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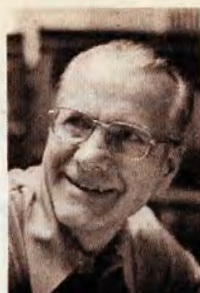
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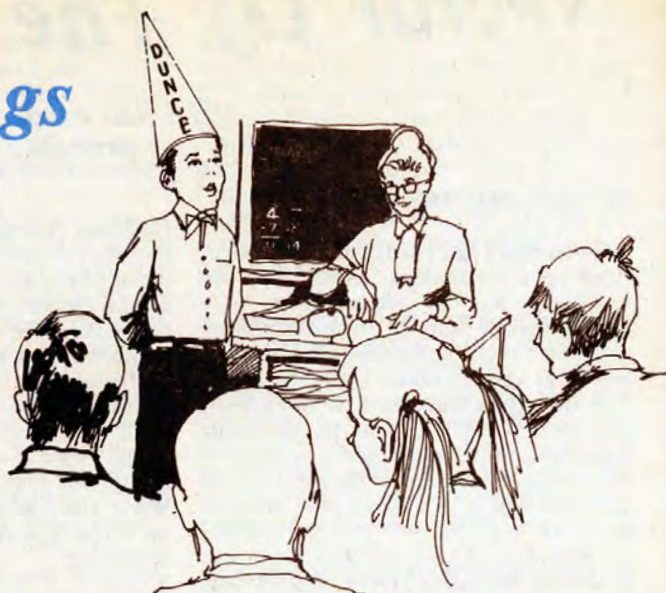
COVER STORY

Sunflowers are increasing in acreage in the United States and Canada. They are grown extensively in Minnesota and the Dakotas. In the Province of Manitoba, Canada the increase was from 165,000 A in 1977 to 210,000 A in 1978. In Saskatchewan the acreage increased from 11,000 A in 1978 to about 25,000 A in 1979.

Hybrid varieties produce about 15% more than the open pollinated varieties.

Sunflowers benefit from honeybee cross pollination and produce nectar.

Gleanings In Bee Culture



September 1980

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Nectar Of The Gods

"If I had eaten sugar in my younger days instead of honey I'd probably be using store boughten teeth by now."

By THE "OLDTIMER"

A few years ago I drove down to one of those open air markets. As near as I can recollect it was the time I built an extra section on the lean-to, to provide more room for the cows and chickens who use it jointly at various times. Everyone knows how important fresh air is to honeybees, and so it is with *all* animals (including man) who prefer, and do much better if exposed to the elements. Our cows — with this free access to a shelter — run outdoors all year, we only use the cowshed for milking in the summer and additionally during the winter for a feed of hay, two, and sometimes three, times a day. However what I do remember crystal clear is a very disturbing incident encountered there at the market which comes back to me once in a while — like right now, for instance.

We were low on several items around the farm — nails, tea, coffee, and what-not, so while my wife made up a list and filled my wallet, I loaded an assortment of honeys, jars, pails and comb on the truck. It had been a good year from start to finish, honey-wise. I even had a small surplus of dandelion, several hundred pounds of wild flower honey, with a high raspberry/thistle content, and a fireweed crop to no end. Honey we were justly proud of, with its varied aroma and colour — or no colour, as in some of the fireweeds. We prefer the honeys from our valley with its deep, rich, gold and heady bouquet. Many supers never did get extracted that year for want of containers and turned up among the empties later on. Any neighbors — and others — who stopped in for a visit that fall and winter, found himself the recipient of a frame of comb honey — sometimes without his knowledge until he reached home.

Although we tried, we couldn't slough any off on our children, on account of, they each had at least a few colonies, and in John junior's own words: "It absolutely rained honey up at my place, we filled everything, even wash tubs and water pails. No thanks, Dad, I'm afraid your cows, as with mine, will get an extra ration of honey on their hay this year."

Anyway, with my business in town straightened away, I hied myself to the market place, which in reality is a big grassy area criss-crossed with unused livestock corrals. I found a shady spot near some big trees and proceeded to lay out my wares. Almost immediately, people

began drifting over, sometimes to chat but more often, to purchase — a pail or jar or comb. One and all seemed impressed and pleased, and for those who wished to try the different kinds, I had placed a number of flat wooden "spoons" whittled from a dry spruce stick and available with samples on a clean paper bag. During a lull when everyone seemed lunch bent — picnic style — a lady approached, scrutinized a few jars and asked the price. When I said 40¢ per lb. she began chiding me on its high cost as compared to syrup and sugar.

"Honey," she said, "was only a form of sugar anyway," and in her opinion "not as pure."

Taken aback by this small outburst, I carefully swallowed my bite of a sandwich before saying, "In my opinion, honey is the cheapest *REAL* food on the market," and furthermore I didn't think sugar had anything in common with honey, excepting they were both sweet, — but then so is chemical saccharine and all kinds of other things. "Sugar," I went on to say, "is not a food — honey is." Sugar, I thought, was manufactured from sugar beet or sugar cane and perhaps other things, whilst honey is an article manufactured by honeybees and having as its main constituent a secretion of plants. And whereas I would confidently recommend honey as a nutritional food and medicine, I couldn't say the same of sugar, which in my opinion "causes all kinds of diseases in man and beast — not the least of which is rotten teeth and heart failure." Warming up to the subject and laying the rest of my sandwich to one side, I went on to say that I was so afraid of sugar and its harmful properties, that I would not allow it anywhere on my farm in case some of my animals should inadvertently ingest some. Furthermore, if I had eaten sugar in my younger days instead of honey I'd probably be using store boughten teeth by now.

Our good woman poo-pooed all this away with, "Food has nothing to do with health — I leave that up to my doctor and I don't think you know very much about your own product."

I said, "Lady, I agree whole heartedly with your last statement. I am woefully ignorant of the hows, whys and wherefores of honey, and for that matter anything else. It seems the more familiar a thing is to me, the more nebulous it becomes. For

instance, I've looked into a hive many times, yet, I've never seen honey being made. You've brought up a good point ma'am and a sobering fact. I don't know for sure what all is in honey and I don't know how it's made. I'm really only guessing — you see I'm not a bee, and more important I'm not GOD. It's their secret alone. I've heard it said that the 'experts' can duplicate honey but I'm very sceptical. Man is not now, nor will he ever be, able to make food. And honey is food. I don't think man is destined to ever know what food is composed of *exactly*."

When I was a little shaver, I thought I'd show off my "smartness" by announcing to my father one day, that I was sure venom was the key ingredient to curing honey since this product is very pronounced during periods of heavy flow. My wise old Dad took the wind out of my sails by cautioning: "Best to wait awhile before you make such a world shattering statement. A lot of things in nature appear uncomplicated at first sight, but then on closer scrutiny take on ever new and more perplexing aspects."

Not wishing to hear any more of my "sermon on the mount" the good lady, at this point raised her hand signifying so — thanked me (albeit grudgingly), said goodbye, turned and hurried away. Somewhat upset, pensively, I picked up a 2 lb jar of wild flower honey, holding it at arm's length and raising it slowly into the sun's rays. My heart soared at the sight and I felt better already. A glassful of liquid gold — only more precious — sending forth gleams. A gift from GOD to undeserving man. Miracle food and healer — pollen dust, suspended throughout, added delicate suffusion in the flood of sunlight. Created by the humble honeybee — ordained by GOD. Honey: Appropriately named by the ancients of a miracle straight from heaven's kitchens, a panacea for all ills, conducive to a long, healthy life and a delectable food and medicine. Reducing its qualities to "simple sugars", borders on the blasphemous when in my opinion, honey should be spoken of with reverence and awe.

According to one "authority", honey is such a "simple" substance, being composed of so much of this and a little of that — but (thinking back to my youth and my father's advice) — although they've analyzed and taken it apart and they know for a fact "exactly" what it is

(although I've never heard of anyone making honey) I'll bet you ten good laying hens that if all these ingredients were assembled, *it wouldn't even resemble honey!* In fact, if a wise old bee touched it with a ten or even an eleven foot pole, I'd be very much surprised. Only GOD and His little honeybees know the secret.

Some of my beliefs which you may or may not agree with are: That honey can only be truly and wholly health-giving or "organic", as they say nowadays, if it is derived from plants grown on naturally fertile soil that is free of toxic chemicals. Good soil and thick weeds go hand in hand.

Honey should not be filtered to death. Our honey is not filtered at all. We store ours in glass jars and stone crocks. On no account should honey be subjected to heat. A few days ago, my wife brought up a gallon jar of honey from the cellar dated 1957. The flavour and aroma were greatly enhanced due to its age.

We've always used honey on wounds both small and large, and I could cite several examples of this technique — all good. One in particular and fairly recent stands out in my mind when a young neighbor boy suffered a really bad axe cut involving some bones. It looked terrible when we got there bearing a pail of honey, but, the results now that he is completely healed can only be described as miraculous — thanks again to honey. There's nothing as easy or more effective on bandages than *unfiltered*, natural honey, also for the eyes and especially burns. In the olden days, my father was scoffed at (me too, just lately) for saying honey is antiseptic, for I know of nothing that cannot be helped by honey. Most folks now know that honey kills harmful organisms. A disease cannot possibly survive in honey, so you see, I, for one, cannot praise it enough. Also praiseworthy according to my intuition, is propolis. So whenever I visit a hive I nearly always come away chewing a piece of this refreshing material.

I suppose by now, dear reader, you're getting tired of my rantings on honey? However, the subject is very meaningful to me and in my estimation it's high time this wonderful product received its due worth as the most versatile substance in the world. If I had my way I would make it the *only* sweetener used on the nation's tables from cradle to grave (and there would be a long, healthy life between both). I'm shocked at the criticism levelled at honey by the public at large (due to ignorance) and the lethargy by the industry, when it comes to extolling its merits.

Slowly, as from a deep, deep sleep, my jar of "nectar of the Gods", (still held at arm's length, by the way) gleamed once

more into focus just as a voice behind me said, "Is that for sale?". Breaking out of my reverie, I turned to behold a smiling faced lady, her head tilted slightly and looking at me rather quizzically. "You were a million miles away", she went on "and the look on your face, like — adoration....wonder, you must be proud of your product? Again I ask, is it for sale?"

It was on the tip of my tongue to say yes — but, it came out instead, "No ma'am — not this one. However, I would like you to please accept it as a gift with my compliments and this little consideration ...that as you savour its aroma and wonderful goodness, you reflect on the humble little creature who, working diligently with others of her kind amidst lonely sun-drenched back-country solitudes — somehow — transforms the nectar of the blooms found there into the most wholesome and delectable concoction. They ask nothing of mankind for all the things they contribute and, very, very humbly. I am sure glad the good Lord saw fit to place me on the same planet with the HONEYBEE."

You know how something sticks in your mind — kind of like a milepost in life's stores of knowledge? Well this article recalls to me as if it were yesterday, some words spoken spontaneously, but carrying a depth of meaning and truth down through the years. This memorable occurrence came about one time in late spring with thaw in full spate when Andy Clyde (a life long friend of ours) and me, found ourselves off the "road" and so badly mired in the formidable Peace River gumbo that after several futile attempts to extricate the old truck, we decided to walk to his place for the old horse and other necessary equipment. Did I recount this in an earlier issue? Anyway, we underestimated the distance so that night caught us while still miles from our destination. Pitch dark and a heavy wet snowfall drove us into a convenient brush covered animal den to wait out the hours till morning. Dry and comfortable in the beginning we soon dropped off and slept

soundly. In the dawn's fitful light however, we discovered we had been sleeping in several inches of melt water which had seeped in without our knowledge. Our wet condition, not helped by a cold, raw wind, moaning among the craggy fastnesses, prompted Andy to remark, "You know John, we would have been dead long ago, the way we live, and I'm convinced the reason we ain't is due to all that honey we eat. I'm sure there's something in that wonderful stuff to keep a man healthy."

So there you have it, and no truer words were spoken; for I've lived and traveled widely in the back-country, rubbing shoulders with one and all and the perseverance and courage exhibited by these hardy folk, while still retaining their good nature under the most adverse conditions I credit largely to the prodigious quantities of honey consumed.

So, we know *exactly* what honey is made of in this, the 20th century, do we....? Methinks though, Jim Blankeney (old Baldy) said it best, many, many years ago when I showed him an article "What's in honey — and how to make it synthetically." After studying on it some (self-taught, he had trouble reading and writing) a slow smile spread over his face and with lifted gaze to his beloved mountain said, real slow-like, "I think they'll find that the last word belongs with the honeybee — and GOD." □

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In The Shadows of Mt. St. Helens

"No one could have guessed that her heart was troubled, until the earth beneath her began to tremble..."

By JOHN BOLF
Lake Oswego, OR.

THE SHRUBS AND VINES are covered with a thin, gray film, a sharp dust that clings to all surfaces, yet will rise into the air as I brush against the plants in my strolls through the open woods.

This strange powder came from miles beneath the earth's surface where it was a molten rock over 2000 degrees Fahrenheit. The build-up there became so terrific that it had to find an escape, and in escaping it became pulverized with an awesome explosion of the released pressure.

Some forty miles north of north-east in the Cascade Range in Washington, stands the once beautiful Mt. St. Helens that proudly displayed her charm and serenity against the rugged horizon. No one could have guessed that her heart was troubled, until the earth beneath her began to tremble and quakes were increasing in volume. There became an aura of apprehension among those who lived in her shadows or knew the ways of a mountain.

On that portentous morning she could no longer contain herself. A herculean power unleashed itself. The top of the mountain was blown off, gases, steam and ash plumed 65,000 feet into the sky. The glacial ice melted under the tremendous heat and volcanic mud poured down the mountain in devastating freshets. Shock waves came at tornado force, heat lightning stabbed at random. One hundred and fifty four square miles of forest were levelled, cottages and lakes buried deep under hot mud and debris.

How can one count the losses when there is no way of knowing what they were? In the blast on her north side human lives were lost, between fifty and one hundred. Caught unaware, they were smothered by the ash, buried alive, or killed by shock waves. Also wild life: Biologists estimate the loss of 6,000 deer, 5,200 elk, 200 bears and a deplorable number of fur bearers, birds and fishes. A west wind carried the volcanic material eastward over farmlands, thick as fog, harsh, dry. Farm animals suffocated. Bee losses were expected to number in hundreds of hives. Though, later the figures were much under that. Bees brought in for fruit pollination were taken out, but the fruit crop was not expected to suffer much

because the blossoms had already been set.

The mighty forces of Nature exact a frightful price of those who stand in the way of her adjustments.

As my footsteps fall upon the path in the woods back of our home, I see evidence of St. Helens' eruptions everywhere I look. Fine, gray dust, sharp to the touch, without form, without smell, but with the unpleasant taste that lingers all day once it gets into the mouth. In these moments I am reminded of that day, not May 18th, when more than one cubic mile of the top was blown off, but the lesser eruption of May 25th. The wind came from the North and we had our first shower of the phenomenal material that perhaps for eons of time had been trapped deep within the earth.

Each time I take this path I stop to greet my bees, each hive, taking brief moments for reflections. I watch them flying out and coming in, observing their behavior and the pollen on their legs. Then one day I became alarmed at what I saw. The pollen was gray, the same gray as St. Helens' ash: I wondered, could the mountain dust have gotten mixed in with the pollen? If it had, would it injure the larvae?

I remembered that the flowers which the bees were working now had burst open after the eruption. So, there would be no ash in them. But it was everywhere else. I began to wonder if somehow they had picked up the ash in with the pollen, from the leaves or sepals. But then, I wouldn't know just by thinking. So I opened one hive. With the blade point of my pocket knife, I picked out the pollen from one cell. It was gray like the volcano powder. I put it into my mouth to taste it. In the like manner I took pollen from other cells and other hives. If there were the mountain grit it would not have escaped my taste buds, because I was already familiar with its taste, even in small amounts. Now I knew that the pollen was clean. My mind rested easy when I talked to other beekeepers at our monthly meeting and learned that fireweed pollen is gray in color, as was also that of heather.

American volcanoes are relatively new

to science, and volcanologists, with their highly technical instruments, modestly admit that they have no way of knowing what to expect because their observations are as yet too limited. Each volcano has its own behavioral patterns and mineral compositions of the erupted masses, which is mostly silica with various proportions of iron, lead, aluminum and others.

Mt. St. Helens' ash of the May 18th eruption was measured at 5 microns in size. This is as fine as talc and it rises with the slightest stirring in the air. The eruption of May 25th was measured at 35 microns. Car air cleaners can filter most of this out, but it adheres to surfaces and rains can't wash it away readily. If a bee lights upon a leaf or blossom coated with this residue it will get it onto its body, which will eventually find its way into the hive. But I think that bees can handle volcanic ash as they can road dust.

S.L. Lamon, President of our Portland Beekeepers Association, brought to our recent meeting a jar of comb, without honey, containing particles of Mt. St. Helens' grit which came from a hive in the Hillsboro area, west of Portland. Mr. Lamon pointed out that he had come across no honey containing the volcanic material. Apparently the nectar the bees gather is clean and the cells into which it is deposited are free of all foreign matter.

At these meetings different aspects of beekeeping are discussed, a speaker will present some interesting subject, or color slides or movies are shown. Afterwards we mingle informally, with coffee and cookies, and engage in idle chats, exchanging views and experiences. These meetings bring beekeepers closer together.

In the Northwest we wonder how many times Mt. St. Helens will erupt again. We turn cautious eyes to the north now and then, knowing that it is still a restless and unpredictable mountain. There might be other major eruptions, or there might be a succession of insignificant disturbances and a gradual phasing out. No one knows. No one dares to be complacent.

