Introduction

The Agricultural (Cooperative) Extension Service was founded in 1914 as a partnership between the land grant colleges (such as the University of California), the United States Department of Agriculture, and local governments. In that year President Woodrow Wilson signed the Smith-Lever Act, which established the Extension Service as a legal and educational arm of the U.S. Department of Agriculture that would "aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage application of the same." Conceived as an educational and outreach organization offering services as diverse as farm and home visits, demonstrations, tours, test plot research, symposiums, educational publications, and 4-H Clubs, the Agricultural Extension Service is one of the largest adult education organizations in the United States. According to the *Extension Service Review*:

> The basic Extension idea was born from the needs of people—men and women across the Nation—attending 'farmers' institutes' to hear 'professors' from the 'ag colleges.' They learned about the newest grain varieties, how clover increases yields in crop rotation, why protein in ration is important to fatten livestock, how to can and preserve food, and how to stop the boll weevil.

In California, the Agricultural Extension Service was established at UC Berkeley's School of Agriculture in 1913. B.H. Crocheron, then a young Cornell University graduate, was recruited to be its first director, and held that position for the next thirty-five years. In 1946, B.H. Crocheron hired John

Melendy as a Santa Cruz County Farm Advisor. Melendy served in this position for thirty years, including ten as County Director of the Agricultural Extension Service, an administrative position. His duties also encompassed being a youth or 4-H advisor and a poultry/livestock/field crops advisor.

In this oral history conducted in 1977, John Melendy discusses changes in agriculture in Santa Cruz County from 1940s through the 1970s—how rising land prices affected the types of crops grown, the effects of mechanization, farm size, pest control and controversies over pesticide use that were only beginning to come to light at that time. A substantial portion of the interview is devoted to a detailed discussion of the rise and fall of the poultry industry in the Live Oak area.

In addition to providing a history of agriculture in Santa Cruz County, Melendy's narrative contributes to the institutional history of Agricultural Extension Service itself, particularly the position of farm advisor. In 1975 the Extension Service (by then called Cooperative Extension) merged with the Agricultural Experiment Station and became the Division of Agricultural and Natural Resources, which also oversees the University's Natural Reserve System.

While Melendy's oral history is useful for its detailed descriptions of the methods and practices of farming in the mid-twentieth century on the Central Coast of California, it also documents the tremendous changes,

which swept Santa Cruz County from 1946 to 1976, as it transitioned from a largely rural, to the urban or suburban landscape it is today.

John Melendy retired in December 1976, and at the time of this oral history interview in 1977 was enjoying operating a Christmas tree farm on San Miguel Canyon Rd. Oral historian Meri Knaster conducted three interviews with him at his home in Soquel, California as part of the Regional History Project's Agricultural History series. Melendy was fifty-six years old at the time.

In her interview notes Knaster described John Melendy as:

> A straightforward man who responded well to a structured questionnaire. He answered questions promptly, to the point, very informatively. He was a pleasant person, always dressed in a blue shirt, which highlighted his eyes…Some of his comments impressed me as indications of a fairness with which he deals with people.

Due to funding and staffing limitations, this interview was tucked away in a locked safe at the Regional History Project's office, and is only now being released for publication. This interview is an important, if belated, tribute to Melendy's dedicated service in Santa Cruz County. While John Melendy is alive at this publication, illness prevented him from reviewing this manuscript. His wife Catherine meticulously reviewed this oral history transcript for accuracy and clarity. Before her marriage to John, Catherine worked as a home advisor in Santa Clara County. Later she served for many years as a 4-H Club leader in Santa Cruz County, so she is quite familiar with the work of the Agricultural Extension Service. Catherine Melendy also

provided the frontispiece, and identified several unlabeled photos of Extension activities that Melendy had donated to the University Library in 1977. We are most grateful to her for her generous spirit and hard work.

Copies of the manuscript are on deposit in the Bancroft Library, University of California, Berkeley; in Special Collections at McHenry Library at the University of California, Santa Cruz; and the Pajaro Valley Historical Association. The Regional History Project is supported administratively by Christine Bunting, the head of Special Collections and Archives, and Acting University Librarian, Robert White.

—Irene Reti

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Regional History Project

McHenry Library

University of California, Santa Cruz

Early Life

Knaster: I think I heard a little bit about your family. There was something in the newspaper in reaction to a book that had been published by a Mrs. Pierce from San Jose, and there was a description in the book about the Melendy Ranch. I was wondering if you were related to those people.

Melendy: Yes, my cousins and brother. There are two ranches over there, and my cousins have the larger ranch and my brother has the home ranch.

Knaster: Oh. One of the things that we'd like to do is get a little personal background in before we launch into the agriculture itself. We like to know how people managed to get themselves to this country, and how they started out. Do you know the history of your family at all, when your grandparents came?

Melendy: I don't know dates. The parents of my father came to Bear Valley. I think my father's older brother was the first or the second white child born in the valley.

Knaster: White child.

Melendy: Yes. Another member of the family, a distant cousin, I guess, was the first white child born, and then the rest of the family were all born in the family home. My father, being the youngest in the family, ultimately ended up buying the ranch and running it.

Knaster: I see. Where did your grandparents come from?

Melendy: Well, I really don't know. I think they came from the East somewhere, Wisconsin, or someplace like that.[1]

Knaster: Oh, so they had already been citizens of the United States.

Melendy: Oh, yes.

Knaster: I asked because I was thinking perhaps they were immigrants from Europe who had made it to California.

Melendy: No. The family had been in this country for several generations.

Knaster: Do you think they came to Bear Valley maybe in the mid-nineteenth century, or earlier?

Melendy: Well, they came somewhere probably around the 1860s would be my guess.[2]

Knaster: Do you know why they came here?

Melendy: Well, no I don't. I'm not a historian. If my daughter was here she could tell you. She's looked into a lot of this, but I haven't. In fact, the

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1. Catherine Melendy added the following comment in 2004: "John Melendy's father's father was born in Wisconsin. His forebears were from Vermont via Massachussetts as of 1703. His father's mother was born in Oregon. Her parents were from the Eastern United States, back to the 1750s.
2. Catherine Melendy added that "John's Grandfather Melendy came as a sixteen year old with an uncle because his mother was afraid that he otherwise would volunteer as a drummer boy in the Civil War."

grandfather came across the plains and then into California, and after several different places ended up in that particular area. That's where he met his future wife and they were married and raised their family.

Knaster: Do you know whether they had been in agriculture before, or got into ranching only when they came here, or was that a tradition in the family?

Melendy: Well, probably in those days everybody was a farmer of sorts. You have the people that went into the mines and a few things like that, but basically in those days people that were coming in were agriculturally oriented.

Knaster: Did your father grow up on a ranch?

Melendy: He was born and raised on that ranch right there, and lived there all his life. In the later years my brother then leased it from him, and then when he passed away he purchased it from my mother.

Knaster: So he was a rancher?

Melendy: Oh yes. All the way through.

Knaster: Were you brought up on a ranch too?

Melendy: I was born in Hollister, but I was raised on the ranch there and lived there all my life.

Knaster: What kind of ranching did your father do?

Melendy: It was cattle and grain.

Knaster: Was it basically a family-run operation?

Melendy: He couldn't afford anything else. The only hired help would be harvest time when you had a harvest crew that came through and everybody helped everybody else, but other than that it was strictly a family operation.

Knaster: I guess that was the general trend in those years.

Melendy: Well, most of them were. Some of the larger ranches would have a hired hand for working cattle or a few things like that, but most of it was a family operation.

Knaster: Do you remember working on the ranch as a child?

Melendy: Oh yes, definitely.

Knaster: What kind of things did you have to do?

Melendy: We had to do all the chores. My older brother and I started about ten years old milking the cows. We had ten, twelve cows we milked but we got the cream checks. They separated the milk and sold cream and that was our money, but we had to buy all our own clothes with it and anything we wanted. It was our money, so since I was about ten or eleven years old I've had my own money and no allowance (no money) given to me. It was all a

matter of being earned and you had to manage it yourself. And that's the way we were brought up.

Knaster: When was that? When were you born?

Melendy: 1921. So this was about 1930, 1931, 1932, along in there.

Knaster: How long did you live on that ranch?

Melendy: Well, until I guess 1946. I had three years in the navy, and then in 1946 I got out and went into the Agricultural Extension Service. But until then that was my home.

Knaster: And was the ranch outside of Hollister?

Melendy: Yes, about twenty-six miles from Hollister toward the Pinnacles [National Monument].

Knaster: Oh, I know that area. Did you used to go to the Pinnacles?

Melendy: I used to work there.

Knaster: Oh, did you!

Melendy: Yes, we used to. On weekends we would be guides and do various work around the monument.

Knaster: Oh, that's interesting. Did you go to school in that area too?

Melendy: Yes, we went to the elementary school there in the valley, and then high school in Hollister. They ran a bus clear up into the country there to pick up all the kids. It was a long ride and you had to do all of your chores, everything ahead of time, and then at night when you got back you had to do them again.

Knaster: Since it was an area where there's a lot of farming, were you given any kind of extra instruction in school that was geared toward agriculture, or was it a regular high school program?

Melendy: No, in elementary school there was nothing. We did have our 4-H Club program there, and pretty near all of the kids were in the program. They all had their own livestock projects and in those days it wasn't getting an animal ready for the fair, it was a strictly commercial venture. You had to make it on a commercial basis or you didn't make it. And then when I went to high school I did get into the Future Farmer Program for, I think three years.

Knaster: What kind of program was that? What did they instruct you in?

Melendy: The Future Farmers? That was regular classroom instruction in agriculture, and then one year I took shop. But it was all phases of agriculture.

Knaster: Can you remember some of the classes you had?

Melendy: Oh, yes. Your classes would be broken down. You would have one on livestock, animal science. Then another year you would have plant science and you'd just study the basics of plant physiology. Animals, feeds and feeding, balancing rations, breeds and breeding and management, this type of thing.

Knaster: I find that very interesting because I didn't know they had programs like that in high schools.

Melendy: Oh, they have, yes. They have and they still do. They're quite extensive. Many people get 4-H and Future Farmers confused sometimes. They feel Future Farmers is the graduated 4-H-er. But, they're two different programs. Both have their specific purpose. In the FFA, it's strictly a school program; it's part of the school curriculum. Whereas 4-H is a voluntary program. While they both have projects, they both operate a little bit differently and meet different purposes.

Knaster: Do you feel that the training you got was really essential for the work that you did later on?

Melendy: I don't think there's any question about it. The experience that you have in actually being on a farm, seeing the realities of it, certainly doesn't hurt anyone. When you get out and you start working with it you have a much better understanding.

Knaster: I see. And you got started really early.

Melendy: Oh, yes.

Knaster: Doing all of those things on the farm . . . did everybody in the family have to pitch in? What kind of things did your mother do on the ranch?

Melendy: Well, she was the chief cook and bottle washer. She took care of the household end of it pretty much. And then, any farm had a few chickens and she'd take care of them to some extent, but mostly she was the house manager.

Knaster: She didn't work with the livestock or the grain?

Melendy: No.

Knaster: I see. Did you have little sisters?

Melendy: No, just two brothers.

Knaster: Workers. (laughter)

Melendy: Yes. (laughter)

Knaster: What kind of jobs did you have along the way? You said that sometimes during the summers or weekends you worked at Pinnacles?

Melendy: Well, at that time the big attendance was on weekends, and myself and my brother and some of the neighbor kids would be guides in the monument. Those days we worked for $2.50 a day and real happy to have it.

Knaster: Was that in the 1930s?

Melendy: Yes. The 1930s and early 1940s. Then in the summer time it was standard in the community—everybody had combines and I always worked on somebody's combine. My job was sewing sacks, which they don't do anymore—it's all bulk handling—but that was the job I had.

Knaster: Sewing sacks for what?

Melendy: The grain.

Knaster: For the grain. What kinds of grains were grown?

Melendy: Well, it was almost exclusively barley and wheat in that country. Mostly barley. Some wheat, but not much. I would get a job in the summer time and go all summer long on it on one of the combines. Interestingly enough I could make about $250 in the summer and that was enough for one year in college.

Knaster: That's amazing.

Melendy: You look at the cost today and it's pretty hard for a student to work in the summer and make enough to pay their full costs of a year of college, but that's just about what it amounted to at that time.

Knaster: Wow. How many hours a day would you have to work?

Melendy: Well, in the combine you'd head out for the rig about 7:00 and quit when the straw got too tough to harvest, which might be 6:00 or 7:00, 7:30 in the afternoon. They were long days.

Knaster: Oh yes, sounds like. Was it mostly men working in this area of agriculture, or were there tasks that women did too? Did they do any sewing of sacks.

Melendy: No, no. It was strictly men. Again, the women were the ones that took care of the household and ran that end of it. When you get the harvesting crews, that's an awfully important thing, because when the crew comes in the meal's got to be ready. I mean, you can't sit around and wait half an hour or anything like that. It's got to be ready. It's got to be adequate, and the crew's got to be back out working again. So generally the women had their hands full just taking care of the household duties in those days because they didn't have a lot of the so-called conveniences we have today.

Knaster: I see. How many people would you have on a crew?

Melendy: It would vary. Some of the larger rigs would have four or five people, some of them only three.

Knaster: Did you have any other work in agriculture as a young man?

Melendy: No, nothing other than what we did at home. But as far as any other type of agriculture work, no.

Knaster: Were there any special little projects that were yours alone—raising a certain kind of livestock, or something in particular that you focused on?

Melendy: Well, in my own case, my interests were sheep and swine. My younger brother and I ended up with a flock. I think we had about fifty or sixty ewes. It was ours, and it was our responsibility to shear them, to take care of them all the way through. Each one had his own. We knew ours and when we sold them we got the money and we got the wool money. At that point we were working doing the ranch work in return for the feed. In other words, my dad had the pasture. That's the way we made our money.

Knaster: Were you just expected to know what to do, or did your father train you?

Melendy: Well, it's not a formal training type of thing. You grow up with it and you learn it as you go, step by step. This concept of training somebody, that you train them in a matter of two weeks or three weeks to do something, is not what happened on a farm. On a farm you learned it over a period of

several years., As you grew up you learned more, and you started doing more.

Knaster: Obviously I didn't grow up on a farm or I wouldn't ask you these questions. (laughter)

Melendy: (laughter)

Knaster: Has that area changed a lot since you were a boy?

Melendy: Really, not very much. Some new people have come in. Some of the ranches have changed hands, but basically most of the ranches are still pretty much intact, and the type of agriculture is pretty much the same. I think the biggest change is that most of the ranches got to the point where they were too small to support a family. Some of them went out and are leasing somebody else's ranch, or they went out and they bought another ranch, or they got a job in town in order to make a living. But, even though it seems like they were big, the ranches just plain would not provide a living.

Knaster: Are the same things grown that were grown when you were a boy?

Melendy: Yes, pretty much. It's still the grain and the livestock.

Knaster: What was it like there in the 1930s during the depression?

Melendy: I frankly don't recall much about the depression. I know they talked about it, but in our particular situation we had food on the table, and a

roof over our head, and the whole country to roam in and enjoy ourselves, and we really didn't worry too much about it. I guess my folks probably did, but, like I say, when you've got your food and a roof, why, what else do you need really?

Knaster: Do you remember any difficulty in selling the grains and the livestock at the time?

Melendy: You could always sell them. I remember on grain we got sixty or seventy cents a hundred sometimes for barley, compared to right now, the price is about five dollars a hundred. And on beef cattle, I know one instance when my father sold the cattle at thirty-five dollars a head.

Knaster: That's cheap. (laughter)

Melendy: But, like I say, what you got was yours. Property taxes were practically nothing. I doubt if the property taxes on the whole place were fifty, sixty dollars maybe.

Knaster: How many acres?

Melendy: Well, there's about 1300 in the place. But there were a lot of those things you just didn't worry about. The things you had to actually buy were very few.

Knaster: Were you raising any fruit and vegetables for home use?

Melendy: Oh, we always had a summer garden. Water was a very short commodity. This is why on their water rationing here I sometimes get amused when they have sixty, seventy, eighty gallons a day. We had periods in the winter when our pipelines would freeze that we had ten gallon milk cans and maybe twenty gallons a week for the family.

Knaster: Wow.

Melendy: And that was it. But, like I say, your needs were not the same then as they are now.

Knaster: Did you have a well?

Melendy: No, it came from a spring and had about two miles of pipe to get it down to where we could use it.

Knaster: I could see the problem.

Melendy: There was very little water in that area. There's water in springs but for irrigation there's just none.

Knaster: That's basically why it's not a produce area.

Melendy: Right, right. It's strictly dry land farming.

Knaster: Well after high school, you said something about making money for college, working during the summers to go to college. Where did you go to school?

