HF: Bees, beekeeping and the production of honey, the business of producing honey. This is an interview made with Mr. Rowlee Smart, of Rexburg, Idaho on the 9th day of January 1982. It’s always a privilege for me as the interviewer to welcome to my recording studio here at 68 East 1st South, my home, those whom I have contacted to be interviewed and to express appreciation to them for accepting the offer and their willingness to share in knowledge of which they have a full understanding, a peculiar knowledge of a given subject by reason of their life long involvement in such a subject matter. And so it is with Mr. Smart, being involved, working with bees, producing honey, and this will be the subject of our interview today.

HF: Mr. Smart, will you state your full name, and where you were born, and when you were born? There’s three questions.

RS: My name is Rowlee M. Smart. I was born in Ithaca, New York October the 30th 1908. My father and mother were there going to school – my father was going to school at Cornell University and after a year he returned to BYU where he was Professor in the college there. In taking care of his work, he had a farm on the hill behind the Maeser Memorial Building. He was in charge of that farm and he [was] engaged in a few bees and through these few bees why, my older brother Wayne started in the bee business. He started in southern Utah for a man in the summer time. I did not go into the bee business or learn anything about it until the last two years of my high school; I went to Preston, Idaho and worked in the summer extracting honey. After that I went on a mission and after returning from a mission I then came to Idaho to Blackfoot, Idaho to work for the Miller Honey Company.

HF: Now, so your parents actually didn’t bring you and your older brother Wayne up into the Upper Snake River Valley. You came up here on your own sort of?

RS: That is right. We came on our own. No, they stayed there and father was a professor for a number of years until he died and then my mother taught school and then became the Dean of Women at the BYU for a number of years until her death.

HF: And what was her name?

RS: Nettie Nef Smart.

HF: Nef Smart.

RS: Yeah, Nef.

HF: I see. Well that’s very interesting. Were there others in the family beside you and your brother?

RS: I have three other brothers and one sister. One sister is deceased now.

HF: I see. Have they all sort of been involved in higher education?
RS: Yes they all have been involved in higher education, one running newspapers another teaching at the University of Utah, one finished his courses in California [and] is teaching there. Of course, Wayne, he’s just finishing on the bees and retired and now living in Salt Lake City.

HF: And you’re carrying on – now you and Wayne were partners I guess for a few years?

RS: Well, we weren’t really partners. We worked together on things. Our outfits were separate but we bought bees together and helped each other along the way.

HF: And he lived for a number of years up here to, didn’t he?

RS: Yes he lived here for a good number of years. He was up here long before I was. I worked in Blackfoot for about seven years and I was in Blackfoot and Salmon, Idaho about six years in the bees until I returned to Rexburg where I started the bee business.

HF: How do you spell your first name?

RS: R-O-W-L-E-E.

HF: I see. R-O-W-L-E-E.

RS: Just one L.

HF: Oh, R-O-W-L-E-E.

RS: My name came from a professor at the Cornell University. His name was Lieutenant Herman Rowlee; my father became well acquainted with him so I was born there so he made my first name Rowlee.

HF: Well so you were a college professor’s son? Well that’s interesting. I think that’s wonderful. I surely want to say that in passing that I appreciated Bishop Smart, who was my Bishop when I first came down here and so that was very fine. Well now we are going to be talking in the interview then about bees and bee keeping and I suppose the first reference that we have is the reference of bees named deseret, d-e-s-e-r-e-t. This name was given to the honey bee by the people who came to the Promised Land, the Jaredites in 2247 B.C. [Ether 2:2] and I believe that when the Mormon pioneers came to Utah they must have brought bees with them also. Do you know anything about the back ground introduction of bees, the bees into this intermountain area?

RS: I don’t really know too much about that but I know that M.E. Miller, the father of the Miller Honey Company, was raised in Logan. He was the first man that I came acquainted with who had bees in a great amount and he was always trying to place bees up and down the valley where he could always accumulate the greatest amount of honey and through his sons, Ray Miller, and Dale Miller, and Earl Miller, and William Miller, the Miller Honey Company went under that and is still under that name. Ray and Dale both worked in Rexburg for a short time with a bee outfit their father set up. Then after a few years my brother Wayne took the outfit over and started buying it and that’s where Wayne came into the picture here in Idaho and then I was
working for the son Earl J. Miller in Blackfoot for a number of years. Then after I worked in
Blackfoot I went to Salmon on a lease for about six years and I didn’t seem to be able to make
really enough to justify what I wanted so I turned to Rexburg and then [built] a bee business
separate from my brother but we bought outfits together.

HF: About what year was this when you really came back and worked here permanently?
Started here permanently?

RS: It was about 45 years ago.

HF: So it would be in the late 30’s.

RS: Yeah, I’d imagine it was about late 30’s I guess.

HF: ’36 or ’37?

RS: It would be a little later than that – yeah that would be about it.

HF: About ’37 or ’38?

RS: ’38.

HF: Now what inventory did you have when you set up your first business?

RS: Well I didn’t have any bee – all I had was experience. There was a man by the name of
Wilmore Kinghorn in Rigby that had an outfit for sale because he had a heart condition and he
couldn’t work the bees. So Wayne bought half his bees and I bought the other half – Kinghorn’s
extracting outfit and used his warehouse the first year and then William T. Gibson who was in
Rexburg for a number of years with his son, we bought their outfit and I took half of their outfit
and bought Gibson’s warehouse which is the old laundry building down by the sawmill and so
therefore between the two I accumulated two half businesses which I worked on for a number of
years. After a number of years the bee business wasn’t proving to profitable for me so I reduced
my number to 500 instead of 1000 and I took on a custodial job and with this custodial job I was
able to handle 500 colonies of bees which continued till 1976 which at that time I gave up my
custodial job and went into the bee business entirely.

