of which was unknown, caused the young bees to die as soon as they emerged from the combs. Esco suspects that it was even carried on from one hive to another by swarms.

Again, the only remedy they knew was destruction. In Elb's words, "Pour y'a little gas on'em and set'em afire."

CONCLUSION

Beyond all the above, there is a multitude of brief hints and thoughts and ideas and superstitions that come from a lifetime of handling bees. A sampling:

—Bees sense when a human is afraid of them and will sting. Never fight or swat when approaching a hive or surrounded by bees. Stay calm and unruffled.

—If stung, don't grasp the stinger and pull it out. Often a poison sac is left behind at the base of the stinger, and grasping it squirts the rest of the poison into the skin. Take the blade of a knife and scrape the stinger out.

—Insecticides kill bees as well as other insects. If corn is sprayed while in bloom, bees visiting the flowers will die.

—Bee venom eases the pain of rheumatism and arthritis. Esco Pitts, when in pain from arthritis, would often get stung on purpose with good results. As he said, "I never had arthritis as long as I fooled wi'bees." Elb McClure agreed.

—Beeswax is perfect for waxing thread for quilting or sewing clothes. And Esco's father, who made shoes, sewed them with flax thread that had been coated with beeswax from their hives.

—The best honey ever produced, according to many we talked to, was that which came from the blossom of the old, now extinct, mountain chestnut.

Along with the hints and thoughts comes a natural awe at the way bees work and thrive. Lawton Brooks: "They've got bees 'at guards; they've got bees 'at carries water, and they got bees 'at makes honey. Then they got bees in'ere 'at cools their honey. They all got certain jobs. And they do their own jobs. One bee won't carry a load a'honey now and do somethin' else next. They got different bees to do what there is t'do to a gum.

"Now that's a funny thing. They got more sense than people think they do. Just like me and you goes on a job, and they put you t'doin' one thing and me another'n, and they're expectin' you t'do your job and not mine. Them bees is th'same way. They've got guards that

don't do nothin' but go 'round and 'round that hole there and just watch 'at. If a ant or anything starts in, they grab it. They guard it all th'time. And they'll guard [against] you too. You get around there and they'll pop th'stinger to y'.

"And they've got'em in there that cools th'honey. You can go of a night and you can hear'em just 'wo-o-o-o-o-o-o-o'—them wings just a'goin'. You never heard such a noise at night. Specially of a hot night. And when yer gums get full'a honey, you can go out there and listen of a night and you've never heard such a sound in your life. God A'mighty. 'Wo-o-o-o-o-o'—just like they'uz billions and billions of'em. And they're a'coolin' that honey with them wings when they do that. They're all fannin'.

"And it's funny, such a scent as they've got. They can smell anything from miser'ble fur. You can put out a little bait here fer one across up yonder, and he'll come right down to it.

"They're a sharp thing. You read about'em; they're a awful sharp thing, a bee is."

Such awe is probably half the reason for keeping them in the first place, and it is echoed again and again:

Lon Reid: "I like t'fool with bees. I've worked at these so much that my shoulder'll hurt. I like t'work with'em though."

Esco Pitts: "They're an interesting thing t'study, a bee is."

Elb McClure: "Most interestin' thing you ever seen t'fool with."

We believe them. We're still going to follow someone, someday when he goes out to cut a bee tree. If our photographers don't all get chased off by angry bees, we'll have some photos for you soon. Come with us if you like.

SPRING WILD PLANT FOODS

The forests and fields of the mountains are literally filled with edible leaves, berries, and roots. Many of these have been used by the mountain people for several generations. In pioneer days, the use of wild plants to supplement the daily diet was a necessity, and many of the plants used served as tonics or medicines as well. Nowadays, with the lure of modern food markets, the use of many of the wild plants is a matter of choice, rather than need. Many of our informants say, "My mother, or my aunt, or my grandmother used that but we don't bother gathering it."

There is a revival of interest in the wild plant foods, for many who have migrated to the city are finding pleasure and good eating in returning to the country on occasion and gathering wild greens or berries. Most of the wild plants have a high vitamin and mineral content, and add greatly to the foods essential for good nutrition.

We began gathering information on this topic several years ago. Though it is not a complete handbook or guide to the woods by any means, it does reflect everything we have found so far; and everything included here has been verified and rechecked with our native informants (with the exception of those few recipes marked by an asterisk, which are recipes that came to us second-hand rather than directly from our mountain contacts).

In addition, we have enlisted for this chapter the invaluable aid of Marie Mellinger, a local botanist, who checked all our plant specimens, verified their botanical names and characteristics, tried almost