Melendy: Well, first I went to junior college, is what it was called in those days, two years at San Benito County Junior College, which was in Hollister, and was the forerunner of the present Gavilan College—in other words, it developed into Gavilan College. Two years there and then I went to Davis for two years.

Knaster: Were you following an agricultural program throughout?

Melendy: Yes.

Knaster: Did you go with something specific in mind that you wanted to specialize in, or was it an overall program?

Melendy: I had planned to go into teaching agriculture in high school.

Knaster: Oh, I see.

Melendy: That was my original plan. It's a very good general agricultural course. You cover most fields in a general way and where I had a background in agriculture to start with it worked out real well.

Knaster: Was there also a teacher training that went along with that?

Melendy: There would have been had I continued. When I graduated I went into the navy immediately and was there for three years.

Knaster: That was 1940 . . .

Melendy: 1943 was when I went into the navy.

The Agricultural Extension Service

When I got out I stayed home for the summer and then got a chance to go with the Agricultural Extension Service, so I took that job rather than going back and going into student teaching or anything like that.

Knaster: How did you get that job? Had you heard about the Agricultural Extension Service? Had your father ever availed himself of that service?

Melendy: Our contact was through 4-H and also through the Farm Bureau meetings with the advisors in the office. Yes, we had a lot of contact with them.

Knaster: Had you thought over the years that that was something you'd like to do?

Melendy: I hadn't really thought of that as something to do, but when I got back one of the fellows in the office there suggested it to me and asked me if I would be interested in it. Then I got to thinking about it, and I applied and I was put on.

Knaster: What was involved in getting the job? Did you have to take any examinations, or have certain degrees or credentials, or be appointed in some way?

Melendy: Well, in those days getting a job was a lot different than it is today. You had the background; you had your transcript from school that they could look at, and recommendations from somebody who knew you personally and knew basically what your qualifications were. The director of Extension hired every person individually. He interviewed them, talked to them, and he was a man that could size a person up immediately and he never forgot.

Knaster: Who was that?

Melendy: B. H. Crocheron. He originated the Extension Service in California. I started under him, and as a lot of people said, he was a dictator but he was a real good one, and when he made a decision on a program it almost always was right. That's the direction we went, and he probably did as much for agriculture in California as anyone.

Knaster: Is he still alive?

Melendy: No, he died, I think in about 1950, something like that.

Knaster: When you went into the Agricultural Extension Service, was that in San Benito County, or was that in Santa Cruz?

Melendy: No, they tried not to put a person in their home county, because you knew everybody. I think they're right. It just wouldn't be a good set-up. No, I started out as what they called an itinerant, assistant farm advisor for

almost a year. In that job you moved from county to county and helped different ones in their programs, which is a real good training program, because you get to not only meet the staff in counties in the different parts of the state but you see the different programs, the different types of agriculture. I often think this is one of the programs they ought to reinstate, and they are attempting to do something of that right now.

Knaster: When was it let go?

Melendy: It was a few years after that, probably in the mid- or late 1950s. I think the basic reason was they did not like to put a married person on the road. And at that point most of the people who were coming in were married or they had families. This was one thing about this fellow Crocheron: he felt very strongly about families, and he said you should never have a family broken up that way, traveling around. He liked to put them in a county and then leave them there. He was always proud of how people have stayed in one place.

Knaster: Did you travel to all the counties in the state?

Melendy: No, I only hit, I think, about six or seven of them. See, you'd go for anywhere from a month to two months in a county.

Knaster: What were your responsibilities in that job?

Melendy: Well, you were assigned to a county for a period of time. Then you worked with the various staff members in that county on their various field programs. Whatever they had, that's what you did.

Knaster: So they would already have something set up and you would come in and they would give you the tasks.

Melendy: Right.

Knaster: Do you remember a particular place that you went to and what you had to do.

Melendy: Well, one good example is, I went to Madera County, and at that time this weed killing chemical 2,4-D was just coming out. The fellow there was doing some testing of it in barley to the extent that it would not just kill the weeds or it wouldn't damage the grain, but he was collecting samples and having germination tests run on it to see if there was any carry over effect. And this is the type of thing they were trying to do, not just, "Well, it does the job so we'll use it." It was a matter of, "Well, how far can we use it and what are the limitations?" In Imperial County I worked with one of the fellows on alfalfa varieties. That has been a big alfalfa growing area and they were developing a lot of new varieties of alfalfa. They would put out these test plots, various varieties, repeat them several times, and then they would have to harvest them all by hand, and weigh it to see which one's producing the most hay. They would also, on some of the hay, analyze it to see what its

nutrient value was because it's no use getting a heavy yield if it has no nutrient value.

Knaster: Did you feel prepared by your training to go into these various counties and be able to work with the people?

Melendy: I didn't have any problem at all.

Knaster: Oh, that's good.

Melendy: Because you went in and you were not expected to know the technical details of the specific thing, but you were expected to know the different grains. A lot of people wouldn't know barley from wheat, a lot of things like that, but knowing all of this made it very simple, really. Everyone you worked with was always very helpful, because they were responsible for your training, and this was a training program. So it wasn't a matter that they just had you there for labor; they had you there and they were expected to give you some background on how to do these things.

Knaster: And you did this for a year?

Melendy: Yes.

Knaster: What happened after that?

Santa Cruz County Farm Advisor

Melendy: Then I came to Santa Cruz County. Yes, it was eleven months, and then I took my vacation and then came here, and I've been here ever since 1947.

Knaster: Were you placed here by the director? Was it his choice for you to be in Santa Cruz?

Melendy: No, not completely his choice. That was one thing—he would always call a person in about the time they were to be assigned and he'd say, "Well now, what type of an area do you want? What type of job do you want?" And he would say, "Well, here are such and such openings, and are you interested in any of those?" You could say yes or no, and he would talk to you and find out what you were interested in. When an opening came up, why he would call you and say, "Such and such is opened. Are you interested?" And generally you would say yes, and okay, that was it.

Knaster: Why did Santa Cruz appeal to you?

Melendy: Because it was a job that would be animal science and 4-H and I was interested in the 4-H—in the youth program. And it was in this particular area, central California, which is what I preferred. I didn't want to get into southern California, or northern California, or into the valley. It just worked out very nicely that this was available, so I took it.

Knaster: Was there a lot of competition for that position, do you recall? Are there a lot of people who want to become farm advisors? Since there isn't an examination to take or any kind of grading, I'm wondering how someone is selected if there are a whole lot of people at the time.

Melendy: No, like I say, in those days hiring of people and selecting of people was done a lot differently than it is today. I think a good example is this position that I retired from here. I think they had something over sixty applications to go through. And when they finished they didn't end up with anyone, so they're starting all over again.

Knaster: Oh, my. Were there sixty applicants when you were applying?

Melendy: No way! No, actually when this particular position came up I was the only one that was considered. There were probably four or five of us as itinerant assistant farm advisors. But I was the only one that had said that this was the type of job I wanted. The others wanted a full-time crops job, or a livestock job there in the valley, or something like that, so I was the only one on the staff at that time that desired this particular type of job.

Knaster: Do you remember that women ever applied for this position?

Melendy: No, not for the positions in agriculture.

Knaster: Have you ever known a woman farm advisor?

Melendy: I don't think they had any. They have some now I think that are applying. Some women are applying and are interested in training.

Knaster: Were women part of the Agricultural Extension Service?

Melendy: They were in the home economics end of it, what we now call the consumer sciences. Generally speaking, there were one or two women in each county. They were responsible for the home economics end of it and also the home economics end of the 4-H program.

Knaster: In the home economics end of it, what did they do?

Melendy: All right, they did similar types of things that they did in agriculture. It was an educational program. They would give demonstrations on new methods of canning, for instance, preserving of foods, nutrition, how do you use an electric range. In those days sometimes there were a lot of people who didn't even have electricity yet, and when they'd get it—then how do you use it? Clothing—how do you repair your own clothing, because they were still coming through the days when they didn't have too much money and this was one of the big programs, how to sew a patch on a pair of jeans.

Knaster: Were there central locations, or did they travel around to people's homes in remote areas?

Melendy: Generally the women were organized in what they called Home Departments, and each community would have their so-called Home Department. The home advisor, as she was known, would go to their meetings once a month, and have a program and work with them.

Knaster: Did women usually work alone, or did they have assistants?

Melendy: No, in those days everybody worked alone. There were no assistants, so to speak, except like when I went around to do some work harvesting or some time-consuming work. No, they worked on their own.[3]

Knaster: Did they ever work with other staff members of the service, or were tasks very separate from each other? I mean, did you ever have to go out with the home demonstration agents—was that what they were called—at the time?

Melendy: They were first called home demonstration agents, now called home advisors.

Knaster: Was there ever a kind of working in tandem?

Melendy: Yes, but not to any degree. I remember one program they had when the turkey industry was growing very rapidly. For a lot of people, turkey was something they ate Thanksgiving and Christmas and that was it. So they had quite a program on how to prepare turkey and the value of

3. Catherine Melendy added that in larger counties there were assistant home advisors.

turkey—it was a very cheap commodity at that time—and the home advisors would work with the people working with the turkey industry in trying to promote turkey as a nutritious food year round. So there were programs like that. Some of the milk programs were the same way. In other words, pointing out the nutrient values of milk. So they weren't completely separated from the program at all. [4]

The Extension program started basically to work with rural people on the farm with the idea of raising their standard of living to a point where they would be encouraged to stay on the farm and produce food. It's just as simple as that. And, yes, things have changed a little now to where the farm life is as good or better than a lot of people have in the cities. But it's still a matter of producing food. That's the justification of the staff working with agriculture. They're accused of working with big agriculture a lot of times to make them wealthy, but that really is not the fundamental [thing]. The fundamental thing is producing food, and that's what they end up with. It's true that when they come up with a new method or a new variety, yes, the farmer benefits. But ultimately it's the consumer that benefits, because you always find that the profit margin, if you want to call it that, whether it's the profit or the interest on investment or what, generally will stabilize at about a certain point in any particular industry. And it may be that he makes a wider margin for a few years, but ultimately the benefit is really passed on to the

4. Catherine Melendy added that male and female 4-H advisors regularly worked together on non-subject matter aspects of 4-H.

consumer. What happens ultimately, just like when the cost of something goes up the farmer has to absorb that for a few years, but ultimately that cost gets passed on to the consumer. So any way we look at it, the consumer either benefits or pays. It may be five or six years before this comes about, but ultimately it does.

Knaster: Do you know how long ago this service was started?

Melendy: I think it started in California about 1914, somewhere about then.

Knaster: And was that strictly an extension of the University [of California]? Or was that part of the Department of Agriculture?

Melendy: No, it's called Cooperative Extension, and the federal government puts money into it; the state puts money into it through the University, the land grant colleges. No other colleges, strictly the land grant college system. And then the counties where the staffs are placed put up a certain amount of money. Right now it runs about, well, let's say twenty percent federal, sixty percent state, and twenty percent county. It varies somewhat, but that's about what the amount is.

Knaster: I see. Is there any time limit for holding this position? For example, certain jobs, certain offices you can only hold for five years or twenty-five years—or is there no limit?

Melendy: There's no limit.

Knaster: So you went into it and it was open-ended.

Melendy: Yes.

Knaster: How long were you actually with the service?

Melendy: Thirty years.

Knaster: So you retired just recently?

Melendy: December 31st.

Knaster: Of 1976.

Melendy: Yes.

Knaster: Oh, I see. So after you were an itinerant advisor you became a regular farm advisor. I guess it was called farm advisor.

Melendy: Right.

Knaster: I assume that you weren't moving around as much. You were basically based in Santa Cruz County.

Melendy: Yes, I was based in Santa Cruz County.

Knaster: Did you have occasion to meet with other advisors from neighboring counties? Were there regularly scheduled meetings of farm advisors?

Melendy: Yes, this was one of the things that we always had. They had training meetings where specialists from the University would meet with the advisors in a section of California in one given field, and they would go over the new things, problems that were coming up, and setting up programs. So it was a continuous training program for all the workers. We'd meet a couple of times a year by committee, and then every year we had an annual meeting of the entire staff.

Knaster: You mean all the advisors of the state?

Melendy: In the state. Yes.

Knaster: I see. What kind of staff did you have to work with here?

Melendy: There were five of us. Actually there were four of us most of the time, but then later they added another one—in the end of the 1960s, somewhere in there. So that made five on a staff. There was, of course, the county director, who worked with the fruit industry, fruit and vegetables; myself with the livestock and crops; and then the home advisor, and then another advisor. When he came in he took over the fruits and berries industry, and worked with that particular group of people.

Knaster: Was there ever an opportunity for you to work together, or did you basically have your separate bailiwicks?

Melendy: We each had our programs, but that was one of the enjoyable things here in Santa Cruz County, the fact that we had a staff that was very friendly. We knew what each other was doing; we were interested in what each other was doing, and yes, we did help each other a lot. This made it very pleasant. In some areas, each person had their own and they seemed to be jealous of it. They didn't want anybody else to know anything about it. It was a situation I would not have wanted to work under. But it was a real pleasant situation here.

Knaster: What kind of budgets did you operate under? Was there a given amount for the entire staff or for the entire program?

Melendy: Budgeting was different than it is now. Coming out of the war years the county director here had a budget of $5,000 a year. He had made a contract with the board of supervisors for a five-year period for $5,000 a year, and he got the $5,000 whether it was spent or not. With that $5,000 he had furnished office space, an automobile, and he had to have two secretaries, buy all of the office supplies, pay for the telephone, and all of that on $5,000 a year, so you can see what salaries were in those days.

Knaster: That didn't include his salary, or your salary, or other people?

Melendy: No, that did not include his. Then, when that period of time was over—I think he was just going through the fifth year of that—he had accumulated in that period of time eight or ten thousand dollars. Of course

there was an argument. Should he keep that, or should this go back to the county? These were all the types of things that you administratively worked out with your board of supervisors. But from then on the budget ran probably under $10,000 for quite a few years. And then of course as the cost of things went up and as the staff increased, we got a third secretary, and automobile costs went up from six or seven hundred dollars for a car, to a thousand dollars a car and all these things, so the budget just continuously increased.

Knaster: Was there one car for the entire staff?

Melendy: No, this was the one thing that was a requirement. To have Extension in the county, they had to furnish transportation for the staff. So each staff member had a car. I know this has been kind of a sore spot with some of our county people occasionally because even today every staff member has a car and they do take them home. Because they do have a lot of night meetings. A lot of the staff are out in the field at six o'clock in the morning sometimes. When you're doing work with a farmer you get out there when he's there.

Knaster: Right.

Melendy: So, they all have a car.

Knaster: The director at the time . . .

Melendy: That was Henry L. Washburn. He was the one that started the Extension here in the county. He was the first one and he retired, I think in 1955.

Knaster: How long was he director?

Melendy: Well, since 1914. That was forty years.

Knaster: Wow, that was a long time.

Melendy: Yes, he was here a long time and he was well known in the county.

Knaster: Do you remember how much people were making then as compared to how much they're making now? Were there annual increments?

Melendy: They had a salary schedule at that time. I think it was $2800 when I started.

Knaster: For the year?

Melendy: For the year, yes. I don't remember what you might say was the top salary, but it wasn't maybe double that. At that time the so-called cost of living increases came through and generally there was just five percent cost of living. They always said don't count on that as being permanent because that can be taken away from you if the cost of living goes down.

Knaster: Has that ever happened? (laughter)

Melendy: (laughter) It's never gone down so they're still getting those cost of living raises. But the salary adjustments went along with everything else. I've always felt it was a good job, well-paying and I've always been satisfied, never been unhappy with it at all. The salary schedule now is substantially higher than that. I am frankly not familiar with where it begins and where it ends now. It's something I never paid much attention to. I knew where I was and I didn't worry about the rest of it.

Knaster: What was the last annual salary that you were able to earn on the job, starting at $2800, thirty years later?

Melendy: I think it was $26,000.

Knaster: That is 1000 percent?

Melendy: Ten times.

Knaster: Yes. Well, that just goes to show how much our economy has changed.

Melendy: Yes, it has. But again, I think you could say that the cost of things has gone up ten times as much, but I feel that the amount I was making was probably equivalent to more than ten times what I started at. In other words, I think I could buy more than ten times as much at the end as I could at the beginning.

Knaster: I see.

Melendy: That's why I say, I was always satisfied with what I had. Some people, no matter what they get I guess they're unhappy, but I always considered it very adequate.

Knaster: That's nice. Do you know whether the budget was determined by the board of supervisors with county funds? You said it was twenty percent, and sixty percent. Were all of these funds combined and then used?