(Continued on page 519)

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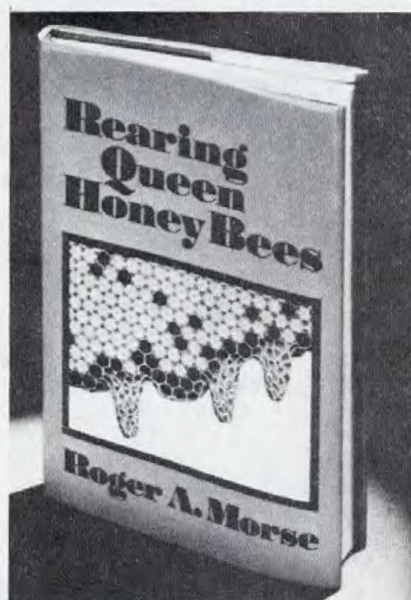
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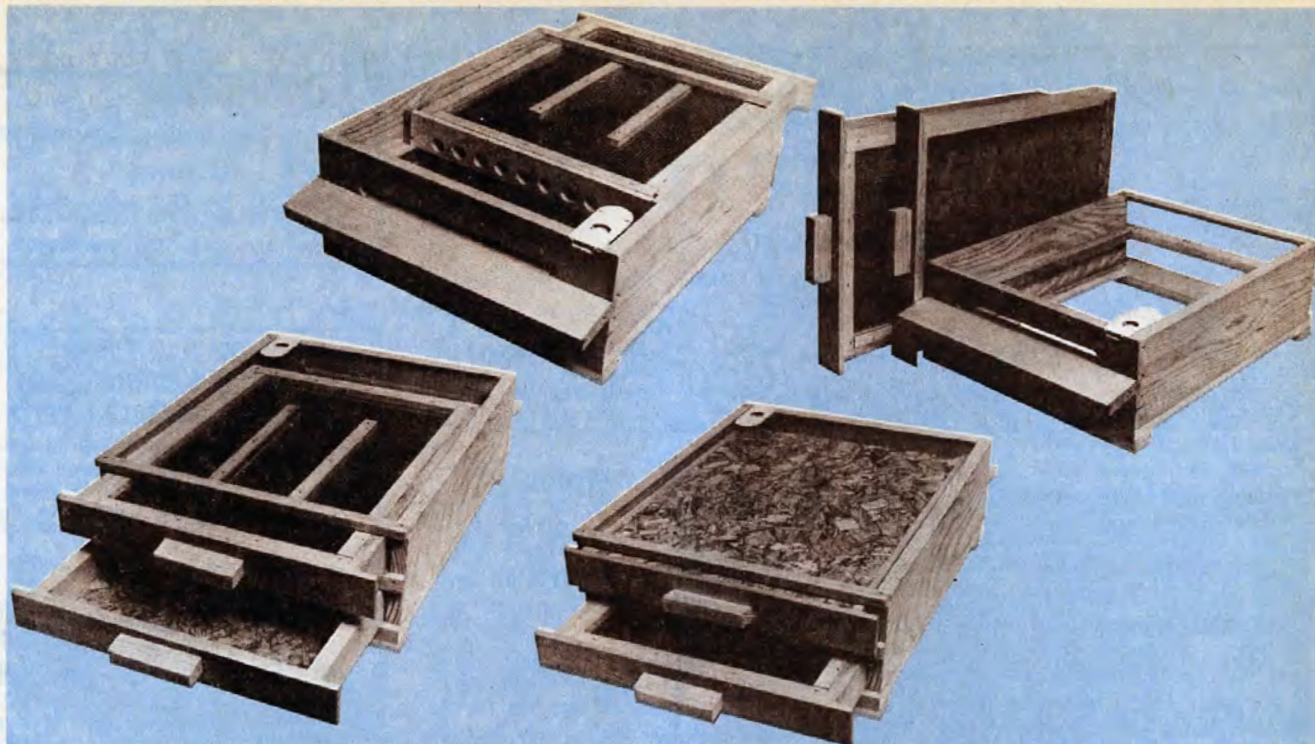
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Bee Technology

"Honeybees...have only one sting in life."

By DR. JAMES TEW
Wooster, OH

A well-known beekeeping fact of life is that under certain conditions, honeybees will sting. Invariably, a bad situation arises when a non-beekeeping individual is stung in the vicinity of managed hives. Consequently, considerable amounts of time are spent by everyone (beekeepers and non-beekeepers alike) trying to avoid bee stings.

Bees do not sting because they are "angry" or because they want to "get even". They sting in response to chemicals that carry the danger signal. The main chemical that results in aggressive behavior of bees is *iso pentyl acetate*. Somewhat surprising, this substance has a very agreeable odor when perceived by humans.

In the honeybee's society individual worker bees no longer have egg laying responsibilities. Their egg depositing structure (*ovipositor*) has been modified into the well-known stinger. This modification of reproductive organs explains why only females can sting. This characteristic applies to all stinging insects, not just honeybees.

The structure of the sting is quite complex. The honeybee sting structure is contained in a sting chamber and consists of two sets of parts: the motor apparatus and the piercing instrument. The main function of the motor ap-

paratus is to serve as the point of attachment for the sting. The piercing instrument is comprised of one stylet and two lancets. The stylet expands into a bulb proximally. The poison sac opens into this bulb. The lancets are two slender rods that are barbed. One function of the stylet is to serve as a point of attachment for the lancets. As the stinging process begins, one lancet slides beneath the stylet (on a track-like ridge) while the other lancet remains motionless. As the moving lancet becomes fully extended, the other lancet moves forward. Since both lancets are barbed, this alternating sequence pulls the stinger into the victim to the maximum depth, unless the stinger is removed.

The alternating motion also pumps venom into the wound at the same time. Since the stinging bee is considered expendable by the hive, the stinger is intended to tear out. The immediate impulse of a person that is stung is to completely and totally destroy the stinging bee. If the bee can successfully get the barbs hooked, the stinger tears away and it no longer matters if the bee is killed in the stinging process. Most people are not aware that a bee stinger should be removed; especially if stung on the neck, head, back or some other spot not readily visible. In this manner the bee dies, but the "tear-away" stinger still performs its assigned task.

Sting venom production begins in the

pupal stage and venom is viable immediately. However, a few days are required after emergence for sting structures to become hard enough for stinging to occur. The secretory activity of the sting glands are at their maximum when the bee is ten to sixteen days old. Normally there is only about .3 mg. of venom in a 15 day old bee.

Honeybees, because the stinger pulls out, have only one sting in life. As would be expected, some provocation is required to solicit the stinging responses. One major reason bees sting is to protect the species. As a person walks barefoot through clover fields, a sting is likely. That person will be much more cautious about stepping on bees from that time on. A second reason bees will sting is colony defense. As the hive is opened or jarred, guard bees will check out the situation, and depending on how aggressive the colony members are, will sting to defend the colony and honey stores. On other occasions, sub-lethal insecticide exposures, odors (gasoline, leather, etc.) or agitation from hive pests such as skunks, wax moths or other animals can elicit the stinging response.

As almost everyone knows, the honeybee sting is beautifully designed to defend the honeybee and its stores. The next time you are stung, for a second (and only a second) stop to appreciate the complexity and design of the honeybee's defensive system. □

Texas — Hot and Dry

"Texas was only one of a five state area that suffered from the drouth conditions."

By DAVE TUTTLE
San Antonio, TX

AS THE 1980 honey season began to unfold prospects looked good for a better than average honey crop.

Although January and February had been dry, still we knew that we had spring rains yet to come. But Mother Nature turned against the beekeeper and on March the third a cold front came through, sending temperatures below 20 degrees F. for almost 48 hours. This severe freeze hurt many early honey plants, but primarily the horsemint and huajillo, two plants which are very important to commercial beekeeping in Texas.

April and May rains brought some hope to what seemed to be a disastrous honey

year. As May came to an end the outlook began to once again take a turn for the worse.

As the month of June wore along, it became hotter and drier. Mesquite trees, of the few that were blooming, were providing only a light honey flow.

The Fourth of July ushered in twenty one consecutive days of one hundred plus degrees. July of 1980 was the hottest month in weather bureau records. All honey producing plants began to wither up and die. The Dallas-Fort Worth area reported little or no honey crop at all, and, the little honey that was stored was fast being used up by the bees. As July came to an end only a fraction of an inch of rain had fallen on the parched and cracked soil.

Conservation estimates put the loss in honey production at about one-half million dollars.

Some areas reported as much as 60% reduction from last year's honey production. Texas was only one of a five state area that suffered from the drouth conditions.

At the time of this writing, which is the end of July, it is hoped that the fall honey plants, mainly broomweed and goldenrod, will receive enough rain so that the bees can gather sufficient nectar to get them through the winter without feeding. If the cotton crop, gathered in August, is good, then no feeding, or very little, will be needed. We all have our fingers crossed.

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Monthly HONEY Report

LAWRENCE GOLTZ

August 10, 1980

The following figures represent the current prices reported by beekeepers and packers over the country. They are based on reports from many states averaged out for each region. Where insufficient information is received no price is shown. The retail prices represent the price of each size jar.

Wholesale Extracted

Reporting Regions

Sales of extracted, unprocessed honey to Packers, F.O.B. Producer.
Containers Exchanged

	1	2	3	4	5	6	7	8	9
60 lbs.(per can) White	45.00		33.00	36.00		34.80	31.00	31.20	31.80
60 lbs. (per can) Amber	45.00	28.80	31.80			31.20	29.00	30.00	32.40
55 gal. drum (per lb.) White		.52	.55	.52		.58	.50	.55	
55 gal. drum (per lb.) Amber		.48	.54			.52	.45	.50	
1 lb. jar (case of 24)	24.50	22.40	23.00	20.65	33.60	22.00	22.10	18.40	22.70
2 lb. jar (case of 12)	24.00	21.15	22.00	19.30	33.00	21.25	21.50	17.10	20.35
5 lb. jar (case of 6)	29.00	25.25	23.75			25.50	23.50	22.25	24.50
Retail Honey Prices									
1/2 lb.	.90		.83	.69	.80	.80	.73	.74	.80
12 oz. Squeeze Bottle	1.35	1.10	1.25	1.10	1.55	1.10	.89	1.09	1.25
1 lb.	1.35	1.25	1.40	1.12	1.60	1.15	1.19	1.19	1.43
2 lb.	2.55	2.39	2.50	2.00	3.20	2.15	2.25	2.19	2.60
3 lb.	3.80				4.50	3.50	3.10	3.49	3.75
4 lb.	5.00	4.49		4.10	6.40	4.45	3.99	3.60	
5 lb.	5.75		5.19		7.00	5.10	4.80	5.45	5.69
1 lb. Creamed			1.41					1.39	1.45
1 lb. Comb	1.75		2.05	1.55	1.75	1.65	1.65	1.50	
Round Plastic Comb	1.50		1.50				1.55	1.29	
Beeswax (Light)	1.90	1.70	1.65		1.50	1.75	1.60	1.60	1.75
Beeswax (Dark)	1.90	1.60	1.55		1.40	1.70	1.55	1.50	1.70

Region 1

Rainfall has been highly variable. This has made the crop vary so much that a forecast is impossible. May and June brought very good nectar flows. Bees are in good condition. Record hot weather has changed the foraging habits of bees from some dependable nectar plants to lesser and more undesirable plants, some giving bitter honey. Honey sales are normal for this time of year.

Region 2

Very little surplus honey reported from New York State. Above average spring and summer crop of honey in Pennsylvania along with some honeydew in July. Bees in good condition and the prospects for a fall honey flow look excellent.

Region 3

Moisture conditions generally good in Ohio. Hot and humid conditions. Honey crop may be average or above average where rainfall and good foraging weather is in balance. Prospects for fall honey flow is excellent if weather is warm and



clear. Hot, dry weather cut into the clover and basswood flow in Indiana, but moisture conditions are good at the end of July. The honey crop may be spotty. Drought conditions in early summer cut the southern Illinois honey crop. Soybeans in central and northern Illinois gave a good yield. Several thousand colonies were moved to sunflowers for pollination. Quality of Illinois honey is excellent. Three hundred new beekeepers were registered this year with the Dept. of Agriculture.

Region 4

The Minnesota honey crop is only fair at the end of July. Estimates run from

one-half to two-thirds to three-fourths of average. Weather has been hot and dry, cutting into the yield from white clover. Alfalfa flow has been slow and steady from first cuttings but are hoping for better yield from late stands. Expect some honey from the sunflowers. Prospects for a fall crop are very poor in Minnesota. Portions of Nebraska have had some rain but serious drought conditions prevail in much of the state. Where rain has helped the honey plants, the average yield per colony may run to one hundred pounds or over; fifty to seventy-five in other areas. Comb honey is in demand and selling well. Iowa will have an average to above average honey crop.

Region 5

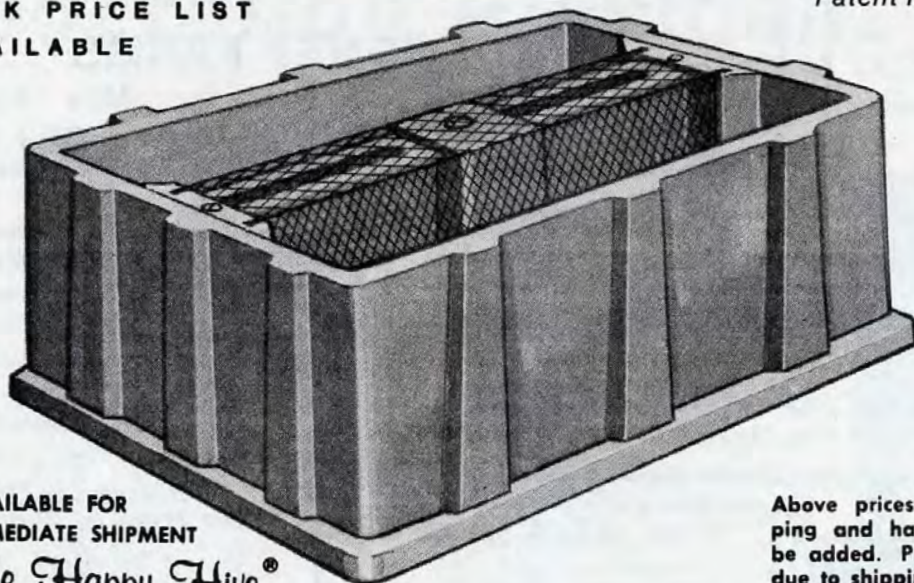
North Carolina had a good honey flow from tulip poplar in most sections but some areas were dry and the honey flow was spotty. Tulip poplar honey was light in color. Sourwood is providing an excellent honey flow at the end of July and is nearly water white. The best sourwood flow since 1964. Beekeepers continue to super the sourwood flow at the end of Ju-

(Continued on page 518)

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G.C. Walker, Jr. of Rogers, TX 1979-1980 Federation President

"He went into the business with his father in 1939..."

By JOSEPH O. MOFFETT*
Cushing, Oklahoma

G.C. WALKER, JR. (1920) operates 2,500 colonies in the Rogers and Lower Rio Grande Valley areas of Texas. Some of the nectar producing plants around Rogers are cotton, horsemint, huckleberry, marigolds, and other wildflowers. G.C. also raises some queens and sells a few packages and nuclei.

Walker bought the old Sioux Honey Packing Plant at Rogers when Sioux built a new plant at Temple. He uses it for a warehouse. About 2,000 colonies are rented for pollination each year. In 1977 the rental fee was \$12.00 per colony. The crops for which the largest number of bees are rented are honeydews and cantaloupes. Walker also contracts bees to pollinate watermelon, cucumbers, and some squash. G.C. has pollinated cucumbers in the High Plains Area of Northwest Texas, more than 400 miles from Rogers, and also sometimes runs bees around Muleshoe in the same area. He also packs a small volume of honey.

G.C. Jr.'s father, George Clinton Walker (1890-1977), was born near Gause, Texas, and started in the bee business there in 1930. The family moved to Pharr in the Lower Rio Grande Valley in 1942. At one time all four of his sons, Mac, G.C., Jr., Edwin Lee, and John Raymond, were in the bee business. He also had a daughter, Rebecca Walker Pierce (1933).

G.C. Jr. has spent his entire life in the bee business. He went into the business with his father in 1939. Upon retiring in 1960, his father sold the bee operation to G.C. Jr. and his brother, Edwin. However, the senior Mr. Walker continued to work bees every chance he got after he retired.

Every summer from 1939 through 1949 the Walkers moved all their bees to the San Luis Valley of Colorado and headquartered at Sanford. At one time, G.C. Jr. also leased bees to Ivan Hansen of nearby La Jara, Colorado. In the 1960's G.C. Jr. moved from Pharr in the Lower Rio Grande Valley, more than 300 miles north to Rogers.

G.C. Walker, Jr. and his wife, Beth. G.C., Jr. is currently president of the American Beekeeping Federation. He has been active in state and national bee associations for many years and was president of the Texas Beekeepers Association twice, in 1956 and again in 1979.



G.C. Walker, Jr. uses a small copper tube soldered through the top of a jar lid to feed his colonies in his queen yard. The tube fits in a small hole drilled in the top of the hive, and the bees take the syrup from the tube. Care must be taken to make sure the tube fits between the frames and does not rest on the top bar of a frame.



Meanwhile, Edwin Walker and his son-in-law, Richard Goodwyn, stayed in Pharr where they are still operating the lower Rio Grande portion of the bee business.