HF: Full time. Now when you had the two operations, are you suggesting that you had one in
the Rigby area and one up here?

RS: Yes. I had a warehouse in Rigby I was running for awhile until I bought the one from
Gibson and I quit running the one in Rigby and moved to Rexburg and ran them both from this
one spot here.

HF: But the warehouses were in two different places?
RS: The warehouses were in two different places but I quit running the one in Rigby and I bought the one here in Rexburg.

HF: So you had one warehouse in Rexburg?

RS: Yes.

HF: And it was just the one location?

RS: Just the one location.

HF: And that’s over on the north side of town?

RS: Well that’s were the old sawmill was, the old [indistinguishable] on the sawmill lot. Then after a number of years when my brother when out of business, I bought his warehouse and fixed his warehouse up. Then the flood came and destroyed both of them so I erected one where by brother’s was beside the track one block west of the sawmill and there I have been working since then.

HF: Would that be sort of about north, a little bit north and east of North Center?

RS: It would be right on Second North, west on Second North.

HF: West on Second North. Mr. Smart what do you mean by a warehouse? What does a warehouse contain?

RS: It contains your equipment for extracting and taking care of the bees during the year. You bring your honey into the warehouse where you extract it, put it in tanks, put it in cans, and then resell it. Where you can have your comb stacked over the winter, where you can repair your equipment and take care of the things that need to be taken care of.

HF: What are the dimensions of your warehouse?

RS: Oh, it’s about thirty-four by fifty-four with a full basement I imagine.

HF: With a full basement?

RS: Yeah, plus an extracting room to go with it.

HF: And you have that heated, do you have to have that heated?

RS: I keep a boiler, steam boiler going most of the winter and I have a little stove that I build fires in it to warm it up.

HF: Now you use this, it’s used and you’re in there working both winter and summer, I suppose?
RS: Yes, I’m off and on in there most of the winter and summer.

HF: Let’s talk just preliminarily about the bee, the beehive. What constitutes a colony of bees or a bee hive? Is that the same thing a bee hive and a colony of bees?

RS: Yes, a colony is one group of bees with one queen. We started out with one box first, hive, and over the winter we found out it took more than one box because they had pollen in it plus honey. We could never tell how much pollen they had in it and if they didn’t have enough honey then they’d starve to death and so we included one more super on it. Making a bottom box and the first super to winter them over, we’d leave at least forty pounds of honey in it for over the winter time.

HF: For one colony?

RS: For one colony.

HF: And about how many bees would there be?

RS: Well there’d be two or three pounds of bee because it would be hard to average out how many there would be but the thing is the winter time as it gets colder the bees get in a cluster around each other over the honey and as they get too warm they come out the outside and the ones on the outside get cold and go inside and then we cover them up over the winter so they can retain heat from themselves a little bit so the biggest part of the winter they’ll be able to move. Our biggest hazard over the winter is that if it’s too long of sub-zero weather where they get too cold where they can’t move, where they can’t move a little closer over to the honey when they’ve consumed one frame, they need to move to another frame to get the honey, and if it gets too cold so they can’t move they just starve to death. That’s one reason I’ve always maintained we have a high January thaw. The Lord blessed it with us so the bees can move in there hives and get going again.

HF: It sort of gives them rejuvenation then.

RS: It gives them rejuvenation.

HF: Now do you keep you hives in the warehouse?

RS: No, we keep them out in the bee yard, out in the yards in the farmer’s lots where they are. We just move them together so that they can have heat from them own selves and cover up all the tops and the ends with straw, tar paper, and wire netting so that the wind won’t blow it off or the animals won’t get into it so that they preserve a little heat in the hives for themselves.

HF: Oh, so you don’t bring your hives in where you place them in the spring and summer time. You just leave them out there.

RS: I leave them out in the bee yard all year round.
HF: And that’s scattered all around the country side.

RS: Yes.

HF: But you do winterize them as you’ve explained and described.

RS: Yeah every – we try to have them covered by the 15th of October and they stay covered at least till after the first of April in the spring, depending on what the weather conditions are in April, whether you go into them. We try and leave enough honey in them so they’ll…

HF: You mentioned forty, did you say forty pounds?

RS: At least forty pounds.

HF: Per colony?

RS: Per colony.

HF: And that would be two or three pounds?

RS: Forty pounds.

HF: Well how many pounds of bees though?

RS: Well it would be at least two pounds of bees.

HF: Two pounds of bees and you want to hazard a suggestion as to how many that would be?

RS: Well I would want to say 2,300 or something like that. I don’t know what the count is. We just go by pounds.

HF: You go on the basis of pounds.

RS: Yeah, it varies over the years. Sometimes they come out weaker, only have a few bees and sometimes they remain strong and we have a lot.

HF: What’s the queen doing all this winter, hibernation time?