Melendy: No, the county part of the budget is approximately twenty percent. And this is determined just like any other county department. The head of the office makes up the proposed budget. It goes in with the county administrator, who goes over the budget, gives and takes, and it goes to the board of supervisors. The state and federal money all goes through the University of California. It's budgeted for staff salaries, specialists, administration, supplies, and all those types of things.

Knaster: Okay. What was your work schedule like? Since you said you'd have to get up at six o'clock in the morning to meet with a farmer or maybe there would be a night meeting, it doesn't sound like it was strictly forty hours a week.

Melendy: My situation was not the one of having to get up early in the morning. Mine was a lot of night meetings. Some of the other staff were the ones that would have to be out in the field early. So I had a lot of night meetings, sometimes three or four a week. They meet pretty regularly.

Knaster: Was that in addition to a regular work day?

Melendy: Pretty much, pretty much.

Knaster: So you'd be working more than forty hours a week?

Melendy: Well, in those days you worked nine-and-half-hour days; you worked Saturday mornings also.

Knaster: Wow.

Melendy: And I don't remember when it was, but it was somewhere in the Fifties, I think, that we went to the five-day week. That was quite a milestone, to go to a five-day week. But still, in working in the 4-H program, I don't think I ever put in on an average much less than sixty hours a week. This was one of the things in Extension, that your work came first. I mean, whatever hours were necessary, you put the hours in, and generally speaking, most Extension people put in pretty long hours.

Knaster: Do you feel there was a lot of dedication on the part of staff?

Melendy: Definitely, yes. Very definitely.

Knaster: Did you work twelve months out of the year?

Melendy: No, even at that time I think it was an eleven-month basis, and then one month vacation. That's one thing that never did change. I think it's always been that way.

Knaster: Well, that seems fair, especially if you were working sixty hours a week.

Melendy: Well, like I say, I couldn't complain at all about any of the working conditions we had or any of the benefits or anything. I've always been quite happy with it.

Knaster: In addition to the car, was there any other equipment or benefit or something that came along with the job?

Melendy: No, not really. The car was not a benefit. That was used only on the job.

Knaster: Yes, I understand that.

Melendy: Right. Primarily, that was about it.

Knaster: Could you describe the duties of your job and how you carried them out?

Melendy: All right. The 4-H program was operated on a club basis by the community. In those days we had between eight and ten clubs in the whole county, and each club might have anywhere from twelve to twenty-five or thirty members. They would of course have their volunteer leaders and it was my responsibility to see that the leaders had the information to work with the clubs. Primarily they were learning how to conduct an organization. They had their club meetings. How to conduct a meeting was really one of

the big training points in those days. How to get up in front of an audience and give a talk, giving demonstrations, teaching other people, learning about their projects—all of these were parts of the program and it was my responsibility to work with the leaders and be sure that they had what they needed to work with the kids.

Knaster: So the members of the 4-H clubs were always young people?

Melendy: Yes. The age in those days was ten to twenty or twenty-one.

Knaster: Were they mixed clubs, boys and girls?

Melendy: Oh yes, yes. That's one of the strong points, I think, in 4-H clubwork. It's a co-educational program.

Knaster: So you worked with the 4-H Club.

Melendy: Right. And then, in the livestock end of it, we would put up test plots on range grasses and introduce new range grasses to produce more feed, and fertilizer plots to try and fertilize range. In working with the dairy industry it's a matter of the butterfat testing of the herds. That was really the big program in the entire state of California. That's what's made the dairy industry what it is, just a real strong program on butterfat testing and feeding. So I was responsible for that particular program, which meant working with a tester who was hired by the dairy association. He'd go from dairy to dairy to test.

Knaster: I see. Now, you talk about test plots. Were there pieces of land owned by the state or the service where you'd do the testing, or was it in cooperation with the ranchers?

Melendy: These were all in cooperation with the farmers. This was one of the things that the original director insisted on, that this had to be done with farmers. What you were trying to do was to develop information or to prove to them that another practice was better, and it was on their own ranch, where they would be there and they could see it, and then the education phase of the work became much easier. All the test work was done on farms; there were no University plots, no county plots, nothing like that.

Knaster: I see. Have the responsibilities of the job changed over the years?

Melendy: The basic responsibility I think is still there, and that is to have a program that will assure us of the food. And when I say this I'm not talking about just Santa Cruz County. I'm talking about the whole United States. Each state has this. Let's take the wheat growing areas, where that's the primary commodity. In those, the University land grant colleges there are a real factor in the production of wheat—developing the varieties that are resistant to some of the diseases, that produce better even in drought conditions, all of these things. So basically it has not changed. Today the methods, the contact you have with the farmer himself is probably not as great. For instance, in our Watsonville-Salinas area there's still a family-type operation, but the men are just farming two thousand acres of truck crops.

Okay, he's a businessman, and he's the one that is taking care of selling and just the general overall. And he will have maybe two or three people who are field men who are really out in the field and overseeing the work, and generally speaking these are the ones that they're working with. This is true probably more in truck crops than anything else. In the apples, it's still pretty much a family farm operation in Watsonville, as well as the strawberries, which, of course is almost exclusively a family deal. Flower growing is very similar—individual.

Knaster: So you don't feel that the job has changed very much since the time you started.

Melendy: The basic purpose of the job I don't think has really changed; I think it's still there. How you proceed and go about it may be a little bit different. They're a little more sophisticated on the crop work. They get into statistical analysis, which we never did. We just ran enough plots so when you got through you were pretty sure you were right, and then you would get the farmer to try it on a field basis, and pretty near always it came out right.

Knaster: Of all the things you had to do, what do you think was your most important function?

Melendy: Well, in the 4-H program I think it was providing leadership. Providing leadership and enthusiasm to the leaders to keep them going, to

let them know they were doing a good job. I think that was really the primary thing there. I think in the other fields of work it was—there was a lot on economics. You couldn't very well convince somebody to try to practice a new method unless economically it was going to be to his advantage. So we got into economics, and I think that in agriculture probably economics was one of the basic things that we had to contend with.

Knaster: In your list of priorities, what function was lowest on the totem pole?

Melendy: Well, I really never gave it much thought. Probably, as far as I'm concerned any of the paperwork and reports. I hate that kind of stuff completely.

Knaster: What was the greatest challenge that you faced in your work over the years?

Melendy: I don't know that there was anything that stands out. In the 4-H program, it was a matter of expanding the program. It got to the point where it was not a program strictly for farm kids anymore. It got to the point where's it's important that other people understand agriculture, understand where their food comes from, and also maybe understand a little bit about them raising some of their own food. As we see today, [there are] many people getting into gardening, small livestock, this was almost a thing of the past a few years back, but a lot of this has come back now. So, I think

probably this was a real challenge, to expand the program and reach a lot more kids.

Knaster: What aspects of your job did you enjoy the most?

Melendy: I think the most satisfying thing about the job was the type of people we worked with. They were all people interested in what they were doing. They were interested in their kids. They were interested in their business. It wasn't a program that was imposed upon anybody. It was a program that was strictly volunteer and that was one thing we were never allowed to do was to go out and go into a man's farm unless he called us and invited us. There was no program to sell or anything like that, so there were some farmers we never did go to see. But still, the practices got put into effect. It was the spread of influence, was what they called it.

Knaster: Do you believe that carrying out this job now in 1977 is more difficult than it was in the earlier years?

Melendy: I would say probably in some respects, yes. I think one of the hazards of the job today is of getting something that looks good and having the whole industry jump and get started on it, and then suddenly find out there was something that wasn't good about it, that it was wrong. This has been a real danger in many fields. I think that that's the real hazard. I think the organization is saddled with an awful lot of more red tape. And in a few cases they're beginning to realize the red tape is up there in the making.

Knaster: Yes.

Melendy: This has always been my contention. Somebody says, well, we have to have this information. Why? I always ask, well, why? And who wants it specifically? Well, they want it. Well who's "they?" It goes to Washington. And then you keep going on it and pretty soon you find out Washington really didn't ask for it, somebody else had asked them for it and they suddenly find out that something can be dropped. I think that one of the less satisfying things about the work today is the red tape involved.

Knaster: You know some of the environmental questions that are so popular today about organic farming and the use of pesticides and various things like that. Were they the hot issues in those days, or were there other things that people were concerned about? What would get people stirred up?

Melendy: Well, the politics would.

Knaster: (laughter)

Melendy: As far as the environment is concerned, I think that the agricultural people probably have always been environmentalists. They would have been washed out in the ocean a long time ago, all our hill farmers. They had to be good farmers or they just plain wouldn't make it. I think this is true with most of the farmers. If they didn't take care of the land, if they abused it, they would lose their crops. The truck crop industry used to—when the price of lettuce was high, they went in and harvested, but, then

they turned around and they put seven or eight tons of chicken manure on the land and this would bring it right back. They knew they had to do that or they couldn't raise one of their crops.

I think the various spray materials have always been a matter of controversy, not from the standpoint as it is today, but from the standpoint of which is the best. I know at one time we used the sprays that they used on the orchards. The whole thing came in a barrel and you had to buy hundreds of barrels of it. A new product came out where you'd buy the barrel and mix it in the water yourself, tank mix they called it. The companies all came in and told the county director they were going to get him fired if he didn't quit promoting that. Well, I mean, here the farmers were buying hundreds of barrels and paying a high price for it, when they could buy one barrel and do just as much spraying, but they would put their own water in it. They were buying water at a high price. So he said, "Well, go ahead and get me fired." Because he knew that the director would back him. That was one thing he did. He backed you right down the line one hundred percent. If you were wrong or anything like that, he got you in private and let you know. But he always backed his people. But they had these controversies. Roads were a big problem in those days. It used to be they would go from Santa Cruz to Watsonville and stay overnight at the Resetar Hotel, because it was more than a one-day trip. Getting better roads was always a big program in those days for the Farm Bureau working with the Extension Service.

Knaster: Was from Santa Cruz to Watsonville that long a trip?

Melendy: Oh yeah, if you didn't get stuck in the mud too often. I mean, they were dirt roads. Not in my day, but previous to that and the pictures in the office, the old Model T Fords and, if you went over there to do any work, it took two days to do it sometimes.

Knaster: Well, I could see that if the roads are dirt and you get stuck for sure.

Melendy: About twelve, fourteen miles now and in those days twenty-five or thirty miles, the way the roads went.

CHANGES IN AGRICULTURE

Knaster: What kinds of changes have you seen in agriculture over the three decades that you've been farm advisor in terms of technology, kinds of crops raised, weed control, pest control?

Crops

Melendy: I think in crops, in the Watsonville area it's probably the highest gross expense area in the United States per acre of gross income from crops. So you can't afford to raise a crop if it doesn't produce a pretty high gross income. At one time they used to raise a lot of certified beans, and they found other areas where they could raise it more profitably. The land was a lot cheaper. They could have bigger fields, so that industry went out.

Knaster: Do you remember when that was?

Melendy: Just about the time I came here, I think there were only about two or three certified growers left. And it went up into the Sutter Basin area in Yuba County and then it came back down into the west side in Stanislaus and San Joaquin Counties. Then it's kind of scattered. But then the green beans, there's another crop. They had them here, used to have a couple thousand acres in the Pajaro Valley and now you have to look to find a field of them. Because they found a bush bean that you could harvest all at once, just cut the plant and run it through the harvester and harvest the green beans that way. So we were out, because ours was all hand-picking labor, and there was no way that you could compete. So that crop then went out. But your lettuce is really the big crop, and then we have the Brussels sprouts, and any other crucifers in the valley. And those are pretty standard crops. Strawberries been raised here from way, way back. It dropped off, I guess, during the war years for a while but it came back after that, and the University varieties were developed and now it's one of the big industries in the area.

Knaster: Have you seen new strains of any particular crops?

Melendy: Well, I think without any doubt, all of your crops have new varieties developed and they are continuously developing. I would say that probably very few varieties of any of our crops are over ten years old. Now your apples, and then your fruits are an exception of that, though a lot of the orchards now are going through a process of being pulled out and replanted.

They pull them out and raise truck crops for two or three years or so, and then they're going back to the dwarf and the semi-dwarf, which are easier to pick and they're a shorter lived crop. Instead of planting an apple tree and figuring, well, I'm going to have apples for fifty years, these are a tree that in maybe twenty-five years you would change crops. So they're not quite at the mercy of the price structure. And there's other fruits that have done the same thing. Peaches are a good example. They were fifteen years and pull the orchard out and replace it. But this is all a development of new varieties.

Mechanization

Knaster: Have you seen changes in mechanization?

Melendy: There's been a lot of mechanization. Now in what respect are you talking about?

Knaster: Well, I know—I guess it was in the Thirties when tractors were introduced, or maybe the late Twenties, and that was a big change from using horses to tractors. Or changes from hand labor, from hand harvesting to mechanical harvesting. I was wondering if after the war there were as many changes that were as strong as those that preceded the war.

Melendy: I think the power unit which are your tractors probably are bigger. You're talking about a power unit that would be used for a lot more acreage than one individual would have previously. This is another reason for consolidating farms, that one farm couldn't afford the equipment to farm a

small piece of ground. We have a number of apple growers, for instance, that will pick up an orchard somewhere, it may not be an economic orchard, but they've got the equipment so they don't have to buy any more equipment and they can cover that. But as far as your labor versus machinery, we've seen the lettuce harvest for instance go from packing in the shed out to the field. I think the unions probably had as much to do with that as anything. Packing in their sheds got to the point where the producer was at the mercy of the unions and they would just call a strike. Well, you would have to stop there. So, to get around that . . . plus the inconvenience. I mean, you had to haul all that stuff to the shed. You had to handle it. It was probably a day older than it would be if it was harvested in the field. So a lot of things entered in. Now they've developed equipment that they can go out in the field and there may be twenty men in a crew. I don't know, they vary. But just one piece of equipment and they pack right there in the field and drop the carts off. They load it and it goes right into the cooler and it's shipped right off.

Knaster: Do you know when this change took place?

Melendy: I think through the Fifties is when it started. It just develops more and more. On your lettuce the harvesting, and that is the extended mechanization, they do pack the lettuce in these plastic wraps. You shrink wrap, fit it right to the head in the field. Most of the crops are packaged in the field now.

Knaster: Would you say then that your equipment has become larger, but there isn't necessarily more equipment that's used, or is that not true?

Labor

Melendy: I think it's become larger. I am not sure that equipment has made much difference in the amount of labor that is used in many of our crops. I think that a lot of the equipment has made the work easier rather than less of it. One of the examples of this is the tomato harvester that everybody points to as putting a lot of people out of work, which is not quite true because had they not developed the tomato harvester the tomato industry wouldn't be here. California would have lost it. The labor would have gone into Mexico.

Knaster: Why?

Melendy: Simply because if they had to have the work up here, the workers up here... It was again going to a union type of thing, and the producers just no way could pass the added cost onto the consumer fast enough to be able to stay in business. Like I told you, the cost ultimately goes to the consumer. And if this can be phased in over a period of years, then certain things can be done. But when it hits you all of a sudden, or if you start getting strikes right when the tomatoes are ready, suddenly, in a matter of four or five days you can lose a field of tomatoes. I mean, once they're over the hill markets won't take them. They're lost. You just cut them off. So actually when this whole thing was transpiring, as I understand it a lot of these growers had land already lined up in Mexico. They were going down there to farm, where the

labor was then at a level to have been profitable and then shipped tomatoes up here. They'd put the canneries and everything down there. So you still have a lot of people on those tomato harvesters but there was a lot of hand labor in those days too, when they had the so-called Bracero program.

Knaster: And that was in the Forties?

Melendy: Yeah. The late Forties and into the Fifties, and that's about when it ended. When it ended, why, there was no labor available in the harvest area. I think this is the fallacy a lot of people don't realize, that there is unemployment here, but the unemployed here will not work in the fields. They say they will, but I've had experience where you watch them, and they do not put out the work that the Mexicans do, whether they're wetbacks, or green cards, or local Mexican people. They know how to work, and they're steady workers, and they just work all day long. And most of them really make pretty good wages.

Knaster: I understand that people working in lettuce can make seventy-five dollars a day.

Melendy: Yeah.

Knaster: Secretaries can't make that.

Melendy: They sure can't.

Knaster: (laughter)

Melendy: But they don't work all year long either.

Knaster: That's true.

Melendy: See, there's something I think we have to admit, that these workers do not work all year long, but they make enough money. If they manage it at all, they're going to come out. You watch these crews. They work on a basis of so much a carton, I don't know what it is now. But the whole crew works, and you watch them, and some of them are much faster than others and they will pick up for the ones that just can't work quite as fast and help them out, because they can't slow that machine down. If they do, why, they're all losing money.

Knaster: Oh, I see.

Melendy: But, yeah, they make good money.

Pest Control

Knaster: What kinds of changes have you seen in terms of pest control? Have certain insects been eliminated and others introduced unwittingly?