G.C., Jr. now lives on a 215 acre farm between Temple and Rogers, Texas. There he runs between 50 and 60 mixed Angus-Hereford cattle on this farm and other nearby land he owns. G.C., Jr. and his wife, Beth, have three children: Ann (1955), Clint (1957), and Jan (1960). Beth Walker is highly allergic to bee stings. The Walkers are active in the First Church of the Nazarene at Temple.

G.C., Jr. has been very active in state and national associations. He was president of the Texas Beekeepers Association in 1956, vice-president in 1978, and president again in 1979. G.C. has been president of the American Beekeeping Federation since 1979. Previously, he had served on the executive committee of the Federation for six years and was vice-president in both 1961 and 1978.

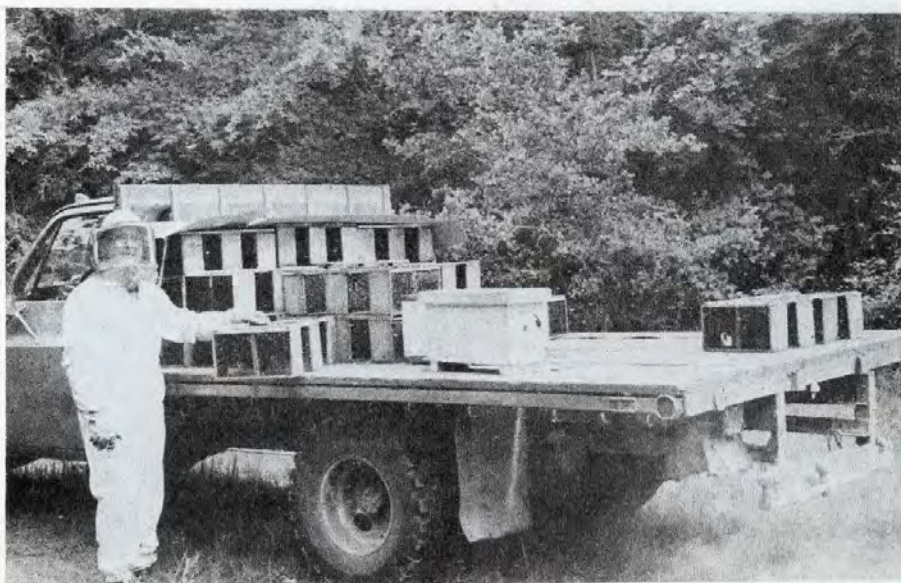
His youngest daughter, Jan, was both the 1979 American Honey Princess and the 1979 Texas Honey Queen. She also was voted Miss Congeniality by the other state honey queens at the 1979 Federation convention at San Diego.

G.C., Jr.'s brother, Raymond Walker, was Texas Apiary Inspector in 1943 and 1944. Another brother, Edwin Walker, was president of the Texas Beekeepers Association in 1969. In 1974 Edwin's son-in-law, Richard Goodwyn, was president of the same association. □

* Slightly revised from "Some Beekeepers and Associates" PP. 122-124. Moffett Publishing Co. 1979.



Janice Walker was both the 1979 American Honey Princess and the 1979 Texas Honey Queen. She was also voted Miss Congeniality by the other state honey queens at the 1979 San Diego convention of the American Beekeeping Federation. Janice is majoring in science at Bethany Nazarene College in Bethany, Oklahoma. She is the daughter of Beth and G.C. Walker, Jr. of Rogers, Texas.



Walker standing beside his truck into which he is loading package bees for sending to Oklahoma. In 1979, G.C. is president of both the American Beekeeping Federation and the Texas Beekeepers Association.

Gleanings Mail Box

Dear Editor:

Am sorely puzzled and grieved by this answer to one of your readers of *Gleanings*.

You state you are not nutritionalists and are willing to abide by the informations given to you by the people in this field. Why do you not provide your readers with the many articles by qualified nutritionalists who irrevocably declare white sugar has no nutritional value and its use is harmful to the physical health of the human body?

One eminent British nutritionalist has stated white sugar is a crime against humanity and should be outlawed. Its use by a pregnant mother can result in birth defects just as tobacco and excessive alcohol can.

Honey is a condiment? According to the bees it is a total food and I would like to see any human being (including myself) out work a bee.

According to the scriptures honey is a food for John the Baptist's food (meat) was locusts and wild honey. Matt. 3:4.

Many athletes, especially Olympic competitors use honey to provide strength and energy needed in their efforts.

Not only does honey have nutritional values for our physical needs it also has values for our mental abilities for we have the testimony of Isaiah 7:15 that our Saviour will eat butter and honey "To refuse the evil and choose the good."

To say that honey is a condiment is an insult to every bee and beekeeper.

Any person who is restricted to a 'sugarless' diet by the false medical profession should go to a naturograph. Merritt Neulin; Hellerton, PA

Dear Editor:

I read with interest the article by Timothy Hosey entitled "Increasing Your Honey Sales With Fund Raisers" in your July issue. However, selling your honey through fund raisers is not as easy as Mr. Hosey implies.

I am an assistant Brownie leader with the Los Angeles County Girl Scouts. Recently I asked the council whether it would be permissible to have our troop sell some of my husband's honey crop to raise funds for our troop. I was informed that selling food products other than Girl Scout cookies would not be allowed.

Later I discovered that such things as candy bars and assorted junk foods are advertised in the Girl Scout Leader Magazine as good items for fund raisers. It's more distressing to discover the Girl Scouts of America encourage the consumption of "junk-food" while finding a natural, wholesome food such as honey to be unsuitable as a fund raising item. Also, the profit for the troop would be much higher with honey than the advertised junk food. Sally Buck; Gardena, CA.

Dear Editor:

This is my first year in beekeeping, and I am also a new subscriber to *Gleanings* in (Continued on page 519)

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Notes From The Straw Skep

"...a retired minister of the Dutch Reformed Church who keeps bees and makes grandfather clocks."

By BESS CLARKE
Canton, PA

SHORT COURSES in beekeeping seem to become more popular each year. Conducted by universities, colleges, agricultural extension services, and beekeeping organizations, the sessions are available somewhere across the country on a year round basis.

They offer an opportunity for the beginner to obtain basic information, often with actual manipulation of the hives. Further, they give beekeepers an additional opportunity to get together and talk interminably about their favorite subject. People consider the time well spent both as a learning experience and as a vacation.

Bill and I have assisted with the Short Course at Cornell in recent years where Dr. Roger Morse annually organizes a learning experience. Participation is limited to 125 persons who may live in the University dormitories and eat in the excellent cafeteria while they attend the sessions.

The course begins on a Friday night with movies, some old, some new, related to bees.

Saturday's sessions deal with how to get started, management practices, how to handle honey, and the latest reports on research at Cornell. On Sunday morning there are workshops on many phases of the industry; and, in the afternoon, an op-

portunity to actually handle a hive of bees.

People from eight states and Ontario attended the Cornell course this year. Most of them are hobbyist beekeepers who are either rank beginners or who want to learn more about bees so they can increase their holdings.

One man I talked to briefly wasn't even at our course. He was attending a meeting of the International Electrical and Electronic Engineers, being held simultaneously with the beekeepers session and he wanted to buy Dr. Morse's books. He works at NASA, and has his own experiment in space which deals with the effects of radiation on transistors in the VanAllen Belt. Those are words I've heard but really don't understand. Anyway, he is also interested in honeybees.

Tony Antonacci is the piccolo player with the Toronto Symphony. You may have seen him on television when the Symphony went on tour to Japan. Tony says it's hard to play a piccolo when his fingers are swollen from bee stings.

A young man from Walpole, Mass. studied dairy husbandry at the University of Massachusetts and now is associated with a roofing concern. He keeps bees as a hobby; has introduced his father to the joys of beekeeping; and even had a label

printed for their venture: "Leland S. Rice & Son".

George Lunsford is a Corrections Officer at Sing Sing. When he retires he will turn his hobby into a small business.

Jack and Cecelia LaRock and their son, Jean-Daniel, came from New York City to learn about bees. The LaRocks work with mentally retarded children. There were several other teachers at the course, too.

We spent some pleasant meal times talking with a retired minister of the Dutch Reformed Church who keeps bees and makes grandfather clocks.

Reneta Kasper's career is creating sculptures out of bronze. Mrs. Kasper, who was born in Finland, is enthusiastic about life in general and bees in particular.

And Lena Guyot wants to make a straw skep to use as an observation hive at the New York Farm Museum at Cooperstown.

Another person with whom we shared a meal is a young man, presently living in New York City, who was born in Hong Kong, and raised in Chile. He is attending a summer session at Cornell prior to enter-

(Continued on page 518)

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Chuck Wagon Beekeepers

"Many large bee operations are able to offer their more competent help employment year round."

By GRANT D. MORSE, Ph.D.
Saugerties, NY

THERE ARE MORE than a thousand individuals in the U.S. and Canada who own and operate bee outfits numbering into the thousands of colonies.

Naturally, these outfits have their hives in locations widely extended, often in more than one State. They face problems that never occur to an amateur, or even to one with as many as 500 colonies spread out near home.

Some of them have operating outfits consisting of trucks carrying supers and other hive parts; sleeping quarters in the form of a mobile home; a chuck wagon of some kind; and one or more passenger cars. This type of composite outfit made up of 5-6 vehicles will doubtless come increasingly into existence due to the cost of fuel in traveling back and forth, to and from the home base, often many miles away from where the honey is being made.

Several large outfits operating in the northwest U.S., also in western Canada (for example, in the Peace River Valley), have built temporary living quarters where their workers can sleep, and find refuge in wet and cool weather. In several instances they have constructed crude extracting quarters that are largely unused, except during the periods following the honey flows.

Usually these extracting units have been built in close proximity to a good water supply so that water has been piped in.

During the non-extracting season, these temporary buildings often fall victim to vandalism by humans, and intrusion by bears, porcupines and squirrels. But beekeepers have usually found ways to deal with these marauders.

The men that make up these outfits are often away from home base for as long as three or four months. Often they set up quarters in a fairly central location and travel out from there. Some workers arrive on location as early as some part of April, in time to make apiary inspections.

Wintering versus Using Spring Nuclei

For a long time many beekeepers in the colder regions of the Northwest, both in the United States and in Canada, have been ambivalent about wintering their colonies, as opposed to extracting most of

the honey that wintering colonies would use, and killing the bees, replacing them with nuclei in the spring.

Such a plan has strong arguments on both sides. In the last few years, as nearly as I can find out, an increasing number are wintering their colonies. There are several good reasons for this.

One reason for wintering versus using spring nuclei has been the relative impossibility of getting nuclei to build up rapidly enough to equal the productive strength of a wintered-over colony.

Also, the saving in honey under the nucleus system was not found so great as imagined since it was discovered that a large percentage of what was set aside as stores for winter was consumed in the spring in brood-rearing — a condition largely duplicated by the nuclei.

The chief ingredients in successful wintering are: 1- Adequate stores of good quality. 2- A good windbreak. 3- Wrapping with black paper of the right consistency. 4- Upward ventilation of the right kind.

It is probable that lack of full understanding of how to furnish upward ventilation without subjecting the cluster to undue and prolonged strain was at the root of the failure of previous wintering losses in these areas. Most beekeepers have now mastered this problem, but not all of them. Too many are still emphasizing the supposed desirability of top-packing to absorb moisture. It is now known that surplus moisture must be passed off promptly, not absorbed. Other faults in the wintering process in such areas include the use of excessively large entrances. The chief value of top-packing lies in its providing a peaked roof which helps the packing shed water and snow.

Swarm Prevention

The prevention of swarming, as in all other areas where bees are kept, is one of the chuck wagon work force's primary duties. All of these groups confront the problem with what they regard as a successful method, but some of them are far more successful than others. I have learned of one outfit that divides every strong colony, setting one of the two wintering hive bodies off on an adjacent bottom board.

Three to five days later a crew member follows the main outfit, cuts queen cells in

the hive body in which he does not find the queen, and gives that half a young queen. Some others, that do not care to expend the money for queens, permit the queenless portion to raise a queen. Later, as the honey flow begins, the two units are reunited regardless of what swarm prevention method has been used. In a few instances, nuclei are employed for strengthening purposes.

A Hospital Unit

Each outfit varies from the others in its methods. I have heard of one unit that carries tools and equipment for making repairs to hive parts and to hive furniture, even transporting on one of their trucks a motor for powering a saw. Later, the same motor is used to provide power for extracting.

Some outfits attempt to bring along all replacement parts, and discard all but the most valuable damaged or broken equipment. One outfit annually transports a paint spraying apparatus. Every outfit carries an adequate number of new frames and foundation to made additions or replacements.

Each operation varies somewhat in the extent to which it attempts to carry all equipment to each and every bee yard. Some avoid this type of operation by using a central location and its equipment in the same manner as a home base. In fact, it essentially becomes a home base.

Protection of Property

In recent years, particularly, along with the rise in theft and vandalism that seemed to follow emphasis on human rights, theft of bees and bee equipment has been on the rise.

Most large scale commercial operators have found that establishing good relations with people who are neighbors to their bee yards, is the best deterrent to loss of property.

Most large bee outfits accordingly expend a great deal of time and effort to establish guardian partnerships with the folks near their bees who are in a position to summon law enforcement authorities whenever intrusion is detected.

This is not always the easiest relationship to establish and maintain. Not every member of the personnel of an outfit is uniquely fitted to the task. But there is

usually one member who has talents of a better than average nature. It is upon his leadership that most large units lean.

First of all, the personnel of an outfit make it clear to neighbors who have been asked to serve as lookouts that they will always alert these neighbors to their arrival. This is done so that the presence of unannounced visitors in a bee yard may be assumed to be by individuals of other than good intent. State or Dominion inspectors must be inducted into this understanding, of course.

All cooperating neighbors are liberally rewarded, usually with supplies of honey. Occasional visits by cooperating neighbors to a beeyard, especially during the winter months, with the instruction about what to look for, can be rewarding.

Frequency of Visits

Naturally, the frequency of visits by outfit members to the individual yard of bees depends, among other things, upon the money yield.

Even at best, the operation of an outfit of colonies of honeybees spread out over two or more States, must follow practices that do not necessitate more than minimal frequency of visits. This presents quite a different schedule from that followed by an individual whose bees are in his back yard.

As we have previously noted, some outfits make every effort to assure themselves that prior to the honey flow colonies do not become so strong as to cause swarming. A requeening plan that assures the presence of only young queens is often followed. Seldom is less than adequate honey storage space given. Entrance cleats are retained in place later than might otherwise be the practice. Nuclei are protected from skunks. Close contact is maintained with State and Dominion inspectors.

Weak colonies are usually not left to an uncertain recovery unless an early visit by one or more of the outfit personnel is planned. By uniting them with strong units, devastation by skunks or by moths, or both, is avoided.

Supers of extracting combs are frequently piled on strong colonies that they may be protected until needed. All hive covers carry a stone of good weight to assure avoidance of the covers being blown off by strong winds.

Minimum of Manipulation

Large outfits rather uniformly routinize their operations and attempt to keep details or variations in manipulation to a minimum.

Most outfits appoint one man to direct the others in their manipulations. He often follows the practice of proceeding rather quickly through a yard, making an examination of the exterior of each hive, then marks it for certain operations by leaving signals on the cover. Many colonies are not touched except to have a super added or removed.

We have alluded to the leader who directs all operations. But this individual is not usually merely an overseer; he often performs more manipulations than any other member of the crew.

Usually the more experienced men work alone. The ones who have seen less service often pair with an experienced operator and become his "plumber's helper". When they have acquired enough skill, they are allowed to work alone.

I have observed that one of the most competent and experienced members of each crew takes responsibility for the extracting and storing of the honey. One of the reasons for this, especially in large scale organizations, is that often more than one flavor of honey may have been stored before the extraction was undertaken. This may necessitate some degree of sorting of combs. Also, if more than one grade of honey is being offered, sorting of frames is essential. In addition to all this, a good man at the extracting tank can save many combs through careful handling.

Certainly there is no part of the honey producing process demanding greater discrimination and use of judgement than the extracting and storing. The individual in charge of that process is the one who sees what goes into the honey containers — barrels, cans, etc.

The Chuck Wagon

From what I hear, the manning of the chuck wagon varies among outfits perhaps more than any other part of the organization. Different outfits have tried a variety of staffing devices.

One unit may depend for the cooking upon an old beekeeper who still likes to be near the bees but is too rheumatic to be a good operator in the yard. He has to be one, the cause of whose affliction was too dissimilar from the nature of bee venom, for it to be an antidote.

Others have tried a professional cook, and some of them have proven to be very satisfactory. A few ventured to give an older woman a try at it. But it is usually too lonesome a job for a lone woman. There seems to be no single prototype. The main essential is for food to be hearty, plentiful, and served on time.

One of the biggest problems in the more rural areas is to secure good refrigeration. Often the menu features a good bit of wild meat variously secured by the cook or some member of the crew that just happened to bring along his gun.

The Social Atmosphere

Toward the beginning of the season the hands are too weary at the end of the day to be interested in very much socializing. But this impediment is soon overcome. When there are community social gatherings, the crew members are usually welcome, especially if they come from good backgrounds.

If the crew sets up in one locality for long, new friendships are usually quickly formed. These affiliations often ripen into long term relationships. A few have been known to terminate in marriage.

But the most important element in the social atmosphere in these groups is the one that the members themselves create: the long talks over a campfire after supper; the stories (sometimes too often repeated); the music, both vocal and instrumental, for beekeepers seem to be prone to playing some musical instrument. And when this talent is combined with good vocal quality, as it sometimes is, the listening experience can be a thrilling one.