RS: Well, fairly warm she keeps laying a few eggs over the winter time to keep up the amount of bees that are in a hive. There will be a few bees die off over the winter on account of they wore their wings out during the summer. She just stays in there and lays a few bees and they just raise a few until spring time comes. And so then when spring comes and the honey flow starts then she starts to increase her activity of laying eggs…

HF: How many eggs is it anticipated that a queen will lay in a year?
RS: Well they claim a queen will lay at least close to 1,800 eggs a day during a honey flow. So the idea is that if you can stimulate your queen to lay a lot of eggs then you have a lot of bees to get a lot of honey and that's the main idea of it.

HF: Are those eggs laid, do they come in clusters?

RS: Well no, we have them in the frame. We have to have an indentation on the foundation, a piece of wax that we put in, and the frame start with – the bees need to have the right size cell to grow to have the worker bees come out of. The bees have a tendency to build a bigger cell, bigger cell and a drone bee comes from that and a drone bee doesn't produce any honey. So we have to make sure our combs are good with the worker size cell so when the queen lays an egg in the worker cell it will come out a worker instead of a drone.

HF: Now it's the drone, is the male and fertilizes the egg?

RS: The drone is the male part of the thing and the queen lasts about three years.

HF: Her longevity is about three years.

RS: About three years and she has to be fertilized once in a lifetime. It takes one drone to fertilize her for a lifetime.

HF: I see. Now would that queen bee stay weeks old or months old before she is fertilized?

RS: She’s fertilized in the first month after she’s hatched out of the cell.

HF: And that one mating is all that’s required to keep her fertile.

RS: The queen makes one flight out of the hive. She goes out for mating and this mating takes place in the air and the queen returns to the hive and there she remains for the rest of her life until or until if you don’t watch it then they get strong in the swarm and the queen takes off with the biggest share of the bees and they fly out of the hives and their cells left…

HF: Vacant.

RS: So they can raise another queen in place where she’s left. They raise their own queen, a lot of queens, inside the hive when they get too strong.

HF: When you say too strong, you mean too numerous?

RS: Too numerous for the amount of room that they left in the hive.

HF: And that causes them to swarm?

RS: That causes them to swarm. So the idea is that we have to go around and make increase each spring so they won’t become too strong.
HF: In order words, you divide the colony.

RS: Divide the colony.

HF: You put where they were all in one box.

RS: And put them in another box.

HF: You put in another – half of them in another box.

RS: Yes, part of them in a box and then we buy another queen which we get from California to put with the new hive.

HF: What size of container ordinarily would you make?

RS: Well, the size box is about 16 quarter inches wide and 22 inches long and about 12 inches deep and we have about nine frames inside of this box.

HF: Nine little frames.

RS: Nine frames.

HF: And it’s these nine frames that they fill with honey.

RS: Honey and brood they put the brood right in the center of the hive and honey’s on the outside of the hive.

HF: The brood, that’s where…

RS: The queen lays the eggs.

HF: She lays her eggs. For best conditions, is there a given temperature that you would like to have maintained or prefer, in that box?

RS: Well they, they have a system of their own to regulate the heat – the fanning of their wings, they have a circulation in there that keep’s its cost in what they want at the year. The longest is in the summer time, they cool themselves off when it gets too hot. Winter time they keep themselves warm as best they can.

HF: Now you have indicated that a queen lay eggs and her longevity is about three years, three years?

RS: That’s right.

HF: And now when the drone mates the queen, does that drone die?
RS: Yes, the drone dies.

HF: Immediately?

RS: Immediately.

HF: Now is it customary for there to be several drones seeking to mate that one queen?

RS: Well, near as we can figure they are but they have a hard time finding – watch to see the queen really how, cause he does it in the air and there are so many bees in the air that its hard to find him. They are all looking forward to it but…

HF: She’s a little bit larger than all the worker’s isn’t she?

RS: Yes, she a little elongated and a little larger than the rest of the bees.

HF: You know, I think bees a miracle, the way they can take off from the hive and fly what, two of three miles away?

RS: Well we figure three miles is about the average for them but they can go as high as seven in times of famine.

HF: And come back to that hive?

RS: And come back to the same hive, that’s right.

HF: Do they have good eye sight or is it something else that directs them?

RS: Well it’s something else that directs them, its instinct more or less.

HF: Kind of a radar system?

RS: A light or radar system, they just climb out of their hive up in the air and they can go direct to where they’re supposed to go. The other bees let them know where the honey is and they just raise out of the hive and then they have the instinct to which direction to go according to light. They fly to that direction where the honey is and then return.

HF: Now when they reach the field where they are going to gather, what is it, do they call it nectar?

RS: Nectar.

HF: And that’s the, what the…

RS: Alfalfa blossoms.
HF: The moisture or whatever in the blossom?

RS: The blossom yes.

HF: What do they call that little thing that they protrude down into the blossom?

RS: Well, I don’t know what hardly to say, it’s their tongue I guess.

HF: And they bring the nectar out.

RS: Yeah, bee has two stomachs: one of them is for the honey stomach and one for themselves. They bring that honey into their stomachs and then what they need to put in their own stomach and then the other stomach is reserved for bringing into the hive and then they come back and they just regurgitate the honey from the one honey stomach and then they go back out again to gather more honey.

HF: Now what the regurgitating is that the nectar they’ve gathered?

RS: That would be the nectar they’ve gathered.

HF: Has there been some process taken place though while it was inside them, fermentation?

RS: No, there would be no difference in it, any fermentation or anything while it’s in their stomach.

HF: It takes place in the hive?

RS: It takes place in the hive, they bring it in and it’s really thin at that time and it has to be fanned down and the moisture taken out of it and then they fill these cells up when all the moisture is out of it, then they cap it over with wax.