Melendy: I don't think that many insects have been eliminated. I think it's like diseases in humans. We have to remember that with all our technology we haven't eliminated anything in humans yet.

Knaster: Well, there is one. One we used to get the vaccination for. What is that?

Melendy: Smallpox?

Knaster: Yeah.

Melendy: It is still in the world and they're still having outbreaks.

Knaster: That's true.

Melendy: I think the primary things that were used before were the Black Leaf 40, which was used for aphid control primarily on crops and which is probably one of the most potent and dangerous insecticides that we've ever dealt with, including anything we've got today.

Knaster: Why is that?

Melendy: It just . . . it's a deathly poison. You take two or three drops of it and it'll kill you.

Knaster: And this was put on the crops.

Melendy: Yeah. But the thing was, the thing I'm pointing out is, we talked about some of the pesticides today, how highly toxic they are and how careful you have to be handling them. And they are. But in those days the farmers all handled this Black Leaf 40 all the time and I don't know any of them that ever suffered from it. They didn't have the problem of leaving it around and having kids drink it out of the bottle or anything like that, but it's a material—oh, it's from tobacco, is what it is. Nicotine sulfate. Okay, you

spray it on a crop. Within a few hours it's gone. Completely. There's no trace of it. And that was the good thing about it, there was no residual effect. So if you sprayed and the weather turned cool, which it could around here very quickly, you didn't have any killing effect so you had to turn right around and spray again.

Knaster: I see.

Melendy: And it was something that, well, you just had to spray continuously, probably every week, which became quite costly. You didn't have a residual problem though, and you didn't have the matter of the insects ever building up resistance to it. This was one thing that never happened. The other material they used on crops is pyrethrins, which, I guess they'd call an organic material, since it is natural. It was a one-shot deal. I mean you put it on once and there's no residual effect.

Knaster: And what was that used for?

Melendy: This again was used as an insecticide for your various types of worms, which are your larva form of your moths and butterflies, and it was also used on aphids. You can still buy pyrethrins now. It's come back and once in a while you can find it in the stores.

Knaster: Is Black Leaf 40 still used too?

Melendy: I don't think very much of that's used. I can't recall having seen any of that in the stores. Frankly, it's a lot more dangerous to have around the house than pretty near anything that we've got today, and yet I don't think they have the rigid controls on it we have on some of our other stuff. But yes, there have been definite advances, I call them advances, in technology as far as pest control is concerned. And when you talk about the dangers, I just don't consider them as being . . . I don't get emotional about it. Let's put it that way. I think most of it's emotions, on both sides. The one gets emotional— this is going to kill everybody—and the other's going: "Look, you can take a bath in it and it doesn't hurt you at all. I've got to use it. It's the only thing I've got." If we take the emotions out of it, I think we have developed excellent programs as far as pest control is concerned, and I don't think the danger to people is really of any significance. I'm not saying that we shouldn't stay on top of it, monitor it, and make sure they're used right, because you always find somebody that wants to do something different sometimes, and you have to look out for that oddball and make sure that they don't do something that is dangerous.

Knaster: Do you feel that some of the pests that have been a real problem in this county have been controlled?

Melendy: No.

Knaster: They're not under control.

Melendy: No, if you don't do something they'll always come back. It's a continuing battle. They're not eliminated to the point where you don't have to worry about them anymore.

Knaster: Have natural methods been used? For example, one kind of predator eliminating another insect rather than spraying? Has there been experimentation with that?

Melendy: Oh, this is going on all the time. They're always working on this. I can't think of the term they use for it. It's really an integrated pest control system where they will have someone who goes out and monitors the field regularly. By that, I mean in certain seasons once or twice a week they go through the field rather thoroughly, or orchard. They will monitor not only the pests but also the predators on the pest. And if they find that the predators on the pest are building up, then you don't have to spray. But a lot of times the predator does not build up until the pest has built up to a point where it'll do economic damage to the crop. Because it's just like everything in nature. As soon as the food supply for one animal builds up, then that animal starts getting plenty of food, so they build up until they overrun their food supply and then it goes down, and your predators generally are behind the pests.

They are running some very extensive and very successful programs on this where they're . . . and again it goes into economics, you don't spray for nothing. It costs money. If they had one program in the Delta area on pears,

for instance, and if you can spray your pear field, say three or four times a year rather than eight or ten, it makes quite a difference. There you're talking about areas where there's other people around. You've got bodies of water; you don't want to contaminate those. All of those things enter into these programs. So they're doing some of that work here in Aptos. They've done some monitoring to watch mites. There are certain mites that are predators on other mites. And watching the build-up, and not using a spray method of control until the mite population, the damaging mites build up to a point where there is going to be economic damage. And sometimes you get by. The predator builds up fast enough so that it will hold them back. But you can't always count on it, so I think we're going to see a lot more programs where these things are monitored very carefully, with the idea of using less of these materials. We went through the stage, I think, when you just routinely went through a field once a week and sprayed. I mean, whether there was something there or not.

Knaster: Oh, really!

Melendy: Like I say, everybody had the idea, "Well, it's a good thing. Let's do it." But it got to the point where that costs too much money. Again we equate these things back to economics, and they just couldn't afford to do it, plus the fact that they were finding they were getting resistant species when they did that. The more you use of a material, the quicker you're going to get a resistance and then it's no good. Then you look for something new. So then

they would get field men who would actually go out in the fields and go through them and determine, yes, we will have to spray the lettuce field, or no, we won't. And if they're going to harvest in three days and the population hadn't built up far enough, why, you could get by without spraying. But I feel we are going to see a lot more of this type of thing. The agricultural people will hire their own technicians, and this will be another phase of production.

Knaster: Well, who is actually doing this experimentation? Is this the Agricultural Extension Service, or the chemical companies?

Melendy: No, it's a combination thing with the University and the [United States] Department of Agriculture. In some cases the USDA personnel are involved, and the Extension Service and the farmers. In some cases, a group of farmers that have the same crop in the same area will get together and make a bigger area and it's more significant if you can get a large area. And if you can control them in that, then you can pretty much well project, well that you can do it in a whole big industry. But at this point it's a cooperative thing. Like the farmers in most of these experiments are putting out quite a bit themselves. And this is again where you get this Cooperative Extension.

Knaster: Have you seen changes in weed control here as well? I remember hearing something about rodent control. At one time it was a very bad problem and they had to go around poisoning. I don't know if it was squirrels or ground squirrels or whatever . . .

Melendy: Well, the ground squirrel as far back as I can remember was always a pest that somebody poisoned for, and I think they're getting away from some of that now. But in some areas... Again, the area where I lived you were dry farming. You had a grain field that was starting to get ripe and the young squirrels were coming out and you get out there and you could almost watch them as they'd cut into the field, just hundreds of them, thousands of them.

Knaster: What did you do?

Melendy: Had to poison them. It was a program. You'd poison. You'd knock out the population to the point where they couldn't do much damage, but by next year they were back and there was no way to get rid of the squirrels, period. I mean, economically. You could if you went out and individually went after them, and spent enough time I guess you could, but they would move back in again. But it was a matter of reducing the population. Because as the feed supply, as the grain got mature, that's when the squirrels were coming and the feed supply would be there. So they would go after it, and they would eat it. But then when the food was gone most of those squirrels would die in the winter time, or the coyotes would eat them or something else. So you had to poison them, or you didn't have a crop.

Knaster: Are ground squirrels a problem in this county?

Melendy: To some degree, but not from a crop standpoint probably. I think we get calls from people. Squirrels get into their gardens and things like that and they don't know what to do with them.

Knaster: (laughter) That's a little different.

Melendy: It's a different type of thing, but basically the populations in the county are pretty well under control, and if they start building up in an area they have a program. They do still poison them. They no longer use the types of poison they did, where if something ate the squirrel they would die also. They use anti-poisons mostly now and only in areas where you get a build-up. It's pretty much a spot type of thing.

Public Service

Knaster: Last time after I shut off the tape recorder you started to talk about poultry. And I don't know for how long you were the poultry livestock advisor, and what years that was.

Melendy: Well, actually the full time I was here, I had those responsibilities.

Knaster: I see.

Melendy: Along with the 4-H program. Which meant when I first came here in 1947 until I retired I had the responsibility of all the animal science plus the 4-H program.

Knaster: So in the division of people in the farm advisor office—there's one who deals with livestock, one who deals with, let's say horticulture and crops and . . .

Melendy: And one with vegetables, and now there's one with floriculture. Yes, they're divided up. Each one has a specialty. Usually each one knows what the other one was doing and knows some of the basics of their particular field. So if somebody calls in (we have a lot of home calls), pretty near anybody in the office can answer most of those calls. That's what we try to do, so you don't have to call them back, or have the people call somebody else and give them the runaround. We like to be able to answer the questions right there.

Knaster: How much would you say the percentage is divided between home calls and home visits and demonstrations? I don't know all the things that are involved in your job.

Melendy: That would be very difficult to break down, because it varies from year to year. It varies depending on the season. It depends on too many things, but I would say just as a guideline, probably seventy percent of the time is spent on the subject matter, working with the commercial end of the job, and maybe thirty percent in what we would call public service. A person that has a backyard garden, or has a few animals in the backyard, or a few chickens or something like that, would probably be a pretty good guideline, because in this county we've done over the years a lot of public service work.

It's just a county where you have a lot of people living here because they want to do these things, and we have always taken care of them, so as a result we get lots of calls on it.

Knaster: Do you spend a lot of time on the road, paying visits, that is?

Melendy: Not now. I would say the past ten years probably not, primarily because having been in the county such a long time I knew the county pretty well. You know the soils in different areas. You know what the water requirements are. You know what the temperatures are, variations, and a lot of those things. A lot of times after asking a few questions you can answer their problem, or satisfy their problem without having to go out. But many times it is necessary, though, for a person to go out and actually visit, because there's no substitute for being on the spot. But many times when you get the same call year after year, you foresee you're going to get certain calls, and you know what the answer is. You can take care of them without going out to visit them.

Knaster: Did you have a policy of demonstrating that certain techniques, or ways of caring for the land, or growing crops or animals that were standard? I mean, at certain times during the year would you have these demonstrations for the public, or was that only by request?

Melendy: This was done by those who were in these particular fields, and they have had them for the last several years now. The man who works with

the vegetables and the home economist have worked together on gardening or home food production. They've held [it] out at Cabrillo College now for several years. This is basically for the individual who has a garden or is raising their own food.

Soil and Climate

Knaster: Just now you talked about being able to answer questions that would come up repeatedly, and it brought to mind whether there's great variation or not throughout the county in terms of soil and climate and the kinds of problems that people have to deal with in terms of their growing. Or is the county homogeneous?

Melendy: In some respects, in generalities, yes, we're in a mild climate. You can just about say that and blanket the whole county. Then you would start making the exceptions. You take an area like the San Lorenzo Valley. It gets far colder there than of course it does on your coastal terraces. Because you are in a canyon and it just plain gets colder. Scotts Valley gets cold in the winter time. Your growing season is shorter. But still, when you get into the summer season, generally speaking, they can raise pretty near anything in those areas that you can anyplace else. Then you have the fog influence, which usually is more along the coast and doesn't get back into the valleys, though it touches there but it doesn't stay all day like it might along the coast. So in general, the climate, while it's a mild climate all over, there are some variations.

The same is true with soils. There are many different types of soils in their classifications. However, when you get down to it you have what we call our marine terraces, which are shallow soil—they're along the coast, in the flat areas, and around Watsonville. They're a shallow soil anywhere from eight to eighteen, twenty inches deep, with clay under them and this certainly limits what you can do. Generally you cannot raise your deep-rooted crops there, like your fruit trees. Then you get into the deep soils, the alluvial soils. Then you can raise your deep-rooted crops. You find your apples growing on those soils. However, we have the situation in Pajaro Valley. The lower part of the valley you don't see any orchards, even though there's a good deep soil. And the reason for that is that it's a drainage problem. That used to be a willow patch, the whole lower Pajaro Valley, and it's all been reclaimed. It's probably some of the richest agricultural land in the world. And it seems to be improving all along. You're getting drainage in, and actually they have pumps there that they have to pump continuously to keep it from being almost a swamp. So you cannot raise your deep-rooted crops there. So you find those east of Watsonville almost exclusively. These are the variations you run into, but you get to know a certain area, and you know what the soil is, you know what the climate is, and you can usually answer questions pretty well.

Knaster: So there are distinct problems in each area.

Melendy: Oh yes. And like I say, with the shallow soils is drainage. And you either have them drained, you get in some kind of a drainage system, or realize that you will have to raise the crops in the summer time only. In the winter time they will drown out.

Knaster: Have you seen that the problems in the different areas have changed over the years, or since you've been in this county have they basically remained the same?

Melendy: Probably there haven't been any significant changes. Again, your soils don't change. Your climate basically does not change. I mean it does. Right now we have a drought, lack of rainfall, and you have temperature changes, variations, but basically those two things remain the same. So in general, I would say the problems don't change, haven't changed drastically. The one change that has come about is from going to the dry land orchards to irrigated orchards. The mountain orchards have all been dry land farmed. There's no water to irrigate, and there've been many people who made their living, sent their kids to school, and they did all of that scratching it out on those mountain orchards.

Knaster: Waiting for the rain to come.

Melendy: Right. They had to depend on the rain. Then when it got to where the land values went up, because the people in the Santa Clara Valley wanted to live over the hill in a nice climate, the demand started going up for that

land. The taxes went up and a lot of that land is no longer farmed. They still have some of the old orchards there but nobody is really buying that land as a farm any more. It just isn't there.

Knaster: Are you speaking of Corralitos and Aptos?

Melendy: No, I'm talking about the highland area, up toward Loma Prieta, Summit, through that area. All those orchards are pretty near gone. They're still farming some, but you can't even make taxes off of it. You talk about Corralitos, yes, there's some of those hill orchards there that are gone. There's still a few, but not too many. And up back of Aptos, a lot of that's been replaced by the industry in the level ground where they've got water to irrigate. So what we end up with is our production has not gone down but the acreage has.

Knaster: I see.

Melendy: And one acre in the Pajaro Valley will produce probably what five or six acres in the hills would produce. So this has been a significant change over the years, the agricultural value. I guess if you adjusted it for inflation, you could still say the value of the crops had gone up over the years. So we're producing more food than we did by far thirty years ago.

Knaster: Now would you say that that is a result of technological changes, using chemicals more, or somehow making less land produce more than previously?

Melendy: Well, it's development of better irrigating procedures. This is one factor. Better fertilizing effort. Procedures again—instead of one application or two applications it's put on several times. Pest control has been developed. A lot of the problems there are overcome much easier than what they were before. They do have answers for a lot of these things. New varieties, I think, is another factor that has made a big difference in production. What with new and better varieties, you get a lettuce variety where you might get, let's say three hundred crates to the acre; you'd probably get five hundred now. These are the things that have increased production. And again, as I mentioned before, there's been a lot of drainage put in the Pajaro Valley. See, this has happened in many foreign countries, and a lot of our University people have gone over there to help them design their systems for irrigating some of these desert areas. Because if they don't put drainage in, within probably ten years or less, they will no longer be able to use the land, because the salts build up.

Knaster: Right.

Melendy: And this is probably why some of those civilizations in the past didn't make it. They just ceased to exist. It's because they had some very sophisticated irrigation systems and all, but they just didn't have the drainage. The whole Nile Valley is a good example of this. When they got the dam in and started irrigating more, then they've got to put in drainage systems.

Agricultural Research

Knaster: Would you say that these new varieties and new systems, irrigation systems, came about through commercial research or university research?

Melendy: I would say it's a combination of both. Your commercial people do a lot of research work, but over the years they've worked very closely with university personnel. Because they're interested in something that's going to be improving something. If it doesn't improve, why, they're going to be hard pressed to be able to sell their commodity. So there has been a good deal of work together. And there still is. I think a lot of the commercial companies now are hiring personnel who have Ph.D.s in solid...in various fields, and they're doing a lot of their own research work. But still a lot of it has to be screened through the University. I mean, this is just the way some of the laws are set up. The University, or the U.S. Department of Agriculture, or the Pure Food and Drug [Act] have a lot to say about any new materials before they ever go on the market. But your research is done both by your public agencies, in this case, the University, and by private agencies. Both of them put a lot into it.

Knaster: Has there been anything that came out of Santa Cruz specifically, or is it mostly that the ideas are imported into the county and applied to the situation here? Has anything been originated in this county that you're aware of?

Melendy: Well, I think a lot of our new strawberry varieties have originated here. Well, you can't say they originated here and yet maybe they did. The work has been done in the county. The people from Davis, our personnel from there have worked down here, but the test work, all the tests of the varieties have been done over at the Monterey Bay Academy. They've got a piece of ground they lease from the Academy and they test all these new varieties, screen them out. There's several hundred of them. But a lot of the first work from the seedlings is done at Davis, and certain screening is done there, and then the field screening is done down here. So it's a cooperative type of thing.