As in any group of like size, there are outstanding individuals. One comes to be known for all the work he does; another for how little. Someone is usually accident prone. He is the one who gets bit by a rattler, or who is beaten up by the local pugilist who resents intrusion into his circle of feminine interest.

Often there is one who goes on to an outstanding position in the field, perhaps as a state director of bee inspectors, or to a position of ownership of an impressive holding in the bee business, and so on.

All this is natural, for the majority of these crews consist of young unmarried men looking for adventure, and for valuable experience.

Year-Round Employment

Many large bee operations are able to offer their more competent help employment the year round.

Some send them to the warmer areas of the U.S. to produce citrus honey, or to build nuclei. Others are kept at the home base, wherever it is, to build new equipment, and to repair damaged hives and furniture.

An experienced man of the right temperament can usually be promoted

since he may become a very skilled worker. Such an individual after a glance or two at a colony can usually tell, for example, whether a colony is likely to swarm early; how good the queen is, and about how old she is (Some outfits clip queens' wings in such a manner as to show their age); whether the colony is likely to produce a surplus, or needs strengthening and so on.

Usually one or more members of a crew becomes expert in the identification of bee diseases; and uncertain cases are often referred to him for diagnosis.

Outfits vary in their effort at detection of bee diseases. Since they often try to maintain a policy of not opening a hive unless it shows evidence of weakness from an uncertain cause, some are not too successful in keeping the major diseases under control.

Like the small scale operator, some commercial beekeepers with large holdings have been constantly threatened in late years with death to their bees from pesticides. It is, perhaps, even more difficult for the large scale operator to deal

with this threat. Often his only option is to move his yards from certain areas. This is a problem that must eventually enlist more help from State and Federal authorities since bees as pollinators play such an important role in the production of so large a portion of our daily food diet.

The Future for the Honey Business

Today, the average American consumes approximately 135 pounds of sugar in some form per year. Of this, only one pound is honey. Why so little?

There are several reasons. For one, honey is more expensive. But there are other reasons, too. Honey does not meld with other foods so readily as more soluble sugars. To a limited extent, the same can be said of maple syrup. My wife tells me that most cooks have more difficulty in gauging the quantity of honey to use in a recipe than they do with its melding quality. Then too, honey is very sticky. It adheres to clothing readily and to any part of the body it touches. But it has an exquisite taste, and is produced in several

very intriguing flavors such as clover, orange and sourwood.

I'm not positive that society would necessarily be better off if it consumed more honey. Perhaps it would. But more of anything is not necessarily better.

But if it is desirable that more honey is consumed, I believe the way to do it is to produce more comb honey — and at a price much lower than now. Can this be done? I think so.

The solution lies in producing cut comb honey and marketing it in plastic containers.

The production of cut comb honey does not necessitate crowding of the brood chamber, with subsequent swarming. It can be produced at a price nearly as low as that of liquid honey because a colony can produce almost as many pounds of cut comb honey as of liquid honey.

But this can not come about over night. The consuming public must first come to know about it, and the price must be right. □

Learning More About Honey Plants

"If you really want to have some fun..."

By **HERBERT KELLER**
Lackawaxen, PA

IN THE WINTER when the snow is flying around the house and the thermometer gets down around zero, I sometimes like to amuse myself looking through various books about bees, plants and trees.

I often wonder how many beekeepers miss the most enjoyable part of beekeeping, since I consider the study of honey plants, trees and shrubs as interesting as beekeeping — as well as being very helpful in colony management.

Anyone considering beekeeping should inform themselves as to what kind(s) of honey plants their bees have at their disposal. This is not as small an accomplishment, sometimes, as many beekeepers may be surprised to learn. Some areas may have an abundance of varieties, of which no one kind by itself is important, but which together may mean the difference between starvation and weak colonies, and having colonies in good condition at the right time.

I hope the following may be of some help to anyone wishing to increase their knowledge of honey plants.

Good books are a must for identification and can be expensive, so check out your local libraries first to see if they have a good selection. Look for books on wildflowers, trees, shrubs, herbs. Certain books on gardening may occasionally be useful since many ornamentals have become naturalized in some areas. You will also need a good honey plants book, which you will probably have to purchase. These can be found in various beekeeping magazines and can give you some idea what to expect from certain plants as far as honey flow and blooming dates. However, most honey plants books lack good identification qualities since any illustrations to be found are usually in black and white and may lack sufficient detail.

Winter is a good time of year to start since many people have extra time to read.

Then, in the spring, you can start at the beginning and follow these plants through their blooming periods in succession; which is the way I think it should be done, to get the most out of it.

I like to keep a rough diary and make observations at least once a week, more often if I have the time, noting whether the bees are indeed working the plants which were in bloom and at what time of the day — also, if they seemed to be seeking nectar, pollen or both. Since one of the honeybee's greatest pastimes when not making honey is making liars out of beekeepers, you may find they won't be working what you thought they should be.

If you really want to have some fun, ask this question of several beekeepers in a group at a beekeepers' meeting: "Gentlemen, what kind of flowers are the bees working now?"

(Continued on page 518)

Do You Ever Just Listen?

"As she was leaving, in a very lady-like way, she said it would be nice if I would make friends with a good beekeeper."

By ED WOLFE
Houston, TX.

IT SEEMS that members of my family can never do things in moderation. As a result, just having honeybees, and selling a little honey wouldn't do. We had to go into the Bee Business whole hog! This entailed investigating the national suppliers of bee equipment and then persuading the company that we wanted to do business with, that our motives were as "pure as honey", before they would give us a dealership.

The next step was to set aside space in our store for bee supplies; arrange for an ad in the yellow section of the telephone book; and oh!, to put a big orange sign in the front window that says "Honey for Sale"; to gradually put in a stock of supplies for the amateur and hopefully the professional beekeepers. But, actually, this is not what I started out to write about.

Our bee supplies and our own personal activities with bees have brought bees and beekeepers, "and those who don't keep bees", into our store just to talk about bees.

My mother's father and all of her brothers were cattle-men and I was raised on tall-tales and joshing. (Every young farm boy has to spend time looking for a left-handed monkey wrench because it backs off the nut of the wagon-axle better.) I remember looking all one Sunday evening for a can of white graphite my uncle swore he had put on one of the wind-braces in the hay barn and he couldn't grease the surrey without it, because black grease got the white wheels dirty.

I've always thought that some of these old-fashioned tales and jokes were rather humorous and far out, but they don't hold a candle to bee tales!

Have you ever listened to what people say about their relatives and bees?

For example, everybody has at least a grandfather, uncle, grandmother or aunt, who kept bees. ("They got to know them bees and they wouldn't sting them no-how"! It is indeed remarkable the complete immunity these vintage giants had to beekeeping problems the ordinary, mundane beekeeper of today must face.

"Why, my grandfather could go out to the back lot and get honey from them bees

any time-a-day, buck-naked — if need be, and nary a sting".

The saintly, old, white-haired lady looked at our sign and said; "Why, you sell honey. Do you know, my grandfather knew how to call bees. When I was a little girl he use to take me with him and when he found bees he would open a gunny-sack and lay it on the ground under them. Then he would give me a bucket and stick and tell me when to beat on it, and those bees would go right in that sack. They knew exactly what to do."

I thought I would risk the ire of the devil and suggested that maybe bees didn't hear all that well and was she sure the bucket and stick did it? She wasn't having any such blasphemy! As she was leaving, in a very nice lady-like way, she said it would be nice if I would make friends with a good beekeeper. There was so much one could learn and she was sure the time would be well spent and that I would enjoy every minute of it!.....She didn't buy any honey. You could tell that she didn't have much faith in the quality of honey from a beekeeper who didn't even know how to call bees.

Then there was the man whose grandfather was gathering firewood on the hill when he inadvertently drove his mules over a bees'-nest.

"You know them bees stung the mules so bad they ran away and tore up the wagon." That wasn't the worst part. "Them mules dang near died!"

It took two weeks of looking before his grandfather finally found his mules down in a wallow.

But, "they just weren't no good for harness no more. You know, he just never was able to get them dang mules hitched to that wagon again."

But the most touching story I have heard, to date, is about the man who went hunting with his old coon dog:

Well, hunting was bad but on the way home he saw a swarm of bees hanging in a tree. Not wanting to go home empty-handed, he decided to take them home with him. Everything was going fine (until he was about half-way down the tree) when he slipped and dropped the cluster

of bees. His old hound dog could just see that "coon" getting away and he bit right into that cluster of bees. Right then and there, their friendship ceased. He lit out for home and spent quite some time under the house. When he did come out he just wouldn't hunt no more. This really hurt the man's feelings. He said he could understand a man's wife mistrusting a man that-a-way, but for a man's coon dog to act that-a-way was hard to understand.

We are thinking about getting a pot-bellied stove, a few straight-back chairs, a round of cheese and a barrel of crackers. Maybe a modern touch wouldn't hurt — how about an electric coffee maker?

I suppose some day people will run out of stories to tell about bees, but I'm not looking for it to happen right away. □

Beekeeper Protests "Fierce Bee" Story

The prestigious journal of general science, *Science*, Vol. 208, 27 June 1980 "Fierce Bees Get Fat and Happy", Page 44 reported that "By breeding with native bees they (*A.m. adansonii*) have become milder and less nasty than their ancestors."

"I don't think anybody should be calling them killer bees" *Science* quotes Anthony Raw, a bee specialists at the University of Brasilia.

The article was written in a manner reminiscent of the many popular press stories about "killer bees".

In a letter to the editor of *Science*, E.Y. Levin of Potomac, Maryland, a beekeeper says "I don't believe anything in this article, except perhaps that someone once brought African strains of honeybees to Brazil."

"Apiculture is a science, like astronomy and deserves equivalent scientific treatment in the pages of *Science*" said Levin. □

Siftings

By CHARLES MRAZ
Box 127
Middleboro, VT 05753

ANOTHER YEAR and honey flow has gone by. It looks like all the honey we get this year will be used to feed our divisions. It has been a poor crop, something that comes more often with the passing years. While some clover was in evidence, it just did not have any nectar. I've heard other clover areas also have a poor crop this year. It seems doubtful if our good crops of 40 years ago will ever come back. It looks like the Champlain Valley is no longer a commercial beekeeping area as it once was up until about 30 years ago.

Richard Taylor's article on page 459, August *Gleanings* titled "AMERICAN FOULBROOD AND COMMON SENSE", as usual, makes a lot of sense. My first experience with AFB was back 1925, my first year working with a commercial beekeeper when we "shook" over 300 colonies, as was the custom then. It is true, AFB does not spread from just one drop of honey through a whole yard and much of the precautions to sterilize everything is futile. You have to use common sense. Of course AFB spreads through diseased honey and combs.

How easily bees develop AFB on exposure to diseased material depends on how much disease they are exposed to and the degree of their resistance to AFB. I have seen bees so susceptible to AFB, it seems if they just smell it, they get it. Others such as the Lockhart Carniolans of 50 years ago were so resistant it was impossible to infect them with AFB, even hives full of diseases were cleaned up permanently in 2 months. Unfortunately, these highly resistant bees no longer exist that I know of.

There is no question the use of Terramycin has made it possible for commercial beekeeping to exist without the disaster of burning valuable equipment. It is valuable both as a preventative and a "cure". But again its use must be with common sense. Some bees, even with terramycin, will not clean up. They must be burned up. As Richard Taylor says, we must use common sense between the two extremes.

Now that so many former good commercial honey producing areas are becoming less dependable with the years in the U.S. Roger Morse speaks of some of the best honey producing areas in the world. They all have their bad years, but many areas of Central and South America have great potentials for honey production. The only limiting factors are roads and ex-

perience. I know from personal experience Yucatan in Mexico is one of the best honey producing areas in the world, but, there is a serious problem with queens. With 5 months of honey flow in good years and with good queens, a two to four hundred pound average honey crop is possible. It is heart breaking to see miles and miles of honey plants in full bloom and only a handful of bees in the hive to collect it. With strong colonies of bees, Yucatan could produce four times the honey they do now with their present number of colonies, about 500,000, and six thousand beekeepers.

There are many other areas in Mexico almost as good where I have had personal experience in honey production. This should be true for all the countries of Central and South America. One of these days, not too long from now, I wouldn't be surprised to see the US importing more honey than they produce for domestic use, and U.S. production continues to drop with the years. Beekeeping and "modern" civilization just do not seem to go together.

Roger also mentions the production of insect venoms for treating people allergic to insect stings. It is true, there is a very limited market for bee venom, for instance. One person can collect all the bee venom needed for this use in the U.S. at the present time. If its use ever becomes extensive for the treatment of rheumatic and other degenerative diseases this would expand the market considerably, but perhaps not to the point where venom production would become an extensive business. A little bee venom goes a long way.

It would seem to me, the use of propolis has great potential for therapeutic uses. Much work has been done with it in Russia, Romania and other Socialist countries with excellent results for almost 20 years. In the U.S. practically no research has been done. My friend in Poland has been sending me a great deal of interesting research in this field. My friend Chaim Kalman recently sent a letter of some interesting personal experiences he has seen with propolis with his family and friends with various diseases. In the research, much has been done on the chemistry of propolis and its potent antibacterial, anti-virus and anti-fungal activity. It is regarded as being harmless to animal life. Personally, I see no reason why beekeepers could not experiment with it by using it on various disorders for

which there is no satisfactory treatment. All one has to do, is chew it and swallow it.

I do believe, however, we cannot expect to get the best material from old propolis scraping from inside the hive. Propolis for therapeutic uses, I feel, should be collected fresh with the use of special collectors and in areas where the propolis has the most active fractions. Propolis from different plants and trees has different activity. Only research can tell what they are. In the meantime, beekeepers in the wooded areas that can produce a good grade of propolis might start dreaming up some equipment purposely to collect fresh propolis. When honey crops fail, perhaps propolis can help out. If they cannot collect honey, then perhaps we can keep them busy collecting propolis. □

Non-Farm Pesticide Use

According to a Cooperative Extension Bulletin from Cornell University approximately one half the total amount of money spent annually for insecticides in the United States is for home lawns, golf courses and other non-farm uses. While individual home owners may treat only a small area with insecticides, the total acreage treated across the country is considerable.

A new publication from Cornell University answers questions surrounding chemicals and their application, especially by home owners. "Effects of Insecticides on Birds and Mammals" (S-109, 50¢) is written by James W. Caslick, Senior Research Associate in the Department of Agriculture and Life Sciences. For a copy of the bulletin write to Cornell University Distribution Center, 7 Research Park, Ithaca, NY 14850. □

Strictly Backlot

"What I want to know is how can we get the old bravado back into hiving a swarm?"

By CARL CALLENBACH
Elizabethtown, PA.

LIKE SWARMS, time flies, and suddenly it's time to announce the **Second Annual How I Heroically Caught a Swarm Contest**. The rules are simple; the prizes worse. But first, as they say, a bit of history.

A year or so ago I fantasized a letter which went something like this:

Dear Carl:

I'm very concerned and disturbed about how most articles and stories in bee magazines treat catching swarms so casually. If it keeps up, everybody will get into the act, like fishing. What I'm trying to say is that the general public is in danger of losing the mystique usually associated with hiving a swarm. Only yesterday, I was out catching a swarm and the few people who crowded around didn't offer one "He must be crazy." In fact, a young woman said, "I read somewhere that swarms are usually quite passive and easily hived." Then she yawned and returned to her secretarial post at the local meat packaging plant. Just two years ago I would have drawn maybe fifteen or twenty anxious people with plenty of Oh's and Ah's. One year two people fainted (in the original fantasy I wrote "two women fainted" and heard from more than two women who definitely would not have fainted). Yesterday two were talking about missing their favorite game show on the tube. What I want to know is how can we get the old bravado back into hiving a swarm? How can we make capturing a swarm **HEROIC** like it used to be in the good old days?

Sincerely,

Mr. K.H. (Portage, WI)

My response to Mr. K.H.'s letter was, of course, sympathetic. I noted that I entirely agreed with him. I wrote "Hiving a swarm isn't what it used to be. Not that I want a drum and bugle corp or even too much applause. But it is time something is done about it."

And that's when the **How I Heroically Caught a Swarm Contest** was born. There were few cigars.

I wrote, too: "I'm counting on a lot of other backlotters out there feeling the same way you do and I do, Mr. K.H., and anyone wishing to enter his or her story should have it written and mailed to me by December 1."

Having announced the contest, I sat back and awaited the avalanche of tall tales. For no other reason than most of the beekeepers I know are delicious liars when it comes to recalling the notorious swarms they've hived. But, I wrote in a later column: "Never has a summons for innocent bluster, indomitable gradiloquence or, if you will, plain lying, fallen on so many deaf ears. Perhaps backlotters who hive swarms as part of their avocations don't care, like some fisherman I know, to distinguish between fact and fiction. Or if they do, maybe lying, they feel, is better done in the oral tradition." I added that for the next contest I was planning to accept cassette tapes on which swarming tall tales could be embellished with proper pauses, appropriate moderation of voice, sound effects, etc.

There were a number of entries to the **First Annual How I Heroically Caught a Swarm Contest**. A column contained all-or-parts of the winning entries: Mr. J.J. Bryant of California won first prize; Mrs. Sylvia Inoue of Massachusetts and Todd Planter of New Jersey had runners-up stories.

So much for history!

The rules remain much the same. Your tales of valor must be in by December 1.