HF: They do this themselves?

RS: They do this themselves.

HF: But inside the container which they’ve capped over, why it’s kind of liquid?

RS: It’s liquid, yes. It’s been thinned down to where it won’t – all the moisture is taken out enough of it that it won’t ferment.

HF: I see. Now if they were left alone, why that’s, and you didn’t take that away from them, that’s what they would live on.

RS: Yes.
HF: What kind of materials constitute the wax that they put over their cells?

RS: Well it takes about ten pounds of honey to produce one pound of wax and they produce that through their body, through a wax gland that comes underneath their body, in one of their segments of their body and after they’ve produced about ten pounds of honey then they produce about one pound of wax, which they can use to build up their combs and cover the honey with.

HF: The wax goes around the outside of the cell?

RS: It goes around the outside of the cell.

HF: Is the cell kind of roundish?

RS: It has about eight sides on it.

HF: Oh.

RS: To start with then it gets to be round.

HF: And you build that?

RS: Well we put a sheet of foundation in the center of the frame with the indentations of the size cell we need and then they build from there out.

HF: Oh I see. Now this wax that they produce is of course of a heavier texture isn’t it?

RS: Yes.

HF: It would have to be.

RS: Yes it’s really heavy.

HF: And you say there’s maybe around ten pounds in each cell?

RS: Well there’d be, yet, the bee has to produce ten pounds of honey to…

HF: …to get one pound…

RS: …to get one pound of wax. So it just depends how much honey you get over the season, how much wax you get. Then after you get the wax you have to separate it and then we sell it back to the processors who clean the wax up and put it back into yellow form and make candles and sell it for different things and also make foundation and things to go back into the bees.

HF: Well and so what you gather then is the honey, the good quality that humans eat, and then wax and you use it to carry on your program of bee keeping and producing and then if there is any excess then you sell that.
RS: That’s right.

HF: The wax.

RS: That’s right.

HF: But it all has to be processed.

RS: It all has to be processed.

HF: You don’t mix any wax in the pure honey?

RS: No, wax and honey won’t mix so you have to keep those things separate.

HF: Completely separate. How often do you go to a colony of bees to get their honey?

RS: Well it depends on which honey and equipment you have. To get a good honey flow you go two or three times.

HF: A season?

RS: A season, which – seasons up here in this valley is the last part of July and the first two or three weeks of August. The farmers cut their hay too quick on the first crop so we don’t get too much from that and we have to wait for the second crop which is last July and the first part of August and we have to hope that we have good weather. [telephone rings]

HF: Mr. Smart, in your opinion, what is the best foliage or the best flora upon which the bees should go to gather their nectar?

RS: Well up in this country we need alfalfa mostly for you to produce the white honey but the dandelions honey is the first thing in the spring is very important to the bees if the bees can get good honey flow from the dandelions it increases their queen, increases her laying and they also produce honey for the coming winter – put the honey in the bottom which we need and then after that they can make the lighter honey which comes from alfalfa and clover and dutch clovers which is lighter honey which the bee people like to get – light honey to go with the dark honey. So they can mix it and make a general blend of it.

HF: I see. So dandelions produces the darker honey.

RS: Dandelion honey is yellow and darker and stronger honey.

HF: And the lighter comes from alfalfa or dutch clover and so forth, and alfalfa.

RS: That’s right.
HF: And that’s the more choice.

RS: That’s the more choice. They pay more for it, the light honey than they do the dark.

HF: How quickly ordinarily can you get out there with the bees? When do they start gathering?

RS: Well we go out and start taking care of them the last part of April if the weather permits. Most generally it does and then we try to take care of the division of them by the end of May by dividing the hives and putting new queens in them from the ones that we divide. And then during June there is more of less just a waiting period for them to start gathering more honey from the alfalfa and dutch clover and things like that.

HF: Any other kind of blossoms that are good? Sage for example?

RS: Well, sage produces a little darker honey but there’s apple trees and different kind of fruit trees and the people in the gardens like to have their cucumbers pollinated by the bees and things like that and the raspberries which need to be pollinated. Bees are very good in this manner. They all like to keep them around the town where there’re gardens.

HF: For example, we have raspberries out here, is it likely that those blossoms and so forth are visited by some hive of bees?

RS: Very much. We have people calling up wanting to know if we won’t put some hives near their house so they can pollinate their raspberries and other years they say there are plenty of bees in then and in other years they say there are very many. I don’t know what makes the difference.

HF: That’s interesting.

RS: But they need it to pollinate their raspberries and different crops and cucumbers and things like that.

HF: Well now, are bees the workers, do they live very long?

RS: The workers live over the winter time when they aren’t busy but the workers bees during the summer wear out their wings and they live only approximately about thirty days so it's imperative that you have a lot of bees because a lot of them are going to die. The queen keeps laying the worker bees so they will keep gathering the honey and the drones are only there to fertilize the queens and they don’t produce any honey, they just eat it and so when fall comes they kill the drones off.

HF: Who kills them?

RS: The worker bees themselves.

HF: Kill them off?
RS: Kill them off so they won’t feed on the honey over the winter.

HF: In a colony of say, two pounds of bees, can you give me an idea, of course there is only one queen but could there be a hundred drones or five hundred drones?

RS: Well there could be a hundred drones. It depends a lot on how your equipment is. If your combs have been broke down and the bees themselves build it from scratch, why they build drone cells which are larger cells and that way they produce a lot of drones that way so we have to keep our equipment in good shape which fewer drone cells ready for them, for the queen to lay in.