Knaster: Would you say that these changes have occurred gradually since the late Forties, or has there been a block of time in which there seems to have been a great surge of change?

Melendy: With the Extension work, at first it was a matter where you would try something out. You'd find it was a better procedure. Then you would have to prove it. This is where the demonstrations came in, and sometimes the process may take anywhere from two to five or six or seven years to put into effect. However now one of the problems some of the fellows in the office have is they will try something and it looks real and good and everybody jumps on it. Well, that's the answer and they want to get ahead of everybody else. And sometimes it is not the answer. That year it may have worked out. But they like to test them over a period of time and make sure

that they're not making a mistake. I'm thinking about a new variety. It may look awfully good one year, but after they get through processing it may not be a good commodity when it gets onto the store shelves, and they don't know that right away. They may have their commitments made for the crops the next year before they find those things out.

Knaster: I see.

Melendy: So this is one of the problems that they have now, is being adopted too quick.

Knaster: Have you seen any shift in focus in one particular area of agriculture in this county over the last few decades? For example, perhaps in the Forties there was a focus on one kind of crop, and maybe in the Fifties it was that new irrigation system was put in. Have you seen any shift that way?

Melendy: The basic crops of the county, no, I don't think they've changed. We've had the Brussels sprouts industry in this area. It's always been a big one and still is. The lettuce industry is a big one, always has been and still is. The apple industry. The one thing that has developed relatively recently, probably [in the last] ten years, is the flower industry which has moved into the area. It's probably one of the biggest ones in the United States now, in Santa Cruz-Monterey County. Because it's a nice climate. They don't have the smog problems. Generally speaking land prices are less and the urban

pressures are less, and as far as shipping flowers, there's no problem shipping them out of Watsonville. They fly a lot of flowers out. It's just a much nicer place to raise flowers, so that has been a major change. Strawberries—you go back in history and strawberries have been raised in the Watsonville area many years. You can go clear back to the early 1900s and maybe before. But it's developed into a more concentrated industry.

Probably bush berries is one industry that has dwindled or gotten less in the county. A lot of those are grown over in the San Joaquin Valley. And again, you're talking about cheaper land, and level land, and a lot of other factors, a hotter climate and therefore they can raise them more economically than we can. In fact, unless we can get a pretty good price here we can't afford to raise them on the land. The land is just too expensive to raise a low income crop on. If we got a good price they'd do real well.

The Poultry Industry in Live Oak

Knaster: Have you seen anything else that's been phased out?

Melendy: Well, the poultry industry has definitely been phased out. That was an industry here. The Santa Cruz area, Live Oak specifically, was originally divided into anywhere from three to five- to ten-acre parcels. It was a big subdivision development and the parcel was sold to people who were retiring and raising poultry as a retirement income.

Knaster: When did this begin?

Melendy: This probably began in the late Twenties.

Knaster: Oh, that far back.

Melendy: It was way back. And it developed into a big industry. There were probably four or five hundred poultry farms in the area.

Knaster: In Live Oak, or in the county?

Melendy: Well, in the county, but most of them were in the Live Oak area. That area was a real concentration of poultry. They used to ship carloads of eggs out of Santa Cruz. And an interesting thing on that—they had a brown egg market. Brown would go to one place and the white eggs would go to another place.

Knaster: Why was that?

Melendy: Well, it's just the preference of the people. I think the Boston market wanted a brown egg and the New York market wanted a white egg.

Knaster: Oh, the eggs went that far!

Melendy: Oh, yes, they shipped them . . .

Knaster: Did they go by train?

Melendy: By train. And in those days they stored eggs. They put them in cold storage. The big production was in the spring and the summer, and the

eggs were all pushed into storage then. Then in the winter time they were taken out and shipped.

Knaster: I didn't know you could hold eggs for that long.

Melendy: Oh, yes. They held them . . . they're not, the quality is not there.

Knaster: Yes.

Melendy: But if you wanted an egg out of season, the only way you could get it was from storage. Then they developed techniques of getting birds that could produce eggs year round, basically by controlling the light. The bird needs about fourteen hours of light in order to produce. And if you regulate the light right it doesn't matter when they're hatched, they still produce the same number of eggs in a year, and they will produce them at the season you want them.

Knaster: Is there any difference in the quality of that egg?

Melendy: No, no. There's no difference in an egg whether it's produced in the spring or the fall or winter. They're all the same. And we have very, very few eggs into storage any more. Very few.

Knaster: Totally fresh market.

Melendy: Almost a totally fresh market.

Knaster: And is that supplying only California, only the state.

Melendy: It's a peculiar thing. California used to be a big egg shipper, shipping eggs out of the state. And for many years they were a surplus state. Then as the population increased, they became a deficit state, and they were importing eggs. I think now, especially in southern California they're an exporting area now.

Knaster: Well, when was that change? When was it surplus and when did it become deficit?

Melendy: I would say sometime in the mid-Sixties is about the time when the switch came. But it was a definite change when they used to have a big surplus of eggs and then all of a sudden the eggs were being shipped in.

Knaster: How long was Santa Cruz an egg producing county?

Melendy: Well, it was phased out again about 1960, 1965.

Knaster: Were they still being produced in the Live Oak area at that time?

Melendy: Oh yes, and a lot of them had gone by the way. They were small operations, and they were people who had retired, so after fifteen years or so in the business you're getting older and there really was no market for a poultry ranch. A so-called used poultry ranch—there was just no market for it. It was much more economical to go buy a piece of land and start from scratch, because then you could have a modern, well-equipped operation. But they would have anywhere from 500 to 1500 birds. And it was a family

operation. Man and wife would gather the eggs, take care of the birds all the way through. But of course the population pressures were one thing that started pushing them out. You get the fly problems. You get the odor problems, the noise problems, the dust problems. The poultry industry and urbanization are not compatible. They just plain aren't. Plus new techniques came in where one man could take care of 10,000 birds, and it was just that simple. So the operations here had no choice but to ultimately phase out.

Knaster: Now was that at the time that Petaluma became a big poultry . . .

Melendy: No.

Knaster: Or was it before or after . . .

Melendy: Petaluma was a big exporting industry at the same time Santa Cruz was. The chamber of commerce had it as the egg basket of the world. I don't know whether it really was or not. But in the process of the changeover to larger operations they had more open land up there, and a lot of the operators set up large operations in that area, so they still are a major egg producing area.

Knaster: So you'd say the lack of open land spelled doom?

Melendy: Well, that definitely had a lot to do with it. Again, your tax structure, I think, had something to do with it. Urbanization was the primary thing. Also in an area like this, all feed has to be brought in. There's no feed

raised here. This puts you at a disadvantage if somebody lives or operates closer to the feed, to where it's produced.

Knaster: Last time [off tape] you talked about flies being a problem, and people wanting people who were raising poultry to leave because of sanitation, and you talked about sewage systems and how you were instrumental in phasing something in or out.

Melendy: All right, what was happening—the Live Oak area was rapidly urbanizing. People were moving in. It was a nice place to live and had pretty much all of the utilities. It did not have sewers.

Knaster: Are you talking about the Sixties?

Melendy: Yes, yes. That's about when it was. The poultry ranches there of course used what we called the double porch type, where all the droppings went into a pile, and in the winter time they would be wet and there would be a fly problem. They would produce flies. So that and people just aren't compatible. And there you had all these problems . . . The Health Department would of course get the complaints. They talked about passing fly control ordinances. This had been done in other counties, but they aren't enforceable. You can't prove where the fly came from.

Knaster: (laughter)

Melendy: And they had all kinds of court suits, so we didn't really get into that here. I pointed out to them—why did you do it, there's no point of doing it because you can't prove anything. I could see what was happening. They were going to be phasing out. I said why don't you, instead of trying to push the poultrymen out, let's try to get sewers in here. Then the land becomes valuable enough. The poultrymen can sell the land. He doesn't have to worry about depleted buildings. And they can phase out. If they want to stay in the business they'd go into business with a good modern plant. I think I had a very significant effect on what happened in that development procedure. In other words I've always felt on these things you don't get in a big hurry and try to do everything at once. If you can work these things out, generally you can work it out so it's pretty equitable for everyone. It's interesting, we still get complaints from Live Oak because of flies.

Knaster: Do you?

Melendy: There are places where they have several acres and they have all kinds of livestock on it. Some of them still have a few chickens and they've had them there. The way the ordinances read, as long as they keep them there they are legal. But once they sell them for something like six months, then they're out of business; they can't put them back. But we still get a few complaints. They're nowhere near what they were before. But once your sewer systems go into an area, then that's the area where the development should go. As soon as you can furnish the proper facilities.

Knaster: Now is the reason why the lots in Live Oak are differently shaped than the rest of the county, because of the poultry industry?

Melendy: Yeah, well it's because it was subdivided. It was all open land at one time. It was subdivided in a way to give as many parcels of land, I guess you'd say for the minimum amount of frontage on a road, because roads cost money to build. So a person might have a lot that's one acre wide, let's say two hundred feet wide, but it might be three acres deep, maybe six hundred feet deep. And where you don't have roads through, those are very difficult for development. But if the developer could come in and put two of those together, then he could put a road down the middle and divide it. I think this is the reason you find there's really not a real pattern of roads in the Live Oak area. It's not laid out . . .you do have some of the regular grid, but there's a lot of different directions that the roads go. Some of them go . . . they're dead-end roads, and things like that. I think it's the Del Mar School that's back at the end of a dead-end road. They bought property that was literally land locked. And then they had to put a road into it. So it's not the most orderly development out there, but it's still a nice place to live, really.

Knaster: Some of the streets end before Portola [Drive] and begin again at Portola.

Melendy: Right.

Knaster: It can be very confusing.

Melendy: That's right.

Knaster: So that's the reason.

Melendy: Yeah. It was a subdivision that was apparently laid out differently than some of these other land promotion deals that they laid out in some other areas where they would sell a five-acre farm, and those were usually on some of these clay pan soils that were completely worthless. But those were laid out in a very orderly fashion, whereas the Live Oak area, it was quite variable.

Knaster: Do you have any idea what happened to the people who had been in the poultry business previously?

Melendy: In the Live Oak area?

Knaster: Yes.

Melendy: There're some of them who are still around. Some of them still have their homes there. They sold the land, or some of them developed their land themselves. A lot of them of course have passed on, because like you say, they were older people, they retired to raise poultry. And it doesn't take long. If you retire at fifty-five or sixty, it's only a matter of fifteen or twenty years and you're beyond the age of continuing any type of operation. Some of the younger ones moved out, went to other places. The one big one we still have in the county is out back by Aptos now and he started in the Live Oak

area. Saw the handwriting on the wall, bought himself a place, developed probably one of the most efficient operations in the state.

Knaster: Which one is that?

Melendy: Out there, it's Marvin Glaum. He's on Valencia Road. But he set it up and he takes care of his manure. Actually he literally sprays it on the ground, only a small area. He just plain doesn't have the fly problem and a lot of people say, well, what happens to the water that percolates through it and goes into the substrata, but apparently this is not a problem out there. It's just worked beautifully. And he gets rid of all his manure from probably 15,000 birds there now on his three or four acres.

Knaster: Doesn't anyone want to use that for fertilizer?

Melendy: Yes, they would like to, but it would cost more to move it than what it's worth.

Knaster: Wow.

Melendy: This is the sad problem with manure. In southern California they have places where they literally have mountains of it, dairy manure. And to haul it from there to where it could be used, it just costs more than what the value of it is. They do use much manure here on our truck crop land. They use many tons of it. But most of that's brought in. They haul it in. A lot of it's hauled in from Petaluma. A lot it's hauled in from the San Joaquin Valley

poultry farms. But they do use a lot of poultry manure, or a lot of other manures on our crop lands.

Knaster: While you were the poultry livestock advisor, what kinds of problems came up? For what things did you have to advise people, for example, with the poultry in Live Oak?

Melendy: All right, the poultry. You had disease problems, for one thing, that were continuously changing and the vaccination procedures . . . the medications for it. Previously there were very few medications that were really of value, and then the sulfa drugs came in and they were excellent for some of the primary diseases. Used properly they would clean it up. The diseases were one of the big factors where we worked.

Economics was another. Economics as related to management procedures on feeds and feeding, the brooding procedures, purchasing of chicks, all of these factors of management were where we worked. Housing is another place. There were always those who wanted to close the house up tight in the winter time to keep the birds warm. But that's the worst thing you can do, because you keep all that moisture in, and pretty soon you've got a wet sticky mess, and the birds pick up disease much quicker that way than if they just were wide open to the cold.

Knaster: Were there any epidemics?

Melendy: Oh yes. Yes the Newcastle disease, and not the one that they had recently in southern California, that was a different type of Newcastle. But it came in and before they had a vaccine it would just go through a flock and maybe anywhere from ten to thirty percent of the birds were killed.

Knaster: Was this periodically, or was there a wave of it?

Melendy: It came in and every new batch of birds would have to go through it. If it hit them early enough, they got over it before they started laying and then the production was . . . the eggs were good. If they got it when they were just coming in to lay, once they got over it the eggs were very thin shelled, so you'd end up with a lot of cracked eggs, misshapen eggs and you lost your quality. Interior quality went down. The whites would be very watery. Probably didn't affect actually the nutrient value of the egg very much, but when you break an egg open and it covers the bottom of the skillet, it's not the most appetizing.

Knaster: (laughter)

Melendy: So that was one disease that came in as an epidemic. Bronchitis was one that they didn't have a vaccine for, and generally every flock had to go through the disease and you just hoped they got it at the right time. Chicken pox was one that they used to vaccinate for regularly, it was just routine. That's one that I think they've gotten away from vaccinating for

now, because you can clean a place up and get rid of the pox and generally not get it back again.

Knaster: Now how was chicken pox for chickens related to chicken pox for humans?

Melendy: They are completely different diseases.

Knaster: Is there any similarity in terms of how it looks? Is that why the name came about?

Melendy: That could be. With the chicken pox generally they would get these big scabby areas on the comb and on the waddles and on the bare parts of the bird. And they'd get to the point where the trachea, the windpipe would get stopped up and it could actually kill them.

Knaster: Have you seen any changes in the kinds of problems that occur in the poultry business? For example, was there something that predominated in the Forties or Fifties, and was no longer a problem in the Sixties and Seventies, or vice versa?

Melendy: I think the change from the small operation to the large operation by having more efficient methods is probably the most significant change that there has been. When they went to the larger operations they started out in new locations. When you isolate yourself in a new location and don't let anybody in to bring in disease, many of your disease problems are taken care

of. Because the disease has to come in somehow, and if you can isolate yourself, I mean complete isolation, many of your diseases just won't be a problem. And they have been able to combat them that way.

Knaster: Now were birds pretty much brought in from other places and then raised here?

Melendy: Almost exclusively they started with baby chicks, day-old chicks.

Knaster: And they bring them from somewhere else?

Melendy: A hatchery. It would be a commercial hatchery or breeder, which are very few. Now this is one big change in the industry, to a breeder and a multiplier who has gotten ahead of everybody else. Once you get a bird that lays more eggs than the other one, the other guy [can] just as well sell his and buy theirs and start there, which is what some of them did. But they'd start with a day-old chick. Now what a lot of the commercial ones do is have the new stock raised someplace else. They'll hire somebody or rent somebody's buildings and hire them and let them raise their pullets, so when they sell the old ones, they sell everything at once and clean up the place completely and [if] they want to take a vacation they could take a vacation, until the new pullets come in. And this way you . . . again, this is isolation, which they called "all in all out," and you would get rid of everything and clean out and have a break of a couple of weeks and that would take care of all your disease problems, and bring in clean birds and start all over again.

Knaster: Has there been experimentation over the years in terms of varieties the way they have done with crops? Or is there a standard chicken that they use?

Melendy: The white leghorn is the one that pretty much is going to out lay almost anything else in the commercial basis.

Knaster: White leghorn?

Melendy: The white leghorn. And when you get down to white leghorn—they're not quite like cattle and sheep and the larger animals where you have a pedigree on them or you have registration papers. Each individual hatchery or breeder develops his own genetic strain, and a lot of times there's quite a difference between them. They're all "leggerns," but there's quite a difference between the two strains.[5] One of them may average three pounds in weight; the other may average four pounds in weight. But each one develops their own. And there has been tremendous advancement there by the breeders. And again, I think they were helped and encouraged and started by the university in the late Forties and in the early Fifties when there was real push on improving the stock. Once they got started, they hired their own geneticists; they hired their own veterinarians on their staff. In fact, they would have several geneticists. And they did their own breeding. Once they found out what to do they just went ahead and did it.