Reminder: **A Handbook to Literature** (Thrall, William Flint, and Hibbard, Addison; Revised and Enlarged by C. Hugh Holman, New York: The Odyssey Press, 1960) defines a tall-tale as "a kind of humorous TALE common on the American frontier, which uses realistic detail, a literal manner, and common speech to recount *extravagantly impossible happenings*, usually resulting from the *superhuman abilities* of a character (emphasis added)." Examples: Tales about Paul Bunyan, Mike Fink, and Davy Crockett.

The prize: Winners of the **First Annual How I Heroically Caught a Swarm Contest** were awarded small cans of baby talcum powder, and I see no reason for changing the prizes. (Any reason for choosing baby talcum powder as the award would be equally absurd.) Mr. Bryant, who was 82 years old at the time, passed his prize on to a newly born grandchild. Mrs. Inoue and Todd Planter, who was 11 years old at the time, never shared

with me their use of the powder and, as I said in another column, it's really nobody's business.

Swarming season's over for the most part. Chew your experiences up. Add some *extravagantly impossible happenings*, give yourself some *superhuman abilities*, write them down and send them to me before you choke! □

West Virginia New State Apiarist Appointed

Agriculture Commissioner Gus R. Douglass has announced the appointment of Bardwell "Bard" Montgomery of Kirby, W.Va., as acting State Apiarist.

Montgomery, 30, operates 100 colonies of bees in the State's Eastern Panhandle and has worked from 1973 to 1978 as a bee inspector under the direction of Earl Cochran, West Virginia's first State Apiarist, who retired in April.

In the 15 years since the West Virginia Apiculture Protection Act was passed, the number of diseased hives was brought down to less than one percent; and movable frame hives largely replaced the old box hive and log gum. At the same time, total honey production tripled. However, even with these accomplishments, West Virginia's average honey production in the record year of 1979 was only 30 pounds per hive.

Montgomery has recently been employed by Genetic Systems Inc., a Florida queen-breeding firm. He is a member of the Eastern Apicultural Society, Professional Apiculturists Association, Hampshire County Beekeepers Associations and a member and former president of the West Virginia Beekeepers Associations.

**HIVE BEES—
WILL POLLINATE**



Bee Talk

"That brings me to something I've been wanting to bring up."

By **RICHARD TAYLOR**
Trumansburg, NY

IT'S THE END of July, and my honey room is again redolent with the fragrance of honey as the comb honey supers, most of them filled to the sides, begin to pile up. It must be the basswood honey that gives them that scent, but whatever it is, it is lovely. Anyone would love a fragrance like that, but to me it is doubly good, for all the associations from over the years, and the reminder it gives me of the delectable honey waiting to come out of the supers and onto the tables of my customers far and wide.

I referred to my "honey room" just now, rather than honey house. It used to be a honey house, when it was half filled with extractor, tanks, steam generator, brand melter, strainers, uncapping machine, honey pump, and all the machinery and equipment you need for extracting honey. That's all gone now, replaced by just one piece of equipment — a pocket knife. I just do comb honey now, and that's all I need. So instead of standing there hour after hour, uncapping and extracting and straining and bottling and no end of things, I just pile my Phoebe Snow records onto my record player, and put up comb honey to my heart's content. Couldn't do that before — the extractor, honey pump and uncapping machine made too much racket. It was even a problem taking time off for a cup of tea. The uncapping knife would get cold, or the flash warmer would need attention, or something. It is astonishing how complex life can get sometimes; and also, how simple, if you just put your mind to it.

I said some time ago that I was going to stop talking about comb honey, and I guess I did, for awhile, but it's something I have to keep coming back to. Have you stopped to think, that it is really the only unprocessed sweet there is? And the only truly natural honey? It resembles extracted honey the way apples resemble cider, and few people consider cider to be an improvement upon beautiful, fresh apples. And I was thinking of that yesterday, while I was getting honey out of the supers and listening to music. I was thinking that, even with the warming necessary to strain extracted honey, some of that fragrance gets lost. I don't think anything

in the world is as good as comb honey, or that any food is as beautiful, so it really is going to be very hard, I'm afraid, for me to stop talking about it.

I was up in the Maritime provinces of Canada recently, talking with beekeepers, and a couple of them told me they thought their honey flows were not heavy enough to get well-filled sections of comb honey. Well, that depends, of course, on how you manage the bees. I used to get pretty good crops of comb honey in Rhode Island, back in the 'fifties (in round sections, believe it or not — I was using them way back then), and that is definitely marginal beekeeping territory. And I had another letter not long ago, which I seem to have lost, from a beekeeper in New Jersey, who said he was never able to raise comb honey there until he started using the shook swarm method, and that now, with that, he gets good crops. Most of New Jersey is less than first rate beekeeping territory.

That brings me to something I've been wanting to bring up. I've described that shook swarm method for comb honey, both in these pages and in my book on raising comb honey. Every now and then people tell me that it worked fine for them, and once in awhile I hear of someone who didn't make out quite so well with it. So I would like to have readers who have used that method drop me a line, telling me how it worked for them. My general impression is that, at the hand of a reasonably skilled apiarist, the method works beautifully, as in fact it invariably has for me; but I would like a bit more testimony on the point.

Is there a good market for comb honey? Well, that depends. The round sections, even though they have been around for over twenty years, have not been used extensively until a few years ago, so they are still a novelty to the buying public. Still, they are so obviously superior in appearance to other forms of comb honey that general acceptance is only a matter of time. Now of course there have always been certain areas of the country where comb honey, of whatever shape, moves slowly. It has never been very popular

down south, where chunk honey is favorite. Still, I was talking with Jim Johnson in West Virginia just recently, and he said that there is an old and established comb honey market there. I get my own big crops sold, though I must admit that I have to be on my toes to do it. Much of it, maybe a couple thousand sections, I sell without leaving my home. But whenever I go on a trip, to talk to beekeeping associations or whatever, I try to take along about fifty sections or so, whatever I can get into a suitcase, and they always get sold.

I think we have to remember that when extracted honey was introduced the consuming public was a bit slow catching on to it. Of course they had the justified suspicion that extracted honey might be adulterated, since there were then no laws against it. It is, however, my belief that if something is genuinely good — and nothing is better than comb honey — then people are going to want it, and while there might be an initial hesitancy towards anything that is new and unfamiliar, the demand develops over the long run. Certainly that makes sense, and it is true of everything else I know of. And my personal experience is that a lot of people who got their introduction to comb honey at my honey stand come back for more, and for the best reason in the world — because it is really good. □

Bee Sting Treatment

A paste of household ammonia and baking soda works exceptionally well on bee stings, according to Mrs. Jane Wilkins of Riverton, West Virginia. She says, "Everytime we have used this combination we have had almost immediate relief from both the burning and swelling. Sometimes more than one application is needed, but it works!" □



Research Review



By DR. ROGER A. MORSE
Research Editor of *Gleanings*
Professor of Apiculture
Cornell University, Ithaca, N.Y.

Pesticide Recommendations

The long-range goal of the Environmental Protection Agency is to push American agriculture in the direction of using fewer and safer pesticides; at least this is many beekeepers' point of view. Despite some changes, the total quantity of pesticide used in this country increases each year.

The U.S.D.A. has just prepared a new publication which may be of value to those who are working to remind EPA of our goals. Two pages are devoted to honeybees and the fact that they should be protected. The title is self explanatory. Copies are available by writing the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. There is no indication of the price on the copy I have.

Guidelines for control of insect and mite pests of foods, fibers, feeds, ornamentals, livestock, households, forests and forest products. Science and Education Administration and Forest Service, U.S.D.A. Agricultural Handbook Number 571. 796 pages.

Foraging Behavior

The behavior of foraging bees is coming under heavy scrutiny today and the results are having some practical application. U.S.D.A. researchers, Kauffeld and Sorenson, observed bees working clones of alfalfa. They found that both in cages and in the field many honeybees discriminate between clones of alfalfa and may visit only one clone on a single trip to the field. When bees behave in this manner there is no cross pollination, only selfing, since the pollen is transferred from one flower to another on the same plant.

Alfalfa plants differ greatly in their attractiveness to honeybees; this fact has been known for a long time. It is a relatively easy matter for bees to distinguish one alfalfa clone from another using color, odor, nectar quantity and quality, ease of tripping, and plant vigor. The important lesson to be learned from this work is that in producing hybrid

*"The important lesson to be
learned from this work is that..."*

alfalfa cross pollination can be increased by selecting parental lines which are as nearly equal in the above characteristics as is possible.

Kauffeld, N.M. and E.L. Sorenson; Foraging behavior of honeybees on two-clone alfalfa combinations differing in bee attractiveness. *Journal of Economic Entomology* 73: 434-435. 1980.

Equalizing as a Management Technique

There are two methods of equalizing colony populations which have been used for a great number of years both to control swarming and to increase honey production. Equalizing colony strength, through removing frames of brood from colonies which are too strong, is discussed in the article cited below. The first equalizing is done nine weeks before the major honey flow. The queen is found, so the beekeeper is certain she is present, and the colony left with four frames of brood. (Defining a frame of brood is always a difficult matter but in this article the author says what he is calling a frame of brood has 70 to 80 square inches of brood on each side of the frame. This would be an area seven or eight inches by ten inches.) The extra brood frames are used in new colonies, made up to the strength of those being weakened. The entrances of the new colonies are blocked and they are moved to another apiary to prevent the bees in them from drifting back to their old location.

As the season progresses, and in subsequent inspections, the number of frames of brood left in the colonies is increased commensurate with the desired strength. The equalized colonies are checked at seven to ten day intervals.

Another method of equalizing colonies which is not mentioned is to exchange the positions of weak and strong colonies in a yard. If, after this, the apiary still contains too many strong colonies, they are split in the manner described above.

I suggest that the subject of equalizing, whatever the method, has not received the emphasis it should. I am aware that it works well in the hands of many beekeepers. There is no research, so far as I am aware, which checks the efficiency of one management method against another. Each beekeeper I know has his own favorite system, which he says works for him. While this might be true I'd like to see some dollar and cents figures to back up management ideas.

Carlisle, B.; Brood equalization management system of Glen and Lloyd Stanley. *Apiacta* 15: 70-72. 1980.



Tulip Poplar Flow Fills Supers

Jim Spradling of Charleston, West Virginia sent *Gleanings* a photograph of one of his hives piled high with supers of honey from the 1980 tulip poplar flow. He said there were other ten story colonies nearby but do not show in the picture. The smaller colony came from a swarm. Jim uses 6 5/8" depth supers throughout. □

Questions and Answers

Q. I have a hive of bees that are very good for honey gathering but are very cross. I would like to requeen them but I can't find her. Would you be so kind as to let me know how I can requeen with out dequeening.

A. The problem arises when the beekeeper must examine the colony comb by comb to locate the old queen. This is always a trying task at the height of the season when the colony is strong. If, in addition, the colony is ill tempered the task is near impossible, subjecting the searcher to many stings. In this event there is almost nothing to be done but wait until spring to requeen. Any plan which involves disturbing the colony to any extent can be punishing to life around the area.

In the spring separate the brood (lower) and the food (upper) chamber if it is a two story colony. Set the upper unit beside the lower unit facing the same direction. You will need a temporary bottom and top. If this is done in the spring there is a very good possibility that the queen will be laying eggs and have brood in the upper unit. A check in the center of the brood nest in a few days will reveal in which of the two units the queen is in. Newly laid eggs will reveal her location.

The colony will be able to raise a new queen in the queenless unit if eggs or very young larvae are present. It may be necessary to transfer a comb of brood containing eggs or larvae to the queenless part if none are present. The principal disadvantage to this method of providing a new queen is that it requires at least three weeks to produce a laying queen and there also exists the possibility that the new queen may inherit and transmit to her progeny, the workers, the same bad temperament as afflicted the bees the previous years.

The other option is to introduce a purchased queen to the queenless unit. When the new queen is established and laying, combine the two units by placing a single sheet of newspaper between them. In a matter of a few days the two units will once again become a single colony. If the two queens are a mother and daughter they may tolerate one another for a short period but eventually one, invariably the daughter, will assume the egg laying in the colony. If they are unrelated or an incompatible mother and daughter the younger queen will immediately, and in almost every case, dispose of the older queen.

In this way the colony can be requeened with a minimum of handling and there is a good possibility of changing the tempera-

ment of the colony for the better by requeening. Of course other factors may contribute to the bad temper of the colony which may or may not be of a temporary nature. Close observation may in time reveal what factors may be causing the colony to be disagreeable or the period of irascibility may pass without the cause ever being evident.

Q. The honey retrieved from our solar extractor is too dark and too strong in flavor for retail sale. We have 7 backyard hives and I would like to use this honey as fall feed. Can you tell me the ration of honey to water? Can it be used in tray feeders as well as friction top feeders? Is there any danger of fermentation when this honey is diluted? -- M.H. New Brunswick

A. We agree that the honey retrieved for the solar wax melter is better fed to bees than bottling it. We presume that the honey has become darker as a result of the exposure necessary to melt the cappings or comb, but even so, dark honey gathered from flowers as well as that darkened by heating is not the best fare for bees confined for long periods during the winter. A higher percentage of minerals in the dark honey may cause dysentery in winter or cause symptoms similar to those exhibited by colonies with dysentery such as severe fecal contamination inside and outside of the hive. The lighter colored honeys or pure beet or cane sugar fed in the fall is better winter food.

If you decide to feed the honey it is better to use a type of feeder such as the tray feeder or a division board feeder which allows the bees to feed directly from the reservoir of honey. If feeding from a bucket with holes in the cover it may be necessary to dilute the honey with water as you have suggested. Diluted honey is more apt to ferment if it is not taken immediately. If water is added, do so sparingly, no more than a cupful to a gallon of honey.

We trust that no disease exists in your apiary. If there is any doubt, the honey should not be fed back to the colonies.

Q. With the arrival of spring my one hive seemed strong and healthy. They worked the dandelion and tulip poplar blossoms with vigor. Then the several privet hedges came into bloom again they were covered with bees. The heady odor from the privet blossoms and the nectar being transformed into honey from the

hive exceeded the odor of any perfume counter in a department store. A neighbour called and asked if I wanted a swarm of bees. I made a cardboard box with a screen on top and a small opening on the bottom which I covered with a cardboard plug and masking tape.

It has been my experience that swarming bees do not sting so went after the swarm with no protection. It was some fifteen feet off the ground. I set the box under them but in cutting the branch only about half of the swarm landed in the box. Apparently the queen did not for they soon left the box and few minutes later regrouped on a lower limb that I could reach. As I was trimming a few small branches away I received a few stings so retreated to let them settle down.

When I went back to place the swarm in the box I was covered with stinging bees. Then I saw the source. It was not the swarm that was stinging me but under the tree in heavy brush was a hive that could not have received sunlight any time of the day. With the aid of neighbour's smoker I was able to capture the swarm.

I brought the swarm home and placed it on top of a super in which I had placed several frames of sealed honey and pollen from my one hive. The swarm had to go through the super to go out but out they went, leaving an empty hive.

Two days later there was no activity at my remaining hive which I had thought to be strong. I took the top cover off and there were only a few bees in it. I had other things to do and was not able to investigate until two days later. As I approached there were many bees around the hive. When I got to the hive I noticed the bees were fighting. There was still sealed honey and pollen in the hive and the wax moths had just started to take over. I salvaged the sealed honey and left the combs out near the hives for any foraging bees to clean up. The next few days there were many bees working the combs. There was no sign of brood in the hive so am wondering if the hive was queenless during the winter.

Now my bee tree (which I obtained from Pellet Gardens and is a beautiful sight) is coming into bloom. There are many bees working it though I know of no beekeepers within a five mile radius. I am quite sure the swarm that absconded has set up a residence nearby.

Would a queenless hive, which I apparently had, follow a swarm with a queen? M.N. PA.

A. Possibly your colony became queenless, the bees reacted to their hopeless plight by joining the absconding swarm. This is, of course, speculation but we suspect this may have been the case. The bees which were fighting around the abandoned hive were robbing the remaining honey from the combs that remained in the hive. Bees do some peculiar things and it would not be surprising if this was one instance where they lived up to this unpredictability.

Q. What use is made of propolis that is purchased from beekeepers? I have always thought it had medicinal properties. H.F. N.H.

A. The last few years has seen a renewed interest in the properties of propolis, the resinous hive product gathered by the bees from the buds of some of the trees. According to information in *Bee World*, "Propolis: A Review" by E.L. Ghisalberti, Vol. 60, No. 2, 1979, Pg. 59, propolis gathered from beehives, where it is used to coat hive surfaces and fill in vacant spaces is sometimes gathered by beekeepers and sold.