HF: Now why do you go out into the spring when you divide a colony and buy other queens? Can’t you get the queen to produce a queen to produce another queen within the colony?

RS: Well we can but it takes too long for them to do it, it takes two weeks from the time the queen starts in the cell till she’s hatched and it takes a few days for her to become fertilized and then it takes a while for her to lay the eggs and their season is so short up here that it doesn’t pay – it pays us to buy queens from say, California and ship queens in to put with this hive so she can start laying eggs right now instead of waiting for the queen to start. We’ve tried to raise queens up here but the season is too short and you’re too busy at that time to spend time doing it. So we find it’s more profitable to buy queens already mated in California and ship them in.

HF: I see and how much do you have to pay for a queen?

RS: Oh you have to pay anywhere from $4.50 to $6.00 dollars a queen. It depends on the year.

HF: Do the sellers make any guarantee or warrantees?

RS: No, they just send you some queens and say they’ve been fertilized and mated and there alright. Occasionally they send an extra few queens to take care of the ones that are dying the ones that are turned drone layers. But that’s all, you just have to take a chance on how many turn out good.

HF: Have you ordinarily had pretty good luck?

RS: We have fairly good luck but it depends a lot on your weather. If you have stormy weather then you have a little more grief than you do when it’s good weather. So your chances have to go according to weather conditions.

HF: Okay, let’s go back now and I want to ask you what causes a colony of bees to swarm? There are several reasons I guess.

RS: Well one thing is they get too much honey in the hive and they get to crowded and they decide just to pick up and move and so the queen – they start raising queen cells, they can have a half a dozen queen cells in a hive and when it gets to a certain point the queen just takes off and
takes the biggest share of the bees with them and flies off to find another place to live. Then the hive is left and they wait for the queen to hatch out and then the queen has to go out and get mated and then come back and start all over again.

HF: So it’s a natural process for them to swarm then.

RS: It’s just a natural process but the bees that are left in the hive are very few so therefore the idea is to try to divide them before they swarm. If you don’t, you lose your honey crop.

HF: Oh, suppose say somebody goes out there and interferes with the hive and makes a noise or pounds on it or something, opens it up, that way you can disturb the bees and cause them to swarm too can’t you?

RS: Well it doesn’t cause them to swarm but it causes a disturbance. The get a little bit meaner that way. You have a lot of them that causes a little bit of damage to the bees by putting holes with bullets and shotgun shells when you’re hunting and things like that but it causes a little detriment to your equipment.

HF: Have you experienced any problems with bees when they’re swarming getting stung or becoming ill or anything like this. Does this often happen?

RS: Well it happens. I haven’t had any trouble with that. I seem to be [immune] to it, I get stung quite a few times during the day but it hasn’t effected me too much. But I have to watch the men that work with me. That bothers me more than anything. I use a lot of students from the college to help and I have to watch them. I’ve had one or two I’ve had to take to the hospital after they’ve been stung a few times out in the bee yard cause it affects them and makes them swell up and itch and hard breathing and so I have to be very careful with who I take out in the bee yard or whether they can do it but I’ve been very fortunate not having very many do that.

HF: A bee sting can be very harmful then to certain people who might be allergic to them.

RS: It can. It can very much. My wife is very allergic to bees, if she gets stung, she has to go to the hospital right now and get a shot for it.

HF: Just one sting will do it!

RS: Just one sting will cause her to swell up so she can’t breathe. It’s really, really tragic.

HF: Do the doctors analyze that venom?

RS: Well they seem to know what to do, they seem to know what to give them and it takes them a week or two to over come it and then they have to keep a syringe on hand in order to give their own selves one if they’re out where they can’t get into it.

HF: In the spring of the year then, what are the things that you must do to prepare to get your hives ready?
RS: Well we most generally clean up the old hives that we brought in the fall, get them ready and you have to melt up the old coal and take care of the z stings which you’ve gathered up over the season which we have a lot of disease which is called American Foulbrood, which is just a disease in the brood itself where it won’t hatch out and we have to doctor that with terimize and thioneizaeansllefafaonsdcna and we have to melt everything that’s contaminated and get rid of it and start over again.

HF: How can you tell whether a colony of bees or a hive is contaminated?

RS: Well in the brood chamber when the brood chamber doesn’t hatch out the brood just decays and lays on the bottom of the cell.

HF: Oh I see.

RS: Therefore she lays eggs but they don’t hatch out and therefore you lose your colony and so…

HF: And you can just look at that with your naked eye know that something is wrong.

RS: Yes and then it’s got a smell to it that kind of repulsive and so we have to watch that and keep that clean up over here.

HF: And you become aware of that in the spring of the year?

RS: You do that at the first thing in spring. You are aware of it all year, you just keep looking for it all through the year so you can separate one hive from the other and put them off in a different yard, doctor them and take care of them. And it’s really been a big factor in taking care of bees to get them clean and keep them clean with so many bees around. A lot of these small people get hives and some of them don’t know what Foulbrood is and they can get it from each other hive if they go rob the honey out of another hive that has it then all of them get it that consume the honey.

HF: And that’s fowl, F-O-W-L?

RS: It’s called the American foulbrood, F-O-U-L brood.

HF: F-O-U-L and then brood.

RS: Brood yes.

HF: I see. Does that seem to be the principle disease or hazard?