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5. Leggerns is another word for leghorn chickens.—Editor.

Knaster: Would you say that Santa Cruz County made some kind of significant contribution to the poultry industry, that something about the poultry industry in Santa Cruz County was different from other areas?

Melendy: I think one real distinct thing about the industry here—they never did go through this individual cage process, where you had individual cages. Each bird had a separate cage that they were in, and the theory was that you could count the eggs and you knew when a bird quit laying. We had the double porch type house which was developed by a poultryman here, Vern Miller, and they called it the Miller House. The feeders were on the front and the roosting was in the back, with the litter area in the middle. And properly run those were excellent type of houses. But we did have the manure problem with it accumulating under the roosts. Again, if it was handled properly you could overcome a lot of that, but not all of it. The individual cage came in to the southern California area and of course, it's like a lot of things. It was novel; it was new. Theoretically you'd know exactly when a hen quit laying and all about her, so you could cull, but everybody seemed to go to that. Here I just couldn't see why they should put in that expense when they could get just as good results from the operations they had, which is what they were doing.

Knaster: When was that? When was the Miller house developed?

Melendy: Well, it was pretty well in use when I came here in 1947, so I don't know just when it really started.

Knaster: And the individual cages?

Melendy: Well, they started after 1950, because that's about when the first ones were coming in.

Knaster: Did anyone change over to that in Santa Cruz?

Melendy: We had one operation, well, we have several that went into it. One of them went into it [as] a promotion. They were going to sell cages, and they just went out and got a bunch of culled hens, literally, and put them in. They were trying to prove a point and they were not successful. We did have one operation in Watsonville where the fellow did have individual cages. He set up a new operation and went into individual cages. He realized there were some weaknesses in it. When he got through, he said you end up very confused. Because nobody had done any research work to say, when do you cull a hen—when she quits laying for three days, five days, ten days, or what length of time? Nobody really knew.

Knaster: I don't know anything about the social interaction system with chickens and whether they would rather be out there pecking around together or living in separate cages. I wonder if that was a factor at all.

Melendy: I don't think it was. The birds—you'd put them into the individual cages. They seemed happy. They were alert there when you fed them and when you're in there. After all, they are pretty close to other birds. Of course there's no roosters involved in this at all, simply because you're trying to

raise female chicks so you do not keep the males. I don't know if there was any affect or not, this is another one of the arguments—well, that's not normal, it's better to have them on the floor. But there's a lot of pros and cons to it. I personally don't think it made much difference as far as the production is concerned. I think they would get just as many eggs out of individual cages as the other. There are very few individual cages any more. This is the interesting thing. They have gone to what they call the community cage, several birds in one cage. They're larger than the individuals were, but there are several birds in a cage and this seems to be the most efficient housing method there is, and it works out real well.

Knaster: When they were in one cage, was that all the space they ever had for moving around in?

Melendy: Yes.

Knaster: Wow.

Melendy: The original cages I think were six inches wide, eighteen inches deep, something like that a little over a square foot per bird, one and a half square feet. In the houses we always recommend about two and a half square feet of floor space per bird. From the social standpoint of the birds I don't think it made much difference. They are finding in these multiple cages that whether you have six birds in a cage, three birds in a cage, or five, you do get differences in production. And this is where some of the work they're doing

now is coming into play on that. If the price of eggs is high, one system will return more. And it's gotten that technical.

Knaster: Was the Miller Chicken House adopted by other counties, or was that particular to Santa Cruz?

Melendy: Some of them did use it, yes. It was published in some of the University publications and other places used that house. I don't think it was nearly as extensively as it is here. But it really was a good house.

Knaster: And it was phased out mainly because of the fly problems.

Melendy: That was one of them, plus the fact that when you put birds into the multiple cages . . . See, we skipped the individual cage system and went to multiple cages directly here. Because that was about the time the poultrymen were going out of business, and the ones that went on were going into the new type of cage, the multiple bird cage. I think we had quite a number of operations. In fact everyone that went into the business then went into the multiple cage. The ones that continued.

Knaster: From the standpoint of economics, how would you rank the poultry business alongside other aspects of agriculture in this county?

Melendy: Today it's, you might say, a minor industry. Definitely. The poultry industry at one time was one of the major, if not the major industry in the county.

Knaster: You mean above and beyond apples and lettuce.

Melendy: I don't know just where it sat, but it was up there— a five or six million dollar industry. Whereas now, I think it's down probably more like a million dollar industry. See, we still have, I think, three turkey producers in the county, which contributes significantly to that.

Knaster: Is that something recent, or were turkeys being raised alongside chickens?

Melendy: We've always had a few turkey producers and they have always had their flocks. It's pretty much been the same people over the years. That's a highly specialized industry. There's an Extension person who works with the turkey industry pretty much in the whole state, or at least northern California. And these turkey producers would go to his meetings over in the San Joaquin Valley, Fresno, Merced, wherever they had them, to get the information they wanted from him. It has been an industry all along. It never was a big one, but we always had a few turkey producers, commercial ones.

Knaster: What about any other poultry, like ducks . . .

Melendy: No, we've never had any other types. The meat bird production was a big industry at one time. Again, they developed methods of handling them, developed breeds of birds that would respond to the new feeds . . . One of the commercial companies promoted the 10,000 bird fryer house. They would finance you all the way through, with the house and the whole

thing and then they would sell your birds for you. There were many people who went into that. Again, 10,000 birds in one house was what one man could take care of. Well, they've developed systems now where one man, and maybe two hired people, can handle a hundred thousand birds, just realizing that a lot of times you were spending a lot of time on jobs that didn't need to be done.

Knaster: For example?

Melendy: All right. You'd go through and you'd stir the feed, and after you stir the feed the birds will all come and eat. But they found out the birds would eat just as much whether you're stirring or not.

Knaster: (laughter)

Melendy: Eventually, they come and eat. I mean, little things like that are very time consuming, but you don't just have to do it. In the egg industry, the cleaning of eggs is an example. It was very common to go into a place in the afternoon and here they were sitting, the sun shining in, sanding the eggs with an emery [board], cleaning all the dirty spots off the eggs, all done dry and by hand. Now they have developed equipment where one person can clean a hundred times as much as they used to clean. It's all done mechanically. They wash them now, and they found out how to wash them so they're still sanitary. The egg wants to be colder than the water. See when the warm water hits it the egg expands and it pushes, forces the water and/

or any organisms out. Whereas if the egg is warm and you hit it with cold water, it's going to shrink and pull the organisms in.

Knaster: I see.

Melendy: So this is one of the big changes which has happened.

Knaster: I had read, I remember, a long time ago, not to wash eggs, to put them into the refrigerator but not wash them, and I never knew exactly why, but it had something to do with destroying something.

Melendy: It's the surface coating on the egg.

Knaster: Yes, that's what it was.

Melendy: When you wash them that is washed off. However, that really doesn't have any effect on the nutrient value of the egg.

Knaster: I thought it might have something to do with how much longer you could preserve it in the refrigerator.

Melendy: No, don't think it makes much difference. If you keep an egg below thirty-five or forty degrees you can keep an egg in the refrigerator for many weeks and there's very little change in the quality.

Knaster: Do you remember egg prices at all over the years?

Melendy: In general. I couldn't give you any specifics. I do know that egg prices today are not much higher than they were thirty years ago. In fact, they may not be quite as high.

Knaster: That's fascinating.

Melendy: We had one period when they were getting more than they are now. And we went through when eggs to the producer were thirty cents and thirty-five cents a dozen, and to the consumer it was generally about eight cents above that. That was far cheaper than they had been a matter of fifteen or twenty years earlier. Eggs are a commodity that through these management processes of handling and producing are still one of the best buys there is in foods.

Knaster: That's true. Well, I buy a flat of extra large white eggs for two dollars.

Melendy: Now is this a thirty egg flat or a three dozen?

Knaster: Probably thirty.

Melendy: Most of them I think are. I think that's fairly reasonable.

Knaster: These are extra large. Usually a dozen fertile eggs costs over a dollar.

Melendy: Yeah, they're expensive. For two reasons. One is that generally they're a brown egg. I don't know why they use just the brown eggs. Your brown eggs are produced by [chickens that] will not lay as many eggs. They're a bigger bird; they eat more feed. Therefore the cost of producing is significantly higher, and then if you have a rooster in there, if you have enough of them to give your guaranteed fertility in your eggs, then you have to feed those roosters. So they have to charge more, but I think the price is probably exaggerated.

Knaster: Is there a difference between the brown egg and the white egg?

Melendy: In quality?

Knaster: Yeah.

Melendy: No.

Knaster: Was there ever a greater demand for brown or white in this county? Were more brown eggs produced, or more white eggs produced?

Melendy: I think when I first came here they were pretty much switched over to just the white egg production. Pretty much. The brown eggs—there weren't many of them. We did go through a stage of producing hatching eggs for the meat producers. In other words they would produce the hatching eggs which would be fertile eggs. Now these were your heavy breeds, which were your brown breeds. The brown eggs producers. And they

got a significant increase in price. They would get a dollar a dozen for their eggs. And when they got through, a lot of them found out that they just weren't making as much as a commercial flock, simply because they had the extra rooster, they had the lower production, the heavier eaters, and even at higher prices it was difficult to come out.

Knaster: Is there anything different about the poultry business here in Santa Cruz County than let's say other parts of the state or the country, or is the poultry business fairly standard?

Melendy: Right now it's probably fairly standard. Again, you have big operations. I don't know what the figures are, but there are not a great number of poultry ranches in California. Compared to what there were, it's probably one tenth, or maybe less than that. No, I don't think the industry here was much different. See, we had the two cooperatives—the feed cooperative was one of the outstanding ones in the state. It was one of the original ones and was probably one of the best managed and best handled.

Knaster: Did that originate while you were here?

Melendy: No, this was before I was here. See, when the industry came here, they had the problem [that] they were at the end of the so-called feed line. They were at the mercy of the feed dealers. So a group of them got together and said, well, why don't we set up our own? So that's when the farmer's co-op came. The big grain silos out in Live Oak by the railroad tracks, they

would fill them with grain in the summer time and then they would have a much cheaper feed during the winter, didn't have to pay the storage and handling to somebody else.

Then they had the egg cooperative which is New Laid, now. It was Poultry Producers then, who handled all their eggs, took care of the marketing. This was pretty much the story in most areas of the state. They had their own cooperatives and their own marketing.

Knaster: Has the poultry business become, as you said, one tenth of what it used to be, because of land values, or for other reasons, because there's another area that's producing eggs now?

Melendy: The reason there are fewer producers is they have found ways one person can handle far more birds than any one ever dreamed of at one time. I think the biggest one is down in Ventura County. I think they have over a million birds on just one farm. They had their problems. When they had the Newcastle outbreak down there, that exotic one. They had to liquidate the whole thing, completely, and start over again.

Knaster: How can anyone survive a catastrophe like that economically?

Melendy: Well, the government pays them so much per bird, when they have to liquidate. This has been standard when they went through in the dairy industry and eliminated TB from our dairy cattle. [A dairyman] was

paid a certain amount when he had to get rid of that cow. And the same thing was true on the chickens.

Knaster: Was this happening in Santa Cruz County?

Melendy: In the TB, yes. On the poultry there was only one place as far as I know that got that exotic disease. It was a person who had many different types of poultry, and [when] I say poultry, I mean quail and exotic birds along with many varieties of poultry. It was a severe blow to have to liquidate, because when the government pays they do not pay the exotic price. They pay something to prevent a person from total disaster.

Knaster: You said exotic birds. Are many kinds of birds raised here for meat?

Melendy: No, not for meat. These were pet birds.

Knaster: Oh, pet birds.

Melendy: The parakeets and doves and quail and pheasants, all those kinds of things that this particular party was selling to anybody that would want them. They had a pretty good business going, but somewhere they got this disease in and it showed up. As far as I know, that's the only situation they had in this county. I don't know why, but it didn't spread.

Knaster: It sounds like there are a lot of parallels between the poultry business and let's say lettuce, or even apples.

Melendy: Oh, yes?

Knaster: In order to be a grower of any kind you have to be large or you can't make it.

Melendy: Well, it isn't necessarily being large. It's a matter of labor efficiency. In other words, why should the consumer have to pay a price for eggs to keep a man in business if he's only taking care of a thousand birds when he could with the same amount of time take care of ten thousand birds?

Knaster: I see.

Melendy: This is really what it amounts to. It isn't a matter of a person making more money because they have more birds, because they are not. In fact, a lot of them found out when they expanded they made less money than they did when they had a smaller flock. We had one party here that always raised about 1200 birds. He could tell you a year from now how many birds he would have on his place. He was just that kind of bookkeeper. And he was making as high as four or five thousand dollars off his flock. Today some of these flocks, a flock of ten thousand birds won't produce four or five thousand dollars.

Knaster: Why is that?

Melendy: Because the price of eggs hasn't gone up. See, it's gotten more efficient. There's a surplus. It's quite common in the poultry industry that most of the year they will be selling their eggs at a loss.

Knaster: How can they afford to do that?

Melendy: Well, then you get a few months of good high prices and you make it up. It's just one of those things the industry hasn't learned. When the prices were high, if they would quit putting in new birds, the price would stay up, and they would make a very good living. But as soon as the price goes up they all rush out and put in more birds, and then they get a surplus and pretty soon the price goes back down. Actually in the end the consumer benefits. That's the one thing about agriculture or food prices, you do have this variation, especially your fresh commodities—high prices and low prices, but in the long run you level those all out, the consumer gets a pretty good break. It's generally speaking, an industry geared to making a profit. And that profit, when it starts getting to be excessive, others go into it, money comes from someplace else, and they get started and pretty soon the profit goes down. So then somebody backs off—well, I can't make enough money on my investment there. I'll take my money out and go someplace else. Well, then the egg production or whatever it is goes down and then the price goes back up. And you get these cycles.

Knaster: Reflecting on the history of poultry in this county, can you make a prediction as to what is going to happen to it?

Melendy: As a commercial industry it's gone.

Knaster: Gone.

Melendy: Yes. We do have one big hatchery here, but practically all the eggs for that hatchery come from Alabama, Georgia, Texas—someplace like that. And it will stay in business as long as it's economical for them to hatch, and ship the chicks out to whoever is going to raise them for meat birds. The one big grower that we've got, I say he's big, he's not really big as they go, but it's strictly a family operation, and I think he's got about 15,000 layers. When he goes, why there probably won't be a replacement. There will be the individual people that have a farm flock, and as soon as these started in the last few years, we started getting some of the old problems that we used to have, pox and some of the disease . . . worms, I mean you never heard of worms with the commercial flocks. They're raised off the ground so you never have worms. But that's what the extent of poultry industry will be, I believe, is the family flock. And they're paying dearly for their eggs, they're paying a dollar a dozen at least.

Knaster: Are they?

Melendy: Oh yes, there's no question about it. When a commercial man can buy his feed at, say, 130, 140 dollars a ton and the individual has to pay, well two or three hundred dollars a ton for feed, I mean, it just isn't in the cards.

Knaster: Well, these folks derive a different kind of satisfaction from it.

Melendy: That is correct, and I have maintained that all along. If a couple is raising a family, the eggs may cost a dollar and a half a dozen, but that's the cheapest investment they could make for their children, is to have them where they are in this kind of an atmosphere, with the various types of livestock. A horse is nothing but a tremendous expense to a family, but it can occupy a lot of the kid's time, and if the kid's occupied they're not in trouble. So economically you can say they're crazy if you do it, but when you get right down to it if they're spending their money there and they're not going for a ski weekend two or three times a month during the winter, it's probably cheaper than recreation, the cheapest recreation they could get.

Knaster: What kind of livestock did you deal with over the years?

The Dairy Industry

Melendy: Well, the dairy industry was a fair-sized industry here. My primary work there was with the cow testing association. It was a butterfat testing, production testing, where I worked with an nonprofit association that was formed. It had a board of directors, and I worked with them in an advisory capacity. They hired a tester who would travel around the dairies, take milk samples night and morning, and then he would run the test on them and do all the computations and give the person the book back. That's where I came in, working with them on—should this cow be culled or kept? As soon as you develop records, why you knew you had a cow that wasn't producing enough so you got rid of it. So that was the primary work in the

dairy industry. The butterfat testing in the state is the one program that Extension had with the dairymen. That was an extremely strong program. As a direct result, California is one of the leading, if not the leading state in the nation, as far as production per cow is concerned. Simply because that was the program. There were a lot of other things we could have gone into, but that was the one thing that would increase production and produce more milk, again, for the consumer, than anything else we could have done.

Knaster: When was that begun?