The antibacterial and antifungal properties of pharmaceuticals prepared from propolis have been investigated during the past thirty years. Before propolis can be unconditionally recommended as having medicinal value more rigorous attempts must be made to isolate the compounds

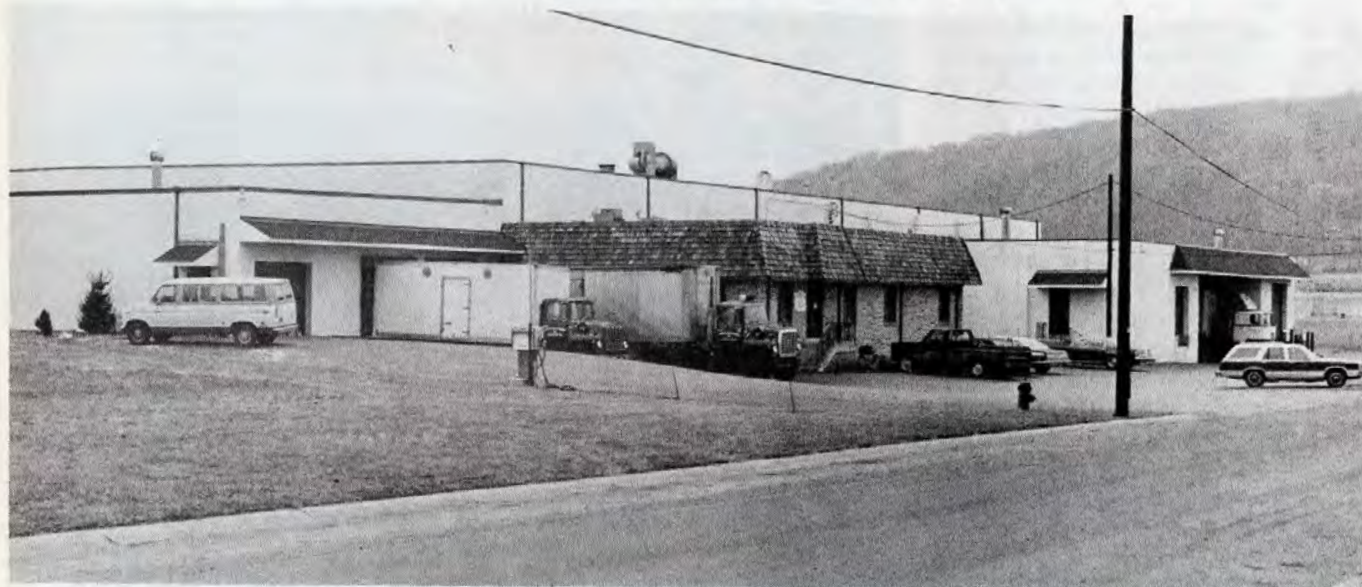
involved, using appropriate bioassays to guide the separation and purification process.

Bee World brings up the point that many of the claims made about the pharmacological action of propolis have not been well confirmed, but nevertheless it seems likely that propolis will be used increasingly for commercial purposes.

Most of the research on propolis is being done in the U.S.S.R. and the countries of Western Europe. In most tests propolis is prepared in alcohol extract although it is also prepared in aqueous extract.

Dutch Gold

"...the next step was to move to the garage..."



The Dutch Gold, 45,000 square foot building and processing plant in Lancaster, Pennsylvania.

By **ROGER A. MORSE**
Department of Entomology
Cornell University
Ithaca, NY

W. RALPH GAMBER bought three hives of bees at a farm auction, in the spring of 1946. This was his introduction to beekeeping and the world of honey. Like many people, he thought bees and producing honey would be fun and a fine hobby. Today he packs over 13,000,000 pounds of honey a year, which is marketed throughout the eastern United States. His number of colonies has fallen to two, though at one time there were many more.

Ralph is fortunate to live in the rich farmland of Lancaster County, Pennsylvania; where colony yields are both consistent and high. His first bees did well and no doubt this early success had much to do with his future. Soon after he bought his first bees, he armed himself with a copy of *ABC and XYZ of Bee Culture*. He still has his first copy, which he keeps in his office for fast reference.

In the late 40's the number of colonies

grew and the Gamber's soon found they had more honey than they could consume and give away. At that time, Ralph was with the sales department of the meat concern, Armour and Company. He put his sales knowledge to work and started to sell some of his honey.

"Perhaps you would like to see our first filling machine," said Ralph's wife, Luella, who today is Secretary of the company and Office Manager. "It was a pit-

cher." That's quite different from the modern machine in the plant today that will automatically fill four jars at a time.

Like many beekeepers, the Gammers packed honey in their kitchen for many years. And, like many beekeeping operations, the next step was to move to the garage. Soon thereafter, they began to buy honey from neighboring beekeepers. A small building, used exclusively for honey packing, was next. In 1958, after two additions to the building, Ralph gave up his job and he and his wife worked full-time packing and selling honey.

The Gammers outgrew their packing plant again in the early 1970's, and in 1974 built their modern, 45,000-square foot building in a spacious field on the outskirts of Lancaster. The address, approximately, is Dutch Gold Drive.

A QUALITY PACK

"There is plenty of room in the market for a quality packer," says Ralph. The Dutch Gold brand stands out on a grocer's shelf. The label, the clarity of the honey, the lack of the foam that is so indicative of careless packing, and the long shelf-life attest to the care with which the honey is packed.

"Less than one-tenth of one percent of our liquid honey is returned because of premature crystallization," says Ralph. "We always have a small supply of packed honey on hand, but all large orders are filled upon request to give a long shelf-life. We guarantee to ship within two weeks but we usually fill orders within seven days."

Dutch Gold packs a number of varietal honeys, including Alfalfa, Clover, Wild Flower, Tulip Poplar, Tupelo from West Florida, Orange Blossom from further south in the same state, and Buckwheat, which is an old favorite from the northeast. Other brands include "Premium" and "Golden". Crystallized honey, both with and without fruit, is also available. "Clover honey is the biggest mover," says Ralph.

About 60 percent of Dutch Gold's production is sold as table honey. The one pound jar is the favorite size. The remaining honey goes into what is known as the "bakery trade." Bakers seek honey for several reasons, one being that it aids in the moisture-retaining qualities of a bread or cake. Also, levulose, the predominant sugar in honey, has special browning qualities that give certain baked goods a special color and eye appeal. Graham cracker manufacturers are especially fond of honey, which gives their products both color and flavor. (Ralph commented that blending honey for the graham cracker trade is an especially fine art.)



Ralph (right) and Bill (left) Gamber, successful father and son team.



One of the several Dutch Gold trucks which may be seen nation-wide picking up and delivering honey.

The Dutch Gold office. A large area is devoted to the retail sale of honey, candles and related items.



Cereal manufacturers are using large quantities of honey today because of its taste and the qualities well known to those who seek natural foods. A small amount of honey is packed for the drug trade, where honey is used in cough and cold preparations (and to cover up the harsh taste of certain medicines). The tobacco people also use honey to cure certain of their products.

A FAMILY ENTERPRISE

Dutch Gold Honey Company is a family-held corporation employing 27 people. Ralph's son, Bill, like the sons of many beekeepers, grew up tending bees and helping pack honey for market. Today he is plant manager, and his wife, a registered nurse, is in charge of quality control and is on call for emergency problems in the plant. Two daughters, Marianne and Nancy, also work in the office.

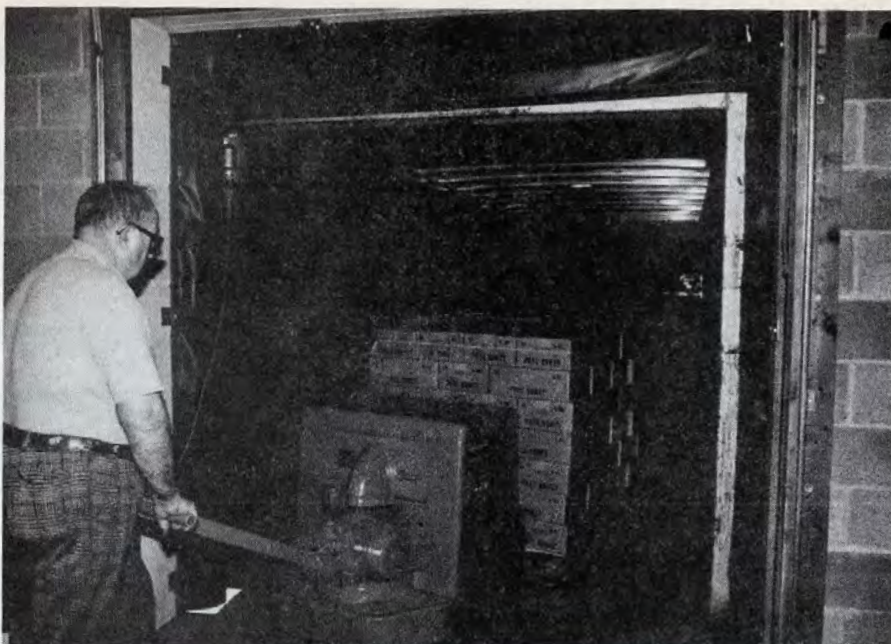
"I saw your truck in Montana," said a neighbor of Ralph's who had been on a summer trip, west. The Dutch Gold Company owns four tractors, five trailers, and two straight trucks to move their honey to market, pick up the glass jars in which it is packed, and to transport honey. Their trucks may be seen in nearly every state at one time or another. Honey comes from many states, Canada, and, when necessary to fill orders, from abroad.

ORGANIZATIONS

Ralph Gamber and his company have long been active in local, state, and national beekeepers' organizations. He served as President of the Honey Packers and Dealers Association for four years. The Lancaster County Beekeepers Association can still depend upon him as an active member. He is always present, too, at American Beekeeping Federation meetings and he and his son and company have been strong financial supporters.

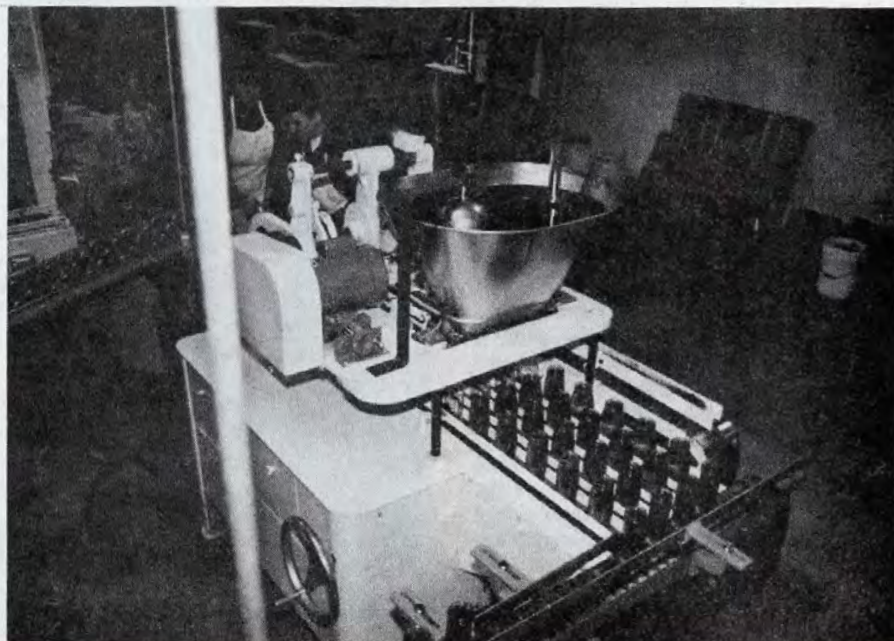
VISITORS

There are no scheduled tours at the Dutch Gold plant. However, visitors are always welcome. In addition to an attractive sales room, there is a panoramic view of their packing room. One is guaranteed to receive an old-fashioned "Dutch Gold Welcome." □



Ralph Gamber loads a truck for delivery. Over half of the Dutch Gold annual production is in retail packages shown here.

A modern, four-row filling machine that is quite different from the pitcher originally used by the Gambers in preparing their honey for market.



A Trash Removal Device For Bee-Collected Pollen

"All of this does little harm to pollen..."

By GORDON D. WALLER and
JOSEPH H. MARTIN
U.S. Department of Agriculture
Agricultural Research
Science and Education Administration
Carl Hayden Bee Research Center
2000 East Allen Road
Tucson, Arizona 85719

BEE-COLLECTED POLLEN can be obtained by attachment of one of several available pollen traps to a honeybee colony (Crane, 1976). Such collection can provide for analysis, to feed back to colonies, or to sell. Pollen collected in this way may contain parts of adult bees, wax moth larvae, granules of crystallized honey, wax particles, and the remains of immature bees that have died. All of this does little harm to pollen used for bee food (providing that no diseased colonies have been used in the collection process), but a simple cleaning procedure to remove these foreign objects would improve the aesthetic value of such pollen.

Kauffeld (1973) developed a trap with an additional set of screens and a second drawer to separate incoming pollen from outgoing trash. Grain cleaning equipment or U.S. Standard Sieves can be used to clean pollen after collection. Jaycox (1979) designed a device to help transfer the pollen from the pollen drawer into a bag.

We have designed an inexpensive and simple device that cleans the pollen and helps bag it in a single operation (Figure 1). We pour from the trap drawer directly onto the top screen, which is made of 7-mesh hardware cloth (Figure 2). This screen separates large objects, such as mature wax moth larvae and dead bees, from the pollen. A fine (14 x 18 mesh) window screen below catches the pollen but allows dust, sugar crystals, and other fine particles to filter through, onto the solid metal bottom. Trash separation is facilitated by a gentle back-and-forth shaking motion (Figure 3). Coarse trash on the top screen is poured out through a metal trough (Figure 4). Fine trash in the lower compartment (mostly pollen) is then poured out a small opening (Figure 5). This might be saved and used later as bee feed or poured back into the colony. After both large objects and fine trash have been removed from the pollen, a relatively clean assortment of pollen pellets remains in the middle section between the coarse

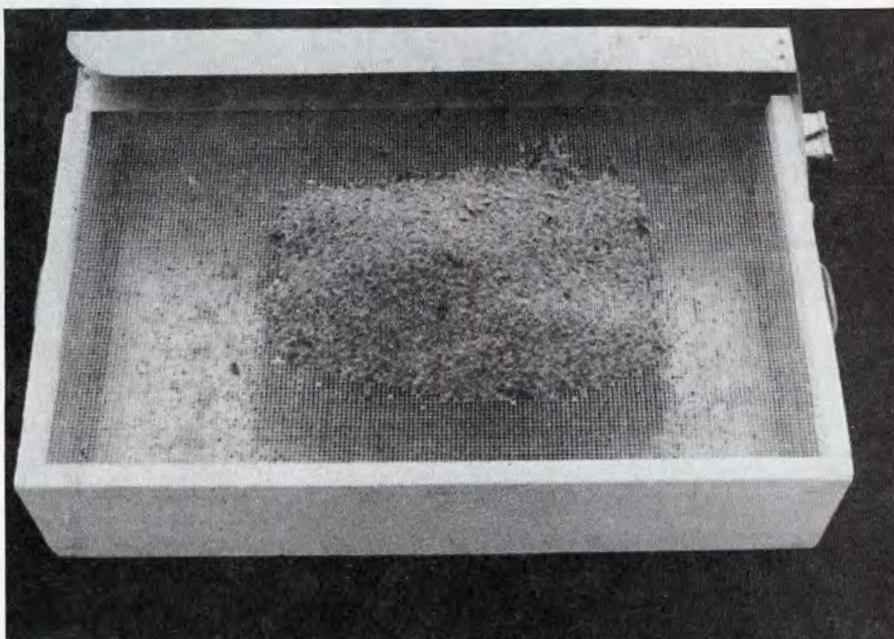


Figure 1. Top view of the trash screen device with the trough that collects coarse trash at the top.

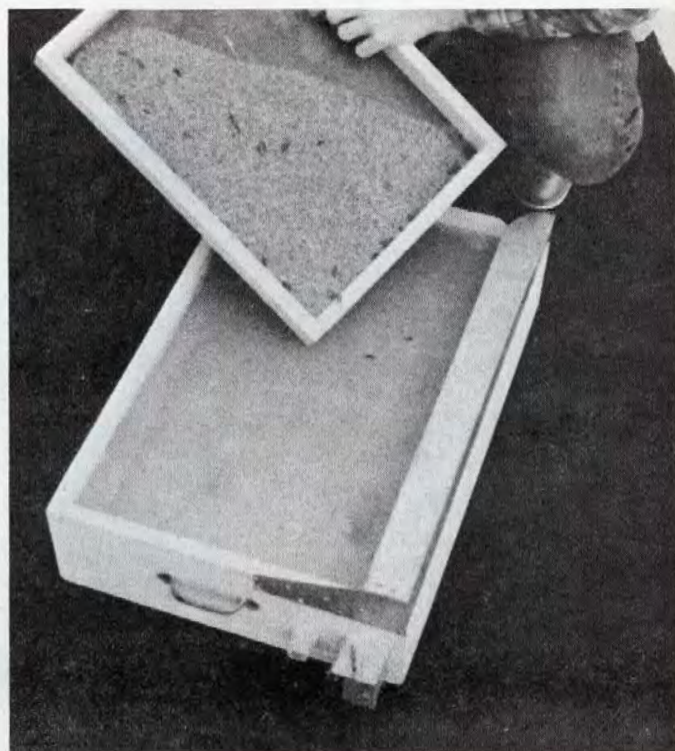


Figure 2. Emptying a pollen trap drawer onto the top screen.

and fine screens. This clean pollen is now poured out through a spout on the end opposite the other 2 openings (Figure 6). During the shaking process, the door over this opening is held tightly closed by 2 springs to prevent pollen from escaping. □

REFERENCES CITED

Crane, E. 1976. Harvesting pollen from hives. *Bee World*. 57(1):20-25.

Jaycox, E.R. 1979. A device for collecting pollen from traps on honeybee colonies. *American Bee Journal*. 119(11):772.

Kauffeld, N.M. 1973. Pollen traps with trash collector. *American Bee Journal*. 113(11): 410-411.

Figure 3. Separating the pollen and trash into 3 separate layers with a back-and-forth motion.