RS: That’s been the principle disease and hazard with the bees really.
HF: I see. Then if you are going to divide hive, you are going to have to build another box aren’t you.

RS: That’s right.

HF: What do you call it, a hive?

RS: Yeah we call it another hive. We just take another box with a little bit of honey and put some comb in it and divide it.

HF: What’s the cost of nowadays to get another box prepared?

RS: Well right nowadays it cost just about time you buy it from their place, it costs about a hundred dollars by the time you build it and put the bees in it.

HF: Close to a hundred dollars?

RS: Close to a hundred dollars.

HF: Are there factories or places in the area that produce these?

RS: There are plenty of places that produce them. There out on the coast or places where the lumbers plentiful and where they can get things wide enough.

HF: How heavy would one of those boxes be?

RS: Oh about twenty pounds I imagine.

HF: Oh, it isn’t all that bad so you can carry them around one in a hand and take it to the location.

RS: Yeah that’s right.

HF: What other things must you do in the spring time?

RS: You have to go in and inspect them and see if they have enough honey and see if the queens are any good. If the queen is poor you want to kill her and then put another queen with her.

HF: How can you tell that, whether she’s poor?

RS: Well according to the laying in the cell, if it becomes irregular and off the side and too many more of them in the cell. Different things like that you can tell or if the queen’s wings are ragged and poor why just the way she moves you can tell.

HF: Can you pick the queen up and inspect her?
RS: Yeah you can pick her up if you’re careful and inspect her.

HF: And she won’t bother or sting you.

RS: No she won’t bother. No she won’t sting you.

HF: In fact, I’m not sure whether, can a queen sting?

RS: Yes the queen can sting but she does it very seldom.

[The taped interview will be continued on track two of this tape]

[Continuing the interview with Mr. Smart pertaining to bees, bee keeping and the production of honey]

HF: Now we’ve been talking rather in detail, Mr. Smart about the spring preparations for your hives once the weather is sufficiently warm then you take the winter coverings off and make your inspections to see how they didn’t and how they kept during the winter time.

RS: That is right. We go out and clean up the hives again so the bees can fly in and out, sometimes there are dead bees in them and we have to clean the dead bees out – make sure they can get in and out of the hive good without any trouble.

HF: And now first when they start going out to gather nectar it’s rather limited in amount and so they pretty much utilize what they get to put for there own selves, their own bodies needs, I guess.

RS: Well there’s not too much until the dandelions come around. They have to keep eating what they have on hand and we have to make sure that they have plenty on hand.

HF: Sometime you have to supply them?

RS: Sometime you have to supply them, stimulate them with some syrup and things like that in the spring.

HF: Now, how many hives or colonies do you take care of?

RS: Right now I am taking care of about 500. That’s about all I can handle on my own with just a little extra help of students.

HF: Where are those placed? In what communities?

RS: Well, I’ve got some just around Rexburg and out towards Plano and up through St. Anthony, up to Ashton around that vicinity.

HF: Any up in the Driggs area?
RS: No, I used to take them up there but I’ve got so I don’t move them very much. There’s a difference there in what it costs to take things in your equipment you use and how many bees you have. We take them over sometimes for the dandelion and then they bring them back later for the hay somewhere else. In moving it costs money and I just let it go and let the bees go in the yards where they’re at so I don’t do much moving.

HF: So you’ve got it arranged so once you place them, why you just kind of keep them right there.

RS: That’s right.

HF: And so they can fly and get the gardens in the summer, they can get the dandelions in the spring and the hay in the later summer and the alfalfa.

RS: That’s right. There’s two ways, the bee keeping has increased considerably over the past number of years. Every things being done now at a bigger more profitable way than I have been doing it. I’ve been doing it like it’s been done in the past years. But now they have big trucks and equipment that lifts hives – mechanical equipment to lift hives on the trucks and then they move them fast to other locations to where the bees are and then they move them…

HF: Where the flora is?

RS: Where the flora is. If they aren’t getting honey at one location they just pick them up and move them to somewhere else where there is plenty of flora and then the other bee men, more or less, have bigger outfits. They have bigger extractors, bigger equipment. And everything is done more on a basis of production. Then the bigger bee keepers take their bees to California or Texas where they can have increase over earlier in the spring and divide their hives and bring them back and then when the winter gets too cold in other places they just move them to where it’s warmer instead of covering them. By that way they make the increase down where it’s warmer and bring them back to get the honey in the countries where the flora is.

HF: Then in the fall of the year, I think you mentioned that was in October, and that’s after all the blossoming has been completed you prepare the hives for wintering?

RS: That’s right, when it gets to be cooler at nights and there’s no [indistinguishable] left most generally after the first of September.

HF: After the first frost?

RS: After the first frost in other words. There’s not much left so after that you just take off all the honey on top of the hive and [phone rings, indistinguishable] extracting and then after you get through extracting then you start covering them before winter sets in so you can keep them dry.

HF: Now at this time you would take the last, you would make the last collection of the summer?
RS: That’s right.

HF: And this may be the second or the third collections in each…

RS: The second or third collection. It depends on how much honey they have produced and how many combs you have, but it’s the last, you only have to the first of September that you start taking all the comb off so you can get them ready for winter.

HF: Now what would be the average take in good honey that you can…

RS: Well the average take of the valley is about 60 pounds per colony, on the average over the period of years.

HF: About sixty pounds.

RS: That’s right.

HF: Now that would make up then into a five gallon can, of good honey that you can sell?