Melendy: It was quite a bit before my time. I would suppose maybe in the 1930s, or somewhere in there. I do not know when. Let's see, one of the first associations was up in Humboldt and they had this 50th anniversary here a year or two back. So that was in what, about 1927, 1928, and the rest of them have followed through. We had a situation that we did not have enough cows here, enough dairies in the counties to test, so we took care of San Mateo and San Benito Counties. Then over the years it developed where that still wasn't enough, so our association directors took the attitude that they would test anybody that wanted to test. Some of the others got choosy, well, unless you're a good dairyman we don't want to test you, or unless you're big we don't want to bother with you. Our directors took the attitude that they were here to serve and help, and I sure give them credit for it. Any herd that couldn't get tested someplace else, within reason, the tester would go there and test. And ultimately the associations in Monterey and ours and

Santa Clara County went together. I tried to get them together several times but invariably somebody would throw a monkey wrench in it, because they wanted their own entity. Now our directors could care less. Their only interest was let's serve the dairy industry, and they didn't care whether they called it Monterey or Santa Clara or what. But ultimately then we finally were able to work it out. We got a fellow in Monterey County who worked together with me on it. We spent many hours talking over some of the problems, and then he would go back and start working with his dairymen, encourage them to sit down and talk about it. There were times when we couldn't even get together and talk about it. There was that much feeling.

Knaster: Was there a sense of competition?

Melendy: It was competition, and pride, and a whole lot of things, and they just weren't about to . . . their personalities, but ultimately he started working on his end and ours up here were pretty well geared to it already, and we eventually got together. Then the Santa Clara group finally came in too, so it's all one group now.

Knaster: How long has that been?

Melendy: Probably six or seven years. I don't know, time goes by. And when this other fellow took it over I said, "Well, you do the dairy work here in this county, because there's no point of my trying to spend a lot of time keeping up with the industry with eight or ten dairies at the most." So we agreed that

he would take care of them. He lived in Aptos at that time so he could take care of it very easily and he was excellent; he was a Ph.D. in livestock and he spent full time on dairy, so he could give them real service.

Knaster: Are you saying that there are only eight to ten dairies in all of Santa Cruz County?

Melendy: I don't think there's that now, there's not more than two or three.

Knaster: How many were there when you first started?

Melendy: I think we probably had around fifteen to eighteen.

Knaster: And was that a reduction from, let's say, the 1930s?

Melendy: The early industry was one where they made cheeses.

Knaster: Were these immigrant groups that . . .

Melendy: Yes, yes, some of them were, and you could not ship milk. We didn't have the roads. We didn't have the transportation. So that's where you started with that kind of an industry. You had a spring feed when the rains came. You had lots of good feed; that's when all the cows were fresh. And then they turned dry and they'd have the dry period. Then they were selling fluid milk and they developed the sanitary techniques, pasteurization, refrigeration primarily.

Knaster: This was in the Thirties?

Melendy: Yes, it was coming in then, the Thirties and the Forties. Even into the Forties they were still handling a lot of milk in the old five and ten gallon milk cans, hauling them in trucks and that type of thing. A lot of it was going as what we call grade B or manufacturing milk. It was after World War II that they started going to the so-called bulk handling of milk.

Knaster: Now when you say manufacturing milk, do you mean the kind of milk that's put into cans? Like condensed milk and evaporated milk . . .

Melendy: Yes, the condensed milk and the dried milk, butter, your cheeses, all of the by-products of the dairy industry, considering fluid milk was the primary product. Then the processors started processing milk for fresh milk, and then that industry grew. And we had several individuals who had their own milk routes. They had their own dairy and they marketed and bottled their own milk. They had those glass bottles, and they would come around in the morning, every morning or every other morning and deliver the milk.

Knaster: Do you remember the names of some of these dairies?

Melendy: Well, the one in this area was the Valley View Dairy. That's the subdivision over here in back of Soquel High School. There's no more dairy there. All the buildings are gone and it's a subdivision.

Knaster: When did that end?

Melendy: I don't know what year it was. It's been quite a few years since that subdivision went in. It's maybe twelve or fifteen years.

Knaster: Were they an immigrant group or were they . . .

Melendy: I don't know what the background of Ernie and Ray Negro's parents were, whether they started the dairy or whether Ernie and Ray started it. I think their mother was still alive, and I think she owns the land. I think the father was gone when I came here or shortly after. But they had the dairy, and they had their own bottling plant, pasteurization and everything, and they ran their own milk route.

Knaster: I was curious as to what kind of groups were involved in dairy, whether they were Swiss or German or Italian and whether that changed over the years.

Melendy: I think in dairy here you would find Portuguese, and probably the Swiss. I don't know that there were Italians in the dairy. I think Portuguese and Swiss probably were the primary ones. I think Portuguese and Swiss are probably still the primary ones in the industry.

Knaster: But there are how many dairies left?

Melendy: Probably only two commercial dairies—the Monterey Bay Academy, which is the school, and then another fellow that was milking in

two different places, but I think he still does his dairy in Watsonville. But that's just about it, and they're not big dairies either. They're small dairies.

Knaster: What caused the reduction in dairy in this county?

Melendy: Feed. Again all the feed has to be hauled in. Your alfalfa hay is one of your primary feeds, and when you have to pay five dollars a ton more than somebody that is over in the San Joaquin Valley, you are at a distinct disadvantage. Land prices, urbanization—all of these things have had an effect on the dairy industry.

Knaster: That's too bad. Local products are nice to have around, fresh milk and cheese.

Melendy: Well, yeah, but I don't know today. Even if it were raised here, the chances are nobody would be able to produce milk in the quantities that they could have a consistent supply and meet a consistent demand. And this is where a lot of agriculture has gone to a larger type of operation, specialization. You're a producer, you're a processor, you're a distributor, and you're the retailer. I mean, this type of thing, simply because milk, much milk is brought into this area and processed. Or if there's a surplus it can be shipped out. Refrigerated trucks for the transportation have been developed and milk can be moved a hundred miles, and still not lose any quality. I mean a hundred miles you can make in a few hours. So this is the reason that we

didn't have a big enough industry—we don't have irrigated pastures and cheap feed. We just don't have it, so as a result the industry just isn't here.

Knaster: How would you consider dairy in the overall economic picture of Santa Cruz County years ago, let's say along side poultry and crops?

Melendy: It wasn't as big. At the time I've been here it was as high as I think a two and a half to three million dollar industry in the county. I think now it's down to about a hundred thousand or something like that. Again, we're talking about your gross value. I mean, it isn't the net return to the farmers by any means. It just isn't nearly what it was.

Knaster: Do you know what happened to the dairy people? Have they left the area, or have they gone into another phase of agriculture?

Melendy: We had what was the old East Side Dairy, and they had two young fellows running it and they divided the partnership. One fellow went down into, I think he's down at Soledad now, and the other fellow had the land out where the Kings Plaza Shopping Center is in Scotts Valley. I think that was his dairy.

Knaster: Was there a specific area of the county that was prime for dairying, or was it pretty much scattered around?

Melendy: In the time I was here it was pretty much scattered around. Originally, I think up the coast every farm had their dairy. I mean, that was

one of the big industries up there, dairying. It was concentrated there, but in my time there were two or three dairies there. There was the one which was actually, literally in Santa Cruz, on the east part of Santa Cruz, about where Community Hospital is, this way from that area and that slough ground, across the Soquel Drive from Harbor High School down in there, that was their dairy. And when they divided, the one fellow went to Soledad and the other one went out to Scotts Valley.

Knaster: How long ago was that?

Melendy: I would just have to guess around 1960 . . . 1957?

Knaster: You mean before 1960 that was a farm?

Melendy: Yes.

Knaster: There were no houses there?

Melendy: Well, I don't think, I don't know whether that property has still been subdivided, but you had to go in those roads and then you go clear into the back to get to the buildings. And you see that whole bottomland there was pasture land for the dairy and it was not irrigated; it was sub-irrigated. It was excellent pasture, so they had their own cheap feed, and then they had their own milk route. It was called the East Side Dairy, and they had their own milk route, so they did real well.

Knaster: What kinds of things were you called in on in terms of checking the cows and the butterfat? Has the butterfat content, the percentage changed over the years, or has that remained the same, the standard that applies?

Melendy: Basic milk is 3.5 percent. And this of course is what you're after. If you go up to 3.7, 3.8 [percent] with a herd, then that has to be diluted with milk that's from someplace else, that is not that high.

Knaster: You mean rather than sold as extra rich?

Melendy: Well, there is extra rich milk, but very little of it goes out unless it's a special trade name, you might say. But what they do with milk, they do what they call standardizing it. All milk is separated. The butterfat is taken out, and then they will put back either 3.5 [percent] or the so-called low fat milk at two percent butterfat. That's not what comes out of the cow originally. It varies, each cow is different. But the extent of the work I did with the dairy industry was to encourage them to do their testing. How do you use the records for feeding? In other words, the level of production of the cow determines how much she should be fed. If you feed them any more all it does is to go into body fat. It does not go into milk. So what you're trying to do is to feed them just at the level of production for that particular cow, and each cow is individually numbered, and you try to feed them accordingly. Because if you feed them all the same, you're going to go broke real quick. So that was, as I say, in the dairy industry the testing was a big emphasis, the testing and the feeding according to production.

Knaster: How large were the herds?

Melendy: They varied. The smaller ones were in the twenties, up to . . . one got up to a hundred.

Knaster: And how large an area would they be on? How many acres would a dairy farm be?

Melendy: Well, some of them might be on just a few acres. Some of these farms they were renting had pasture, but basically dairy was a concentrated type of farming, and you didn't depend too much on the pasture around here, because you just didn't have it, except in the spring.

Knaster: Well, what would a farm be, twenty acres, or less or more?

Melendy: Probably four or five acres would take care of the dairy end of it, and any thing extra would just depend on the circumstances you happened to be in on that dairy farm. One of the last ones in the Santa Cruz area that went out was [near] Branciforte Drive, and they probably had fifteen, twenty acres at the most. There was no pasture there at all. It was all grain, all for feeding. And they went out here a few years back.

Knaster: What kinds of problems came up with the cows? Were there diseases that were rampant in this county?

Melendy: No, there were not diseases that were rampant. We were conscientious about programs to get rid of tuberculosis, and the one to get

rid of brucellosis, and those were the two primary ones. TB was pretty well taken care of before I got here. Very rarely would you find TB in a dairy. Brucellosis was going through the process of elimination in the whole state.

Knaster: What is brucellosis?

Melendy: It's called Bang's disease. It's an ungulate fever, is what it's called, and you get it basically from contact with livestock. San Mateo County had a high incidence of it because they had all the slaughterhouses up there in South San Francisco, so all those people were exposed to it and there was a high incidence of sickness in those people. But ultimately California became a certified area. They had other problems—hoof rot. In an area where cows are concentrated, you get muddy conditions. You can get hoof rot, and you've got to treat for that. And they had what they call hardware poisoning. When you have hay, you get all kinds of debris in it, and a lot of times cows get many old pieces of wire in their stomachs, and sometimes they'd have to operate and take it out. Sometimes they'd lose the cow, or it might be chronic and they'd have to sell her. Then with the young calves there were a lot of different types of scowers they would get if they didn't take care of them right.

Knaster: Scowers?

Melendy: Scowers, they would say. Diarrhea, is what it was. And they started treating a lot of those with the antibiotics when they got them, but

they found out there were several different types of scowers. And pneumonia was another. This was a real problem in trying to raise replacement stock, to get them going and healthy. But the cows themselves, they didn't have too many severe disease problems.

Knaster: I'm wondering whether it would be easier to take care of the cows than the chickens.

Melendy: Easier to take care of cows than chickens?

Knaster: Yeah.

Melendy: Both of those are industries that take care every day, seven days a week, 365 days a year, period. Again, this is one of the reasons that some of these operations have gotten larger. Where a dairy may have four or five hundred cows in it, you can have two or three milkers. Then the dairyman can go off on a vacation, or he can be gone for a couple of days, something like that, and he'll have a foreman up to take care of it. When you have several milkers, one can take a vacation, and the rest of them can fill in, so it makes it a more livable situation for the people who are running it. And it's not uncommon to hear a poultryman say, "Well, there hasn't been one day in the last ten years that I haven't been on this place." That was a fact. They were quite proud of it. They had never left that place for twenty-four hours in ten years. I just say, well . . .

Knaster: (laughter)

Melendy: (laughter) . . . you're ready for a vacation! But, with the larger operations, it gives them a chance to have these vacations that everybody assumes just naturally come.

Knaster: Have you seen changes in dairying the way you saw changes in the poultry business, for example?

Melendy: Oh, yeah.

Knaster: You talked about the differences in the housing of the chickens.

Melendy: Oh yes. And again, what you're talking about is, when a refrigerated truck came in they used to stop by five or six dairies to get a load of milk. Now they can go to one dairy, get a load and go direct to the processing plant. What you're talking about then is probably cutting the cost of that milk in half. I mean, that particular operation. This is really what's happened. The price of milk has gone up, but it has hardly kept up with the inflation. I mean, when you get right down to it, milk is still also an extremely cheap commodity. And the development of methods of processing or handling of the milk has probably contributed to that more than anything else. Plus, as I say, the butterfat testing has increased production from seven or eight thousand pounds per cow, up to where it's more like 13,000 pounds. In other words, a fifty to eighty percent increase, depending on the herds, in the amount of milk a cow produces in a year.

Knaster: You mean by programming the feeding?

Melendy: The feeding, breeding, keeping your good cows, selection, management. It doesn't cost much more to keep a cow that is producing 13,000 pounds of milk versus one that's producing 9,000. So again, you're talking about getting a commodity that costs less.

Knaster: Was a certain kind of cow particular to Santa Cruz County? I know cattle varies from area to area. Like Jersey cows or...

Melendy: Jersey was a breed that was never popular here. I think there was one herd that had Jerseys, the one where that big shopping center is [now] on 41st Avenue, Brown Ranch. They had Guernseys also when they were in business. East Side Dairy had a combination. They were marketing their own milk. So they had the Holsteins which generally had lower butterfat, the Guernseys have a higher butterfat, and again by testing they knew about what they had to have to end up with a 3.5 percent average milk. But generally it was a mix. The Holstein was predominant. And I'm talking about the time when I was here, but a lot of them had a balance in the herd, because at that time they hadn't gone to the standardization you might say, processing of milk, where you just separate it all and then you put it back together. Holsteins are a heavier producer. Guernseys added the extra butterfat mixture needed to give a 3.5 percent milk.

Knaster: I wanted to talk a little more about other livestock—horses, sheep, goats. I'm not really clear on all the kinds of animals that you worked with and how you advised farmers what to do with their animals.

Melendy: I think dairy and beef were the two major fields that I worked with. The dairy was a pretty substantial industry for many years back and on through, until probably ten, twelve years ago, when it practically phased out to where it is almost nothing now.

Beef Cattle

There has been a beef industry in the county. We have a certain amount of open land and that's all it's suitable for, pasturing cattle. So that particular industry has stayed with us and I did work with that primarily through their cattlemen's association. It had been, what, 1952, I think, when we started the association. I worked with them through the association, educational programs, and they have in their association now around 120 members. It's a big membership for a small county, but we have a lot of people who have a few cattle and who are interested in cattle. The industry is primarily along what we call the north coast of Santa Cruz, from Santa Cruz to Davenport, and over in the Watsonville area, east of Watsonville in the foothills. And then some irrigated pasture, but not much.

Knaster: As far as you know, was the cattle industry fairly big here for a long time, or was it very minor?

Melendy: It's always been a relatively minor industry, primarily because cattle are an animal that utilizes pasture rather than raising them in a concentrated situation such as dairy or poultry, swine, or something of that

sort. So it's been a fairly stable industry all through the years. And we still have it.

Knaster: Are there slaughterhouses in the county?

Melendy: There is the one, Walti-Schilling, which is an old, old slaughterhouse. I was just reading in the paper here the other day that they're closing that up in July. I guess it's a matter of economics as much as anything. The competition from the Midwest and plants that are again closer to the supply of cattle, all these things enter into it. Where you have to truck them, you've got added expense and their expenses or their costs are cut very closely.

Knaster: Would you say that while that place was in existence the cattle slaughtered here was then eaten locally, or was it shipped out of the county?

Melendy: No, the cattle were not necessarily eaten locally. They did deliver locally, but most of it goes out of the county. I don't think we could even begin to eat all the meat that runs through that plant. There is a plant in Watsonville, I should add, which was started by a group of cattlemen over there in the early 1950s. And it's still in existence. It's changed hands, and it's still slaughtering. Basically it is a different type of plant than Walti-Schilling. Walti-Schilling killed primarily beef cattle for choice and prime grade, for the retail trade. The Watsonville Dressed Beef Incorporated is primarily what

you call a cow plant. The meat goes into hamburger and cheaper cuts. It's a lower grading, not too good in the commercial grades.