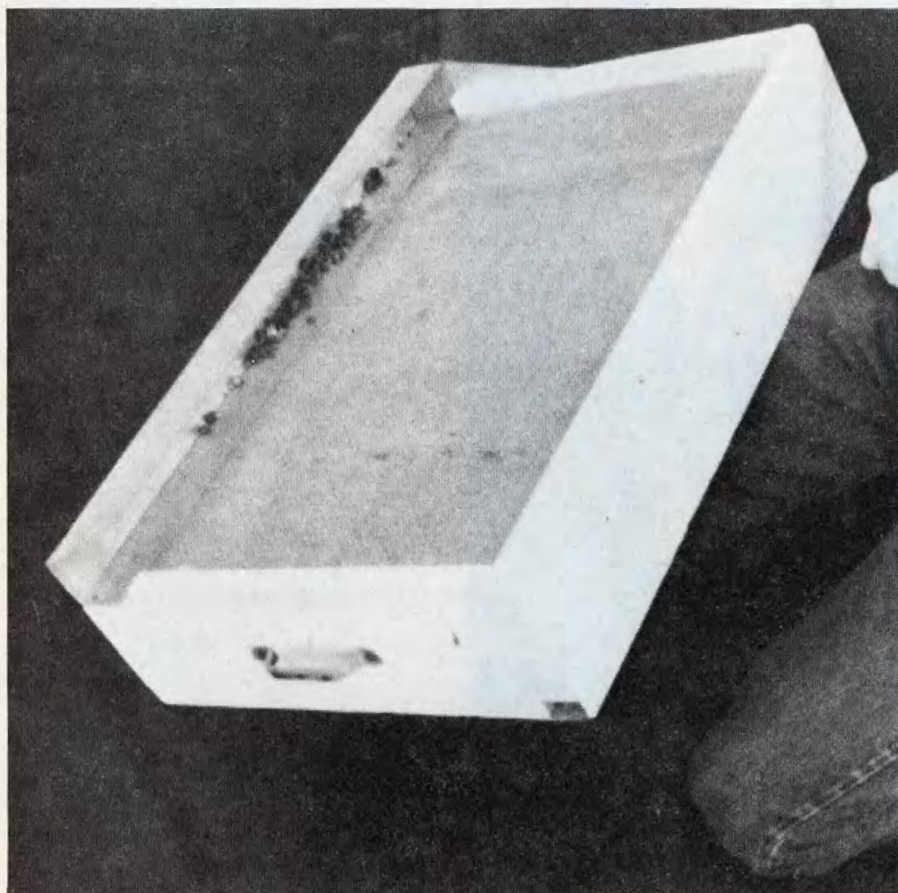


Figure 4. Moving the coarse trash into the trough for easy removal.

Figure 5. Pouring the fine trash out the opening provided.

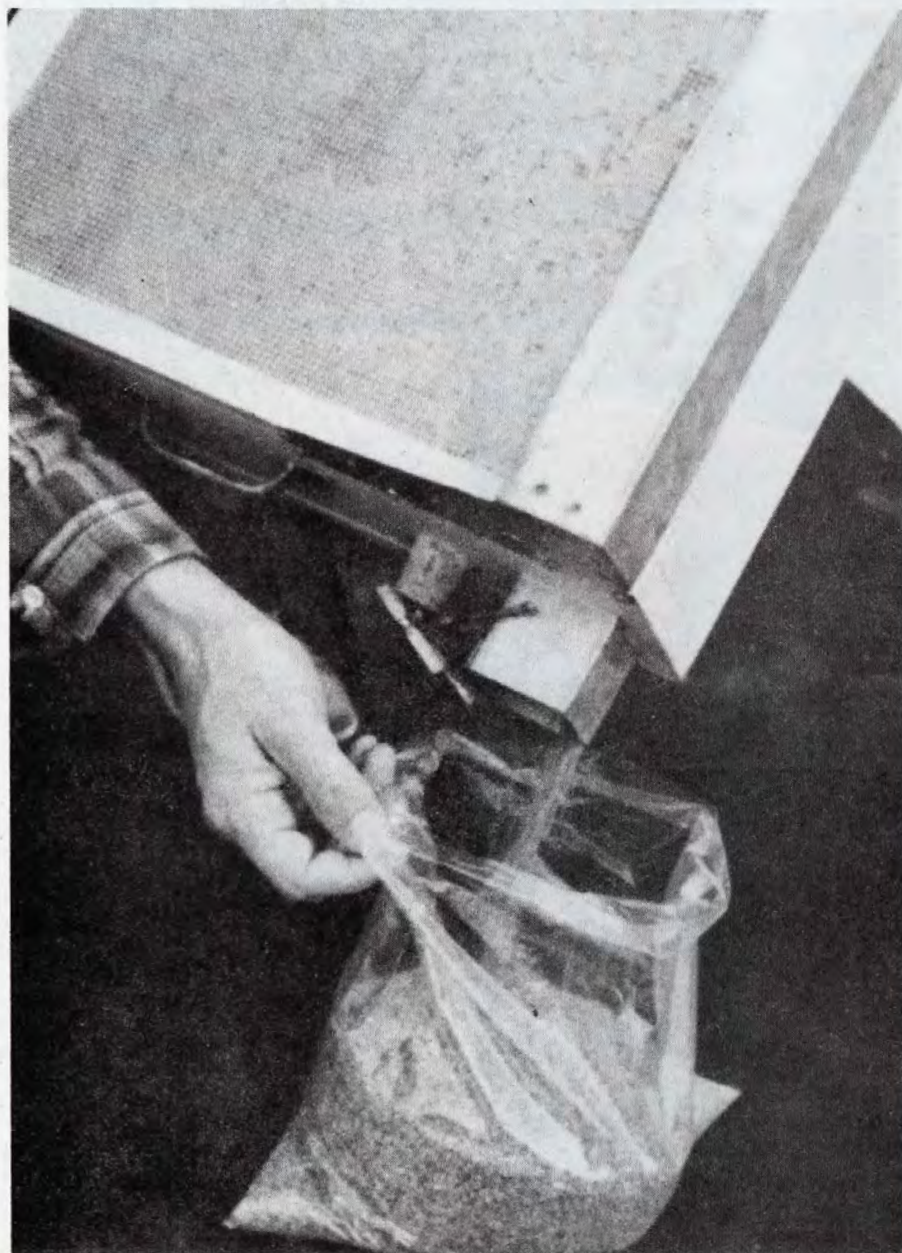
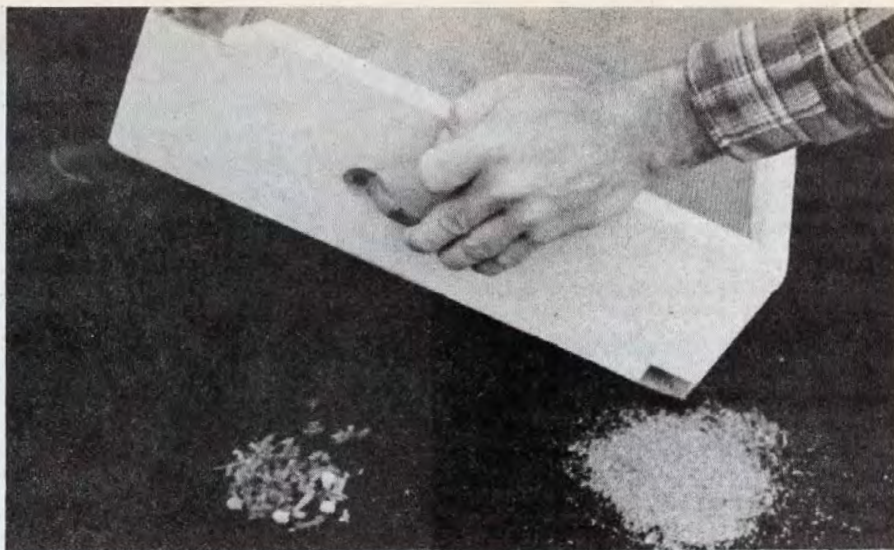


Figure 6. Bagging the clean pollen.

What Makes a Super County Beekeeping Organization?

By Mrs. Irene McIver,
Recording Secretary
North Carolina State Beekeepers Assoc.

"...honestly make a commitment...."

FIRST OF ALL, to have a super county chapter of a state beekeeping association, you must have a super administration — an Executive Board made up of the county association's officers and directors. This Executive Board meets before each regular meeting and at other times when it is felt necessary, to plan and make major decisions for consideration by the full membership, and to take action on matters which cannot wait until the next meeting of the full membership.

Persons accepting such a position (officer or director) in a county chapter should honestly make a commitment to perform the responsibilities of the position to the best of their abilities. Being present at all times (unless it is **absolutely necessary** to be absent) is, of course, a mandatory requirement.

The responsibility for the total chapter lies on the shoulders of the President.

The President shall:

1. Act as presiding officer at regular and called meetings and direct the activities of the group.
2. Act as chairman of the Executive Board.
3. Appoint standing and special committees and work with and through them.
4. Serve as an ex-officio member of all committees except the nominating committee.
5. Fill by appointment, all vacancies in office soon after the vacancy occurs.
6. Serve as contact person for other chapters and the state association.
7. Take action, with the advice and approval of the representative Executive Board, on matters which cannot be deferred until the next full membership meeting.
8. Attend all scheduled meetings of the

State Association, if at all possible, to become better informed.

9. Serve as liaison between the beekeepers' chapter and other area groups such as garden clubs, scouts, schools, and local government agencies such as the county extension office, ASCS office, etc.

10. Sign a bank card soon after election to be able to accept and issue checks in the absence of the Treasurer.

11. Work with the program committee to be sure worthwhile programs are planned.

12. Ensure that the other officers and committee chairmen carry out their responsibilities.

13. Learn the names of all members and generally where they live so that if a member or non-member needs help he can recommend a member in the general area (some chapters use the "buddy system" assigning assigning new and inexperienced members to experienced ones).

14. Make phone calls, write letters and talk to legislators in behalf of the beekeepers.

15. Establish a file of persons who want swarms with extension agent, fire department and police department, also a file of persons who will get bees out of houses.

16. Give generously of time to helping others.

17. Confer with State Apiculturist and/or state Association President and/or Directors or Regional Representatives on all matters in question.

18. See that all chapter owned equipment is circulated properly (ex. extractor, branding iron, etc.).

19. Encourage chapter participation in the State Association's fund raising endeavors.

20. Cooperate with State Association on endeavors which concern all beekeepers.

The Vice President should be as well informed as the President is so that he can fill in for him or replace him whenever needed. He should be on good communication terms with the President, as they need to confer time after time.

The Vice President usually serves as Program Chairman and heads a committee which assists him in planning programs.

The Vice President shall:

1. Plan the year's programs for the chapter to be informative, educational and/or interesting and to meet the needs and interests of the group.

2. Build programs using different techniques for presenting ideas so as to stimulate thinking which will develop into action.

3. Encourage growth of members by having as many different members as possible take part in programs.

4. Plan for the installation of officers at the proper time.

5. Recognize the needs of members and provide programs and projects to aid in individual knowledge, develop leadership among members and encourage participation in study groups.

6. Channel the strength of total membership into activities and projects that will develop a genuine spiritual fellowship among beekeepers of the area.

7. Provide opportunities for developing better human relationships.

8. Consider inviting honey queen to some function and paying her travel expenses.

9. Be responsible for all publicity unless the President appoints a publicity Chairman (remember all good publicity promotes honey).

The Recording Secretary shall be responsible for keeping in the secretary's book the following:

1. Complete minutes and proceedings of each meeting, signed by Secretary and President, including:

a. Names of persons who made and seconded motions.

b. All "drops" including termination of membership by death, resignation, non-payment of dues, non-attendance, etc.

c. Summary of Treasurer's reports.

2. Roll of chapter members —

a. Names arranged alphabetically.

b. Names of deceased members with date of death.

c. Names of other members dropped (with reasons).

Minutes and membership records should never be discarded or destroyed. They should be kept as a permanent record of the chapter, passing them on to the successor at the end of the term.

If the Recording Secretary has to be absent for any reason, someone should be appointed to take notes in his absence; so there will be no gap in the Association's history. The appointee relays the notes to the Recording Secretary, who uses them to write the minutes.

The Recording Secretary shall present a copy of the minutes to the President, soon after each meeting, so he may refer to it as needed.

The Corresponding Secretary-Treasurer shall:

1. Be responsible for receiving all money, paying out all money, keeping an accurate record of receipts and expenditures, reporting to the organization, surrendering the records for audit and passing on all records to the successor.

2. Keep on hand membership cards for the Association, a Treasurer's cash book and receipt book.

3. Go to the bank directly after taking office and sign a bank card authorizing his signature to write checks for the chapter. He should also ensure the President establishes check-writing capability, so he may act in the Treasurer's stead, when necessary.

4. Collect from the members annual state dues and county dues set by each county, give receipts for the money collected and issue membership cards at the time of payment. Notify all members who are delinquent in payment of dues.

5. Deposit the dues in a bank from which he writes checks to pay bills as approved by the President.

6. Promptly send the state dues to the State Treasurer accompanied by an accurate record of members who paid,

names in alphabetical order, addresses and zip codes.

7. Notify the State Treasurer and the State Apiculturist of all changes of addresses and report the death of members.

8. On the appropriated meeting notice, include a statement that dues will be collected and the amount of dues.

9. Arrive early at EACH meeting and sit in a convenient place to receive dues from any members, old or new, as well as answer questions.

10. Prepare a membership list for each member as soon as the bulk of the dues are in, listing names, addresses and telephone numbers — also listing officers and committees of the County Association.

11. Introduce new members at meetings and give members time to record names and other information, if member joins after membership list is made.

12. Spotlight two or three old members at each meeting, so that members will become familiar with each other.

13. Carry on the correspondence of the chapter as delegated by the President. He may act as an agent of the President and Executive Board and correspond for the board. When Treasurers change, the outgoing Secretary-Treasurer shall see that the new Treasurer has the needed materials and instructions. Pass on all records, papers and all other property of the Association to the next person to serve. All records should be kept for the history of the Association.

In addition to officers with well defined duties and an Executive Board to administer the Association's activities, several permanent or temporary committees are needed. Following are some examples:

I. The Honey Queen Committee shall:

1. Upon the vote of the group to sponsor a queen, elect a County Honey Queen, so she can serve in the county all year.

2. Sponsor her for State Honey Queen at the summer meeting of the State Association.

II. The Social Committee shall:

1. Ask for volunteers to prepare refreshments for each meeting.

2. Take charge of arrangements at covered dish suppers and similar functions.

III. The Nominating Committee shall:

1. Observe the members closely all year

and have a slate of officers ready to present at the appropriate meeting.

IV. In addition, miscellaneous committees should be appointed as necessary for various needs such as fund raising, participation in promotional activities such as State Fairs, County Fairs, giving programs for young children, etc.

Even though the qualifications and services of the Officers and Directors of the Executive board are important, they are not the only factors in developing and maintaining a super county beekeeping organization. The members must also serve and participate to ensure success.

Following are some of the members' duties:

1. Support rather than criticize, but remember that constructive criticism is beneficial.

2. Make helpful suggestions.

3. Volunteer to serve in many capacities.

4. Serve when asked.

5. Work together in harmony for the betterment of all. □

Come Help Us Celebrate The Child

St. Jude Children's Research Hospital continues its search for life-saving knowledge about catastrophic childhood disease. And this search continues because people care. There's no charge to patients or their families once admitted to its research studies by physician referral. The cost of drugs, equipment, and research programs is met primarily by public contributions. Help us celebrate the child by sending your tax-deductible check or request for further information to St. Jude Children's Research Hospital, 539 Lane Ave., Memphis, TN 38105.



ST. JUDE CHILDREN'S RESEARCH HOSPITAL
Danny Thomas, Founder

News and Events



TEXAS Texas Beekeepers Association

100TH ANNIVERSARY MEETING 1880-1980

PROGRAM

FRIDAY — November 7, 1980.

A.M.	
8:00	Registration
9:00	Call to Order John Milam
9:05	Invocation Rev. John Flynn Welcoming Address Van Henry Archer Response James Parr
9:25	Introduction of Special Guests
9:30	"Reflections on a Century of Texas Beekeeping" Binford Weaver, W.T. Burlison, Claude Burgin, Loys Milam.
10:20	COFFEE BREAK
10:45	"How Bee Movies are Made" Dr. Norman Gary
11:30	Introduction of Honey Queen Beauties Patti Tuttle, Chairperson
12:00	BREAK FOR LUNCH
P. M.	
1:15	"Beginnings and Future Outlook" Promotion of Texas Honey Leroy Biggers
1:45	Reintroduction of Honey Queen Beauties Question and Answer Panel Patti Tuttle, Chairperson
2:15	"Advancements of the Honey Packing Industry" Robert J. Steele
2:45	COFFEE AND COKE BREAK
3:10	"Growth of Texas Beekeeping as seen through the eyes of the American Bee Journal" Chuck Dadant
3:45	"Honeybee Foraging for Nectar and Pollen" Dr. Norman Gary
4:30	ADJOURN MEETING
6:30	Queen Coronation - Din- ner & Dance - Beekeeper of the Year Award.

'til
12:30a.m.

SATURDAY — November 8, 1980.

A.M.	
8:00	Registration (For late com- ers and Beekeepers School)
9:00	Call to Order James Parr
9:10	"Outlook of The American Honey Pro- ducers Association" Bernie Johnson
9:30	"Vacuuming Honeybees...A New Ap- proach to Finding Queens & Harvesting Honey" Dr. Norman Gary
10:10	COFFEE BREAK
10:35	"Outlook of The American Beekeeping Federation" George C. Walker, Jr.
10:55	"Annual Texas State Fair Summary" Luther Maserang
11:30	BREAK FOR LUNCH
P. M.	
1:00	Business Meeting. Commit- tee Reports, Old and New Business. (Open to all members.)