RS: That’s right.

HF: And you can sell that for what, ten dollars…

RS: Well…

HF: Eight dollars or something.

RS: No, it comes up more than that. It comes between thirty and forty dollars. It averages between thirty five to forty dollars.

HF: The retail?

RS: Well for retail it gets up to about forty-five and fifty dollars.

HF: I see.

RS: Then of course packers, they put it in smaller containers and they charge plenty a pound for putting it in smaller containers.

HF: Now that’s what Millers have done a lot isn’t it?

RS: That’s what Millers have done.

HF: They have done a lot of this thing. They whip it up and make it thin.

RS: Or creamed honey.
HF: Or whatever and retail it in small packages and that increases their…

RS: That’s right.

HF: And it’s a convenience to the consumer to have it.

RS: It is. One’s that don’t eat very much honey don’t need to buy a great big amount. It’s easier to get into it and easier to take care of it in small packages.

HF: Right. That’s true and it’s a real convenience. Well now then theoretically, with 500 colonies you may receive from the year’s operation maybe 500 sixty pounds of honey.

RS: That’s right.

HF: Now do you, in your warehouse Mr. Smart, do you have the facilities to prepare that to retail it to me?

RS: Well all I do is retail it out of the sixty pound can, and I have a forty-five pound plastic bucket and an eight-pound tin pail which I put up right at the time of drawing out of the honey tank. I don’t go and just processing or re-heating the honey or bottling it or anything. I just put it up and get plenty on hand as people need it they can buy it from me and the rest I take…

HF: And actually from the time that you take it out of the hive what do you do with that – what’s been done with that honey by the time I come over and get, say an eight pound pail of honey.

RS: Well I just extract it and it goes into a honey tank and let it settle and then draw it in with a honey can and that’s all I really do.

HF: When you settle it, what do you mean by that?

RS: Well you heat the honey a little bit as you extract it and therefore it goes into a great big honey tank.

HF: And so it’s in liquid form.

RS: It’s in liquid form so that it settles so that if there are any particles or anything in it – wax particles would go to the top and any heavy particles will go to the bottom so when it comes out in the can it's clean honey.

HF: I see. Do you as an operator, do you personally market most of your honey?

RS: I don’t market all of it. I just market a little bit of it. I only have one store in town that I put it in and the rest I just sell it out of the warehouse if people want it and I have worked up a fairly good business to people that come and get it, then I take the rest of it to the Miller Honey Company in Blackfoot.
HF: And you sell it whole sale to them?

RS: And I sell it whole sale to them.

HF: Now we’ve mentioned the Miller Honey and of course they’ve been in operation for fifty-sixty years or so.

RS: Yeah.

HF: And their father, these men’s father really got started.

RS: That’s right.

HF: Probably around the turn of the century.

RS: Of course there are a lot more bee men in this country besides Miller.

HF: Numerate some of them.

RS: Well there’s William T. Gibson who was here in Rexburg who came from Ashton. There’s people in Ashton who have had a few bees, there’s Lee Browning here in Rexburg also had bees. His son Elmer had them here till the flood and then he moved toward Idaho Falls and there were some bee men in Rigby. There were a good number of men in Rigby, there was Kinghorn who lived around town and there was the Myer brothers who were there. The Mobley brothers, Percer out toward Ririe and Lloyd Anderson, his father had bees, there’s a good number of bees throughout this territory. The two Mobley boys from Menan, they were in the bee business, so there have been bees in these territories for years and years and years.

HF: The Cox.

RS: The Coxes are from Shelley.

HF: And they have a big operation?

RS: They have a big operation in Shelley, yes.

HF: Is it as large as the Miller’s?

RS: No, it isn’t as big as the Miller’s.

HF: The Miller’s is the largest, I guess.

RS: Yes it’s one of the largest around here. They moved to California, have an outfit in Salt Lake City and their biggest operation is out of Colton, California.
HF: Colton?

RS: Yes.

HF: Now where is that?

RS: Down by San Bernardino. It’s where Woodrow Miller, their youngest son, took over. That’s the largest outfit. The Miller in Blackfoot now, his son Neil is taking over. Neil is getting a real big outfit. He had a big outfit over in (inaudible) North Dakota.

HF: That’s were my nephew is. The Kirby boy.

RS: That’s where Kirby worked. He worked for Miller for a number of years.

HF: Any businesses over in Star Valley or Jackson?

RS: I don’t know too much about Jackson or Star Valley. They might only move them up there and move them back, but I don’t know very many bee men up that way.

HF: Now in detailing the expenses of a bee keeping operation, let’s just numerate in a nutshell some of the big expenses that you have to put up with almost every year.

RS: Well you have to buy at least, for my size outfit, a hundred and fifty, to two hundred queens each year or else you have to replace them with packages which cost close to thirty-five dollars and by the time you get them here. Then you need to replace the old equipment, the old frames and things and replace your things that are ruined from account of disease and then you need to repair things and keep things painted up and then also you have a hazard of fire. I haven’t been bothered with this much but this last year I had two yards that had a fire in them. It consumed one of them completely, which I was reimbursed with it by the company which was alright and the other one I didn’t have any insurance on it so I had to pay that price myself. But that comes along with the bee business, is that you have to expect things like that of fire and flood.

HF: Do you usually have your equipment and your warehouse as well as your boxes and so forth insured against loss by fire?

RS: Well you have your warehouse and equipment covered but you don’t have your bees in the bee yard covered.

HF: Because that’s on somebody else’s property.

RS: That’s on somebody else’s property.

HF: Oh let’s see, any other, well the cost of paint and all those things and labor I suppose.

RS: Labor is quite a big factor. It takes quite a bit of labor anytime you get students to help you and that. I have been very fortunate though – first few years I had bee men son’s that came in to
go to school that helped with the work. And they have been proved very profitable the last year or two it’s been, I’ve had to break new men in and it has been a little expensive that way.

HF: Now what are the hazards and the risks in bee keeping from year to year? The farmer, of course, typically relies on good weather conditions, growing conditions. He can’t do much about it either. It’s just one of those things.

RS: Right.

HF: For you as a bee keeper, I guess you are subject to that same…

RS: Thing.

HF: …problem.

RS: Yeah, same thing. Your wind keeps the bees in, if they go out they get lost and can’t get back. Or if it rains they can’t get out and there are certain things. In the spring it takes care of a few bees that will never get back. There are a lot of hazards in the bee business that you don’t look at because after all you got all your eggs in one basket – actually you only got three weeks to make your honey crop in, the last of July and the first part of August. And if you get storms or things like that where the bees can’t get out then you’re always preparing for it. It’s gone down the tube more or less, you just don’t get it. But they come often. There’s been years when I hardly had to extract any honey and in that way you have a rough time getting by. You have to have other jobs sometimes to get by.

HF: Do you think it’s a good hobby to get into?

RS: Well it’s a good hobby.

HF: Maybe you know for somebody to have half a dozen hives around?

RS: Well if they are really interested in it, then they’ll do it, why it’s a good hobby but some of them on the spur of the moment get it and then they don’t take care of them and then it’s a detriment to the bees around. That’s the only thing is that they really take care of it then it’s a good thing but a lot of times I used to help people many times get started and they wouldn’t seem to take care of it and in a year or two I would bring the equipment back and it’s got so I half way discourage them. I don’t know why cause you get so you discourage people instead of encourage them anymore. Maybe it’s because I’m getting older.

HF: Do you often place several colonies together?

RS: Well we put anywhere from fifty to eighty hives in each yard.

HF: Do you? Why so many in one area?
RS: Well we figure that about fifty to eighty will cover an area of three miles so we try to keep the yards at least three miles apart from the other bee men but it’s getting so that the bees are gaining so many that it’s getting less than that now. It’s a little harder so you cut the number of hives down toward the numbers of bees you’ve got around so you’ll get some honey.

HF: Do you experience much problems trying to find a yard?

RS: Well it’s getting to be a bigger problem. People are clearing their ground more and it’s getting so there is not as much wind breaks, farm, or much territory. The farmer hasn’t got room to put them. When they clear a piece of ground then they get away with a piece of waste ground and we need a piece of waste ground to put them on where you are able to get to them without going into water or anything, that’s your biggest problem. You have to be able to get to them and on their waste ground the place is not accessible.

HF: Do you find that when you particularly feel that you’ve got a good location, you go and ask the farmer… are they quite reluctant or are some of them happy to have you do this?

RS: Well a lot of them want one but once in a while you find a person that has probably been stung or one of their families have been stung and they are reluctant about putting them on. They think its more nuisance than it’s worth. But most of them cooperate.

HF: Do you usually pay them maybe?

RS: Yeah we pay them pay and rent with honey most generally. Once in a while we pay them money when they want it.

HF: Based on each hive or each colony.

RS: Yes.

HF: We have come to the close of this interview – there’s an expression of something like this, “you’ve been as busy as a bee” suggesting that if there is an insect that has an attribute of industry, I suppose it is the bee.

RS: That’s right.

HF: What are the characteristics when they get out, do they work from day light to dark or…?

RS: They work from day light to dark everyday of the week. It’s just the process of gaining honey while they can and then they rest in the winter and it seems to be a very industrious thing. They work very hard at what they are going after.

HF: If a bee were to leave the hive and go three miles to get nectar and then come back again, how much time would that take. Do you have any idea?
RS: It really matters what it does, if the wind is blowing or whether, it doesn’t take them too long. Sometimes they can make two or three or four trips a day I’d imagine. I see them come in and out all day long, watching them.

HF: Apparently there has never been a study made anyway of tracing the bees activity in a given day.

RS: Well, they’re doing a lot of research on bees now, I have notice it coming it out on TV that there are a lot of researchers doing a lot on it but I don’t really know exactly how many times the bee goes in and out. They do an awful lot when the weather gets warm and they can go fly out they go out every chance they get.

HF: But say with three weeks of real gathering, intense gathering, a worker literally has expended his life hasn’t he?

RS: That’s right. They about live inside of thirty days. They can wear their wings out going in and out and that’s what it amounts to is that they…you figure about a bee accumulates about a tablespoon full of honey over its lifetime.

HF: Of thirty days?

RS: Of thirty days or its life time.

HF: A tablespoon full of honey.

RS: A tablespoon full of honey. So it takes a lot of bees to produce a lot of honey.

HF: It sure does.

RS: So the idea for the bee man is to get out in the spring and work his hive over to stimulate the bees so that the queen will lay a lot of eggs so that there would be a lot of bees in the hive and keep them from swarming and then when the honey flow comes have your hive at the greatest potential of strength so that they can go out and get it.

HF: Well I thank you Mr. Smart for this interview. I think it has been very informative.

RS: I was glad to be here.