SATURDAY — November 8, 1980.

HOBBYISTS BEEKEEPING SCHOOL CHULA VISTA ROOM

P.M.	
9:15	Welcome/Introduction John Milam
9:25	"Basic Beekeeping Equip- ment - Description & Use" Mark & Jan De Hay
10:00	"How to Requeen a Hive and Install Package Bees" Curtis Meier
10:30	"Spring and Fall Manage- ment" James Parr
11:00	"Controlling Diseases and Predators of the Honeybee" Paul Jackson
11:40	Questions and Answers Moderator, James Parr
12:00	BREAK FOR LUNCH



INDIANA 1980

Honey Queen is Glenda Ann Musgrave

Miss Glenda Ann Musgrave is the 18 year-old daughter of Mr. and Mrs. Boyd Musgrave of R.R. 1, Bargersville, Indiana. She is a senior at Center Grove High School. She has been active in Sunshine Society, FEA, FCA, 4-H Jr. Leaders, Booster Club, French Club; plus enjoying most sports.

Glenda has worked much with the handicapped and mentally retarded children in her community and plans on being a Special Education teacher following college.

**ILLINOIS STATE BEEKEEPERS'
Annual Fall Meeting
Sat. October 11, 1980.**

8:00-9:00	Registration
9:15	G.C. Walker, American Beekeeping Federation, Inc. Jack Meyer, American Honey Producers' Associa- tion
9:30	Dr. Elbert R. Jaycox -"Development of the Honey Bee"
10:00	Charles Dadant -"Beekeeping Equipment"
10:30	Break
10:45	John Root - "The Anatomy of the Honey Bee"
11:15	Dr. Norman Gary -"Honey Bee Behavior"
11:45	Lunch
1:15	Dr. Robert Meloy -"Physical Properties of Honey"
1:45	Jo Anne Weber - "Women in Beekeeping"
2:15	Frances Bean - "American Honey Queen"
	Break
2:30	Dr. H. Shimanuki -"USDA and Honey Bees"
3:00	Dr. Eric Erickson - "Soy- beans and the Honey Bee"
3:30	Business Session - ISBA
4:30	Adjournment
6:00	Banquet - Town & Coun- try Square Dance Hall (Foundry Street)

The weekend activities will begin Friday, Oct. 10th when the first day of issue envelope featuring the honeybee will go on sale at the high school gym and at the Paris, IL Post Office.

There will be other activities throughout the day including a Friday night High School football game at which the Marching Illinois Football Band will provide the halftime show.

**WISCONSIN
Educational Telephone Network**

Wisconsin beekeepers can learn about "Fall and Winter Management of Honey Bees" during an Educational Telephone Network (ETN) conference Oct. 1, 8:30-10:20 p.m.

The conference is free.

Topics include late fall feeding with sugar, medication needs and benefits, colony organization, protection from wind and extreme cold, and overwintering in controlled environments.

Beekeeping experts from University of Wisconsin-Extension and the USDA Bee

Research Laboratory in Madison will present the program. Speakers said time will be reserved for questions.

ETN functions like a huge telephone party line which links listeners throughout the state with speakers in Madison. Listening points are located in every county.

If you would like to participate or listen, contact your local county Extension office to make sure a room is available.

**MASSACHUSETTS
Middlesex County Beekeepers' Assoc.**

The regular monthly meeting of the Middlesex County Beekeepers' Association will be held Saturday, August 30, 1980, at 2 p.m. at the home of Mr. and Mrs. Gus Skamarycz; 257 Dunstable Rd.; Tyngsboro, MA 01879. Phone (617) 251-3987.

**FLORIDA
Beekeeping Course**

A beekeeping course will be held at HILLSBOROUGH COMMUNITY COLLEGE, Dale Mabry Campus, Tampa, Florida, beginning September 20, 1980 through October 25, 1980. Saturdays from 9 until 1 o'clock.

This course is designed to introduce the beginner to the basic principles and procedures of handling the honeybee colony. Topics include: Honey production, equipment, supplies, control of diseases and processing of honey.

An enrollment fee of \$13 per person is charged. For further information, contact HILLSBOROUGH COMMUNITY COLLEGE: P.O. Box 22127; Tampa, Florida 33622.

**SOUTH DAKOTA
South Dakota Beekeeping Assoc.**

The South Dakota Beekeepers Association is having its annual meeting on September 13, 1980 at the Holiday Inn in Mitchell, S.D. Featured speaker will be Dr. Basil Furgala from the University of Minnesota on sunflower pollination. The evening banquet will conclude with the crowning of the 1981 South Dakota Honey Queen. Registration is 8:00 to 9:00 a.m.

**KANSAS
Kansas State Beekeepers Association**

The fall meeting of the Kansas State Beekeepers Association will be held at the Vagabond Motel, 2524 Vine St., Hays, Kansas, on Friday and Saturday,

September 26-27, 1980. The Judging and Crowning of the 1981 Kansas State Honey Queen will be Friday evening from 7 to 9 p.m. Saturday Registration begins at 8:30 a.m. The business meeting, used equipment auction, Auxiliary meeting, and field trip will make up Saturday's activities.



**OHIO
Butler County Honey Queen**

Melanie Creech is the new Honey Queen for Butler County, Ohio. She is the daughter of Mr. and Mrs. Hiram Creech, Hamilton, Ohio. Melanie is attending Miami University where she is majoring in nursing.

The Honey Princesses are Gennie Cope, daughter of Mr. and Mrs. John Cope, Monroe, Ohio and Gina Johnson, daughter of Mrs. Pauline Johnson of Hamilton, Ohio.

Honey Queen on TV

The 1980 American Honey Queen, Frances Bean of Fort Worth, Texas, was in Los Angeles recently to appear as a contestant on a new television show scheduled for release nationally this fall. "You Bet Your Life" with Buddy Hackett as the M.C. promises to be everything the original with Groucho Marx was and more.

Through arrangements made by the California Honey Advisory Board, Frances was interviewed by six producers at Hill-Eubanks Productions, producers of "You Bet Your Life." Out of the 2,000 interviewed, our Honey Queen was selected as one of the first 90 contestants that will appear on the first season of the show.

We hope you will be watching for "You Bet Your Life" and Frances. She did an absolutely terrific job for honey, making Buddy an honorary beekeeper presenting him with a hat and veil and tee shirt with the slogan, "Honey Lovers Stick Together." Buddy was also given a plaque from the American Beekeeping Federation making him an honorary member. Buddy really got in a few good ones that got the most laughs out of the entire afternoon filming. Can't tell you more, you'll just have to watch for the show!

Queen Frances then travelled to Del



Frances Bean, 1980 American Honey Queen at the Southern California Exposition, Del Mar, California

Mar and the Southern California Exposition. She spent a day promoting honey in the first prize exhibit of the San Diego Beekeepers Association. Thousands came

by to visit with the Honey Queen, taste honey, pick up recipe leaflets and learn more about the industry.

California Honey Advisory Board News Release.



Sean Durbin

Sean Durbin, 8th grade student at St. James The Less in Columbus, Ohio recently competed in the annual Science Fair at his school. He chose to do his project on bees and beekeeping. Sean learned a lot from this project and scored a superior at his school. This earned him the right to move on to the District Science Fair at Capitol University in Columbus. This Science Fair included students from the 7th through the 10th grades from the central Ohio area. Sean earned an excellent rating at this fair. □

The Science Exhibit of Sean Durbin

Science Fair Project Features Beekeeping



New Use Of The Micro-Wave

By DARRELL MATHEWS

The ideal way of removing honey from the comb is to spin it; however, I am a small beekeeper (2 hives) and I am not in the business to sell honey, so it would not pay for me to buy an extractor. I am sure there are many other beekeepers as myself who get attached to the bees as you would chickens or other animals on a small farm. I solved the problem of wax removal through the use of our micro-wave, which I would like to share with others.

SEPARATING HONEY FROM WAX

This is my method which I find is fast, clean, and requires little effort. I cut two frames of capped honey in a large micro-wave container with a clear lid, so I can see through it. I set the timer at eight (8) minutes and the energy output at 40% to 50% capacity, which is on the low side between sizzle and low; so check your micro-wave instruction book. The molecules in the honey and wax move rapidly, creating even heat throughout the honeycomb, up the heating point of the wax, melting, but not boiling. By watching through the clear container cover you can see the wax disappear. When it is melted, take it out and let it cool. The wax comes off in one piece, with most of the other particles, and I strain it into the jars while it is still warm because it flows easily.

HOW TO CLEAN UP

I would suggest that you purchase a container for the micro-wave that you don't use in cooking other foods, because it is difficult to completely remove 100% of all the wax from the container. I clean 98% off the container by filling it with water and putting it into the micro-wave and letting it boil for a few minutes. While most of the wax will melt into the water and can be thrown out, you must wipe the container clean with a paper towel while it is still hot and wax can be removed easily. □

ITALIAN QUEENS

1-19 \$4.50

20-up 4.00

Phone: (318) 466-3238

SMITH APIARIES

Rt. 1, Box 639 Deville, LA 71328

HONEY REPORT

(Continued from page 490)

ly. Prospects are good for a fall honey flow in North Carolina.

Region 6

Record hot weather prevailed through July in Kentucky. Moisture had been short until late in July. There was a light honey flow during the drouth and this has been the poorest honey flow ever experienced by some Kentucky beekeepers. Hoping for a fall crop. Honey sales continue to slow. Tennessee had the best white clover flow in years. The dry, hot weather may affect the fall flow but with rain flow may develop in Tennessee.

Region 7

Still very dry in Texas and Southwest after light showers. The cotton honey flow is in full swing at the end of July and an above average yield is expected. Honey is in good demand but little is available. The spring honey crop was down 50% in Arkansas. The northern one-third of Arkansas has had ample rain but the southern one-third is very dry. Soybean and cotton has been affected by the drouth and nectar yield has been hurt badly. This is not going to be a good year for Arkansas beekeepers. Feeding of many colonies will be necessary for winter.

Region 8

Rain, sunshine and ash fallout stimulated honey plants in western and central Montana causing them to bloom all at one time and to have lush growth. The western part of Montana has a better than average honey crop to date but eastern Montana is still under drouth conditions. The central part of the State is about average. The bees are in good condition. The honey flow has been extended beyond normal.

Region 9

The honey crop is about three-quarters of normal in Oregon. The California orange honey crop was very good. Buckwheat continues to yield well during its blooming period. The sage honey flow lasted about three weeks with an average yield. Bees moved to alfalfa seed fields are averaging about \$15.00 per colony rental fee. Honey trade between beekeepers and buyers is moderate. Market is steady. Honey imports are down. Industrial honey sales very good.

LEARNING MORE ABOUT HONEY PLANTS

(Continued from page 500)

The resulting discussion (or argument) can sometimes be very interesting; since

conditions and variety of plants can vary greatly over just a couple of miles and it is unlikely that any two beekeepers are going to have exactly the same conditions. Also, don't be surprised if you hear of strange plants you can't find in any book — since some of these plants have many nicknames, which may only be used locally.

Since many honey plants are bi-annual and some of those are not very susceptible to yearly changes in the weather, you may find that you will have to keep your diary for several years before you have the complete picture. However, I doubt that you'll want to stop once you get started.

I have found in my area, after one year of study, 49 varieties of plants which are worked by honeybees for pollen, honey or both. This is not including honeydews, of which I have discovered at least one source and possibly a few more. Granted, many of these varieties are insignificant, but I have been surprised by the interest shown in many normally insignificant plants, especially for pollen and occasionally nectar.

I think more beekeepers should try this most enjoyable part of beekeeping and I am confident you will be the better beekeeper for it. So, this winter when you get tired of working in the bee shop, take a trip to the library and look at some nice flowers. □

NOTES FROM THE STRAW SKEP

(Continued from page 496)

ing Princeton in September as a pre-med student. If he reaches his goal he will be graduated from Harvard Medical School in a few years.

My little world was stretched by my contacts with these and other people I met during the course, and I'm certain all of you who participate in such a course have similar experiences.

RECIPE

Cabbage is abundant at this time of year and it makes a good salad accompaniment to almost any meal. Don't forget that it is a great source of vitamins A and C. This recipe for cole slaw should be made ahead of time so the flavors can blend. It keeps well for several days.

HONEY COLE SLAW: ½ cup honey, ½ cup vinegar, ¼ cup finely chopped onion, 1 teaspoon salt, 1 teaspoon celery seed, 1 quart chopped cabbage (more or less), ½ cup grated carrots, ½ cup grated green pepper. Combine honey, vinegar, onions, salt, and celery seed in a pan and bring to a boil. Pour over chopped vegetables and toss to cover all surfaces. Chill several hours to blend. □

IN THE SHADOWS OF MT. ST. HELENS

(Continued from page 484)

Where once the mountain top was a gently rounded dome, it is now pocked with a crater a mile wide and almost that deep. The horse-shoe shaped rim is black and jagged, with the lower side torn away. White steam rises tiredly from the inside. Sulphur oxide gases fill the air.

Once in a while ashes and rocks belch upward a thousand to five thousand feet, and the mountain rumbles half-heartedly as if there was some work yet to do.

Whatever might happen on the mountain in the near future, we learn that certain areas are already redeeming themselves. False hellibore leaves are breaking through two feet of the layer on the mountain slope where thick stands of green forests once flourished.

In time Nature will adjust herself and will have made peace with Mt. St. Helens. The minerals will work into the soil and through a slow process, for generations perhaps, the nutrients will be released, enriching the soil from which bountiful crops can grow. Then the beautiful mountain will manifest her charm and serenity again. □

GLEANINGS MAIL BOX

(Continued from page 495)

Bee Culture. It was thus that I read with disappointment in your July 1980 issue the article by Evy Peterson Nerbonne in which she innocently "reports" of a situation she herself perpetrated.

Perhaps your readers would be interested in some background facts that Ms. Nerbonne failed to provide.

Governor Lee Sherman Dreyfus is an extremely popular Republican Governor who in 1978 defeated the incumbent Democrat, and thus returned the leadership of Wisconsin to Republican hands after eight years of Democratic control. Ms. Nerbonne is an active member of the Democratic Party.

What she so "objectively" reported was a private conversation -- what might be referred to as small talk -- between the Governor and the Wisconsin Honey Queen, Lynn Ludack. Ms. Ludack has publicly said she was not offended by the Governor's remarks. The original story was Ms. Nerbonne's idea, and of course, it must give her great pleasure to have the wire services and publications such as yours lend credence to her story. (*Webster's Dictionary*: story, refers to a series of connected events, true or fictitious, that is written or told with the intention of entertaining or informing).

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I can appreciate Ms. Nerbonne's frustrations with our popular Republican Governor, particularly in this election year, but I also believe you owe your readers more objectivity in what you print. Judy Rendall; Mazomanie, WI.

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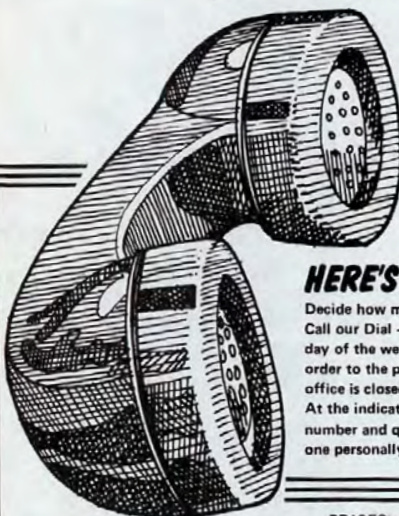
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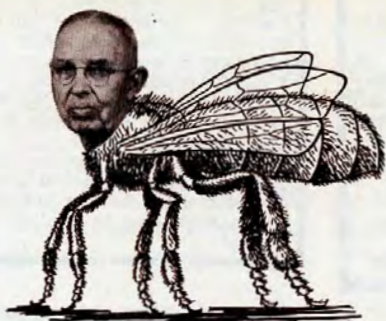
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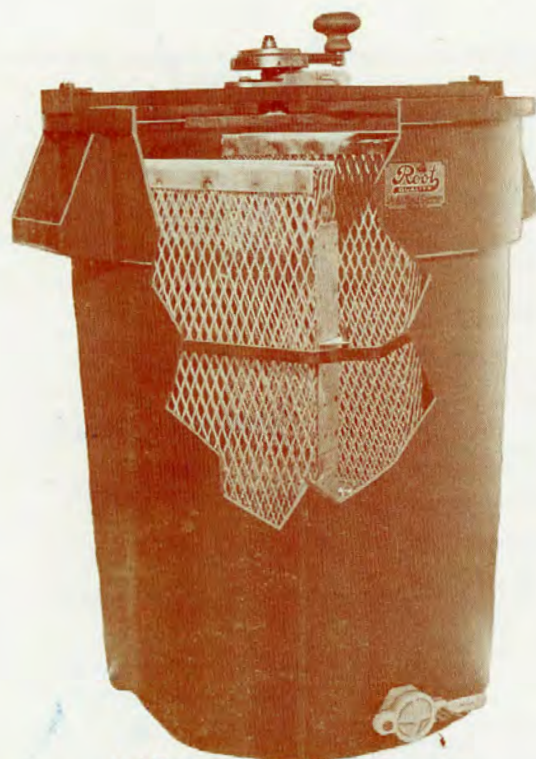
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