Knaster: What kind of problems would you advise cattle owners on?

Melendy: It was a matter of selection. We had a beef cattle improvement association, and I worked with several of the herds on that, where it was a selection process of weighing, grading, and selecting breeding stock. We worked with them on pastures, on feeds and feeding, all of these factors.

Knaster: Did you deal at all with pigs and horses and sheep and goats?

Melendy: Pigs have been a minor type of livestock in the county, again primarily because the feed all has to be brought in. Pigs are a high consumer of feed. The feed had to be brought in and the pigs had to be shipped out. There was no place to slaughter pigs here in the county, so they all had to be shipped out. It never did develop into a large industry, at least the time I have been here. Sheep have always been with us, a few small flocks here and there, but we've never had any group that we worked with in that particular phase of livestock. I've worked with a lot of them individually. Again, it's on selection, on pasture development, fertilization of pastures—primarily this kind of thing. As far as horses are concerned, horses were a relatively small item livestock-wise until probably the last ten or twelve years, and now as everybody knows, there are many, many horses. I really don't know how many, but when they vaccinated them for the sleeping sickness disease they

vaccinated over five thousand horses in this county. So we're pretty sure there's more than five thousand, which is a lot of horses.

Knaster: Are you involved with that process at all, with vaccination?

Melendy: No. We were not. This was all done by the veterinarians in the county. And it was organized. Everybody brings their horse to a certain place and the veterinarian comes there to vaccinate.

Knaster: What about goats?

Melendy: Goats are an animal that basically you might say are in the pet category in most instances. We have had a commercial goat herd or two in the county. We had one up the Old San Jose Road, which I think was the only one in the county for many, many years, until the fellow passed away and then the herd was liquidated. We have now probably five or six goat dairies in the county, and when I say goat dairies, I mean they're milking, actually milking and selling the milk. And it is shipped over to, I believe, Modesto. A group of them get together and each one takes a turn each week to haul the milk over for themselves.

Knaster: Oh, I see.

Melendy: But there's quite a group of them. A lot of that started through the 4-H program actually and there are several of the 4-H members who are milking goats and shipping milk.

Knaster: Why it is shipped to Modesto? Is it processed into cheese?

Melendy: It has to go for processing. It'll go for condensed goat milk, canned goat milk, rather than the Grade A, because when you get into putting up the barn and the facilities necessary to produce Grade A milk, you're talking about twenty-five, thirty thousand dollars, and for a few goats it doesn't pay.

Weed Control

Knaster: I want to jump a little bit to something that we had started talking about, and that was changes that you've seen in agriculture over the decades in this county. We did talk about technology and the kinds of crops that were raised. I was wondering about weed control, and if there's been any change in terms of the kind of control and perhaps the kinds of weeds that invade that are controlled, and then new ones possibly invading in this area.

Melendy: Well, as far as weed control is concerned, I think we've seen a lot of change in that through the use of the herbicides. There're a number of different herbicides that can be used and they have to be used properly. And when I say properly, I mean each one has a specific use in a certain crop for a certain purpose. So this has been a big change that has come about. There has to be a screening process, a testing process which the Extension Service is deeply involved in for any of the materials—whether they are herbicides, insecticides, or fungicides—to determine whether they are suitable for use here in our climate or not. An herbicide might be good in the San Joaquin Valley in their hot climate and it may not work here at all. So there has been a

lot of screening and a lot of testing of herbicides, and quite a few of them are just standard procedure now, though still a lot of our crops are grown without the use of any herbicides at all.

Knaster: What would you say is not grown with herbicides?

Melendy: I don't think they use many herbicides on our lettuce, and lettuce is one of our biggest crops. And the artichokes—they were having some problems with some herbicides in there, so they were trying to find something that would work. But they were having problems, so some of those are grown without any herbicides.

Knaster: Is there a weed in particular that is quite a pest, a nuisance in this county? I know there are different things that grow rampant in different areas.

Melendy: No, I don't think I could say one specific weed, because in one particular field that weed might or might not be a problem. But Johnson grass, wherever it's growing it's a problem. You get tules or cattails in somebody's reservoir then they are a problem. You get some of the very common grasses—rye grass can be a real problem in a lettuce field if it gets started. A weed is a plant that's growing where it's not wanted, really. It's your definition of a weed, so it's difficult to say what a specific weed would be. Puncture vine has come in and the law enforcement end of the agricultural agencies have programs when something like this comes in,

determining, well, do we eradicate it, or do we worry about it? What is its danger? I know that's one that's come in.

Changes in the Labor Force

Knaster: What kinds of changes have you seen in terms of the labor population? How closely involved is your work with labor?

Melendy: I didn't get involved myself in my particular fields of work, because pretty near all the fields that I worked in were family farm types of things. A dairy would have two or three employees and that was about it. A poultry ranch might have one or two employees and that was about it. So I never did get much into that. However, in looking at the labor situation, when we had the so-called Bracero Program, of course a lot of the Mexican nationals were brought in to work in the fields, and when that program was going to be terminated everybody got excited. Well, we wouldn't have any labor; this was to be the end of everything. The Watsonville area over the years has always had a very large resident agricultural worker population and so as a result, if the Bracero were here or weren't here, it really didn't make too much difference in the Watsonville area. This has changed now. We have a lot of our so called green card Mexican workers. There's the so-called illegal aliens or wetbacks. There're a lot of those working all through California, and I guess all through the United States, as far as that goes, and not just agriculture, I guess, it's in everything.

But you still have a large requirement for labor in most of the fields. Apples—you still have to pick them. They can't shake them and haul them in. The lettuce—they don't have the packing sheds like they used to have. They pack in the field. You still have to have large crews for that. The hoeing of the lettuce is still all hand work. All those things are still hand work. The Brussels sprouts—they have developed some mechanical types of harvesting for those which does cut down on the labor. Then again, it was kind of a phasing in of the mechanical from the labor force. The labor force was one that had a lot of Filipino people that were here and they were getting old and were no longer readily available for work. The mechanization came in just about the same time, and it just kind of shifted, you might say, naturally. So, it wasn't a matter of any equipment really displacing the workers. There still is a substantial labor requirement in the sprout harvest even today. But a lot of it still has to be done by hand.

Knaster: Do you see any new groups coming in?

Melendy: For labor?

Knaster: Or is it basically confined to the Mexicans?

Melendy: I think it's basically confined to the Mexicans. We do have a number of situations where a lot of the Mexican people are getting into farming themselves.

Knaster: Oh.

Melendy: The federal government is coming up with some money, and some of these programs have gotten into farming. Some are successful, some aren't. Some are situations where somebody tried to take advantage of them, I think, and they got the benefit of the federal money and the new farmers didn't. There's been a number of problems there, but basically we're seeing a number of former Mexican workers who are actually going into farming and it's a family affair. The whole family gets out. If they have a strawberry patch all the kids, everybody is out working, it's theirs. Quite a few of those are being successful.

Knaster: Would you say that this is a radical change from what used to happen to the groups that made up the agricultural labor force?

Melendy: I don't know whether I would say it was a radical change. I think it's a change that really one would expect. We see it with our Japanese population. When they had the Bracero program we had some outfits came in that had 2,000 acres of strawberries, one company. And they had unlimited labor supply, so they took over the strawberry industry. When the Bracero program left [the industry] had to go to some other source of labor. They also had problems going into the change. They didn't have the management control over the problems in the field that you do have on a smaller scale. So you no longer find any of these big operations in strawberries. You find many of our former Japanese workers are now the farmers. I would say most of the strawberries are raised by the Japanese farmers. And it no longer is the

four or five acre plot—they'll have ten to twenty acres. And they do real well. Again, it's a family operation, they hire . . . a lot of the work on those places is done by Mexican labor that they hire.

Changes in Farm Size

Knaster: When you say it used to be four to five acres and now its ten to twelve, would you say in general that family farms have increased in size in the county?

Melendy: Oh yes. I think so. Now again, I'm not referring to some of the so-called farms in the last five to eight years.

Knaster: When you say "so-called farms . . ."

Melendy: Someone will come in; they buy ten acres. Maybe the man and wife are both working someplace else and they consider themselves a farmer.

Knaster: Oh.

Melendy: And by no means are they a true family farm. To me a family farm is one where they're working at the farming end of it, and that is the primary work and primary employment and income. So yes, I think basically the family farm has increased in size.

Knaster: And would you say that the more commercial farms, when I say commercial I mean non-family farms, have increased in size as well?

Melendy: I would say they probably have. Some of our larger farms are still family farms. As I mentioned this one party mentioned he had 2,000 acres, which was essentially a family farm. It was a family operation. I think there's been some increase in size there. There has been some juggling for position, if you want to call it that. Some of these large companies came and bought into agriculture. They were going to buy these companies and set up and they would control the price of lettuce. And some of them lost a lot of money, because they did not understand what they were getting into. They did not understand that there was no way they could control the price of lettuce, because the potential for growing lettuce is so great that we can raise more than the people can eat. And there was no way they could control it. So in most of those cases if they didn't sell out they maintained their operation, and they got back into line with the rest of the industry.

Knaster: Would you say that there are more farms of fewer acres, or fewer farms of greater acreage?

Melendy: I think I would put it this way. Those who are doing the farming are farming larger acreages, but that doesn't necessarily mean that they own the acreage. See, a lot of our land is leased land. There're many people who own land but they do not farm it. They lease it to someone else. Because what they own, maybe they own a hundred acres of truck crop land and no way can they afford to farm a hundred acres, because of equipment problems, because of labor problems, you can't have a continuing labor force. There's

shipping, marketing, all these come in, so there's no way that they can afford to do it. So they lease the land, and they may have some other land for a few of their own crops. Basically I would say the acreage farmed by an individual has increased, primarily because of the equipment, marketing, and to some extent a better use of labor. In other words, if you have a larger operation you can have some employees year round, and you can keep them busy. If you can't keep them busy you can't afford to have them. So a small operator just can't afford to hire individuals and train them to do work and keep them there, including foremen and so on.

Knaster: Since you deal so much with family farms, what are the kinds of things that family farmers complain about, or mourn the loss of, or wish things were different in some ways?

Melendy: Well, I think in agriculture there's a lot of complaining, if you want to call it that. There's lots of problems. It isn't a crying type of complaining. I think that probably taxes are one thing that has really hit them pretty hard in a lot of cases. There are situations where the tax burden is such that they're not able to make anything on the land. They know that someday it's going to go up in price. It's inflation, and that's the way they'll make their money. Price fluctuations are another problem. If you've got a crop ready to go and the price is down, there's nothing you can do. I've seen several fields of lettuce here just recently have been disced up. They never cut a head out of

them because the price is so low that it's cheaper to disc them up, than it is to try to market them.

Knaster: Wouldn't it be possible to let people know that the lettuce is available. They would come out and pick it and that could be used for places where old people are given free or inexpensive meals, or they could be used for child care centers?

Melendy: I think this has been tried in a number of cases and sometimes it works, sometimes it doesn't. When a decision is made to disc up a field, it's made this morning: the price is down, we can't cut the lettuce. Take the tractor out and disc it up and let's get going on the next crop. See, they can't wait four or five days, I mean, in many cases, wait till somebody cleans the field and then go out and work it up. So it's a matter of distribution. On a lot of this, you see fruit many times on the ground, rotting. And you say, well, gee, why can't we get that to somebody who could use it?

Knaster: There's a lot of starving people.

Melendy: But when you stop and think, now who's going to pay the bill to ship it, to pack it, and ship to where the people are, this is the problem. It's one of distribution. And the costs of distribution are one of the biggest factors in the increase in food costs today, probably more than anything else.

Knaster: Would you say it's because of the truckers, because trucking is unionized and wages are fairly high?

Melendy: Well, I wouldn't really know what the specific cause of it is, but it's a matter that the labor force for picking it, the labor for packing it, the labor for hauling it, the cost of gasoline has doubled here in the last few years, pretty near your fuel costs have doubled. When you get the food to the other end of the line you have to have the labor force again to unload it, to distribute it. It's ironic, but the lettuce that we buy here in a Safeway store is shipped from here to Oakland or Richmond and re-packed and sent back to the stores. It does not go direct from the field to our local stores.

Knaster: That doesn't make sense.

Melendy: But it doesn't do that. And it's actually probably more economical and efficient to do it that way, than it is to try and distribute it to the local stores.

Knaster: Was there ever a farmer's market in the county where farmers would bring in what they produced locally and people, the community could just come and buy from them?

Melendy: I think there've been some attempts made, and this was before my time, of farmer markets. I think there was one, but again it's one that I'm not familiar with. Again, you're talking about distribution only to your local population.

Knaster: Right.

Melendy: And you take the amount of food that the local population can consume and they can't begin to consume what we produce. So still, you have to handle and ship out the major portion.

Other Agricultural Organizations

Knaster: Right. What relationship has your office had with other agricultural organizations, for example the Agricultural Commissioner, the Associated Farmers, the Grange?

Melendy: As far as the Agricultural Commissioner goes, we've always worked pretty closely with them. As I mentioned, they are responsible for enforcing the state laws and county ordinances concerning agriculture. As far as other organizations are concerned, Extension originally started and was very close to the Farm Bureau. In fact it was a requirement that there be an organized Farm Bureau in the county before Extension would be put in the county. And the reason for that was so there would be an organization with which they could start making their contacts. They wouldn't have to start from scratch. It was a very smart move that was made by our director at the time, and it worked very well. Then when the Farm Bureau started to grow, and started getting into a lot of political types of things, we no longer could be associated as closely as we were. We still worked with them; we're available to any organization for that matter. But we had to, you might say, separate. We never were the same, but we could not be associated directly with them in their programs when they get into the political end of it. So, and

I think this happened in the late 1950s. We had to separate and you might say, go our separate ways, though we still do work very closely together. The Granges never have been a large factor in our work, I guess primarily because they are, you might say, a secret type of organization.

Knaster: Secret?

Melendy: Yes, you can't sit in their meetings. And we cannot, we will not participate in any organization unless the public is welcome. That's one standard policy. No way would we meet with any group unless the public is available. We could go to their meetings. You'd stand in the foyer and wait. They would call you in, you would make your presentation, and then you would leave. And during that period anyone could come in. But the reason I think we never got very much involved was because it was cumbersome, it was inconvenient, and while the Grange did have quite a few of the farmers in it, it was more . . . it was a social organization, but it was also a social organization of people interested in agriculture, they were definitely interested in agriculture.

Knaster: What about the groups like the Associated Farmers?

Melendy: As far as I know we never had any organization of them here in the county, at least when I've been here. So I don't know what Extension did in any of the other areas. Again, the services of Extension were available to any of these organizations if they asked for it.

Knaster: Would the Agricultural Extension Service work more with individual farmers, or with grower groups, grower associations?

Melendy: We worked with both. And I wouldn't say with one more than the other. If you could work with an association, a larger group, you're more efficient in your work, you would reach more farmers. If you have to work with individuals all down the line, you don't have time to work with all of them. If you could work through an association, and this is where the Farm Bureau came in, you could work through a Farm Bureau organization, and you could go to their meetings and you'd make a presentation of some of the new developments. All right, you would go to a meeting, and maybe have twenty-five or thirty people. Whereas if you went and visited one farmer, it was a losing proposition. We tried to get groups rather than the individuals. Though the work had to be done with individual farmers. This was another thing that our director would never let us do—you had to put all your test plots on a farmer's land. We never were in a position of saying, well, why can't we rent a piece of land and put the test plots out. It had to be on a farmer's land, which I think was very wise.

Knaster: You said that you didn't work with farm laborers. I was wondering whether Extension had anything at all to do with laborers and possibly with unions, whether you were ever even approached by them.

Melendy: No, not to my knowledge. I don't think we ever were. The men never did work with them. I'm sure had they approached Extension for

information that was available. There were some studies done. They weren't necessarily with the unions. You were mentioning the trucking where in the milk situation the truckers were going to raise the rates some astronomical amount. So a study was made of the costs, and Extension found out that if truckers raised the rates the farmers could go out and buy their own trucks. It would be a farmers co-op and they could buy their own trucks and ship their own milk, so the dairymen just presented that to the trucking firms and said, "Well, if you want to raise your rates, go ahead. We're going to buy our own trucks." The rates didn't go up and they didn't have to buy their trucks. Now, I personally feel that this is really not Extension's place, to do this type of thing, but once in a while over the years Extension did get into some of these situations, where this type of thing did happen. I think something like that preferably should be done by a private enterprise.

Knaster: How do you see the farm advisor in the overall network of agriculture in the state?

Melendy: Well, I think that there still can be a real vital link between the University's College of Agriculture, their developments, and agriculture. I think it's, as I mentioned before, it's no longer a matter of trying to sell somebody on a new method. One of the problems is to keep them from accepting a new method until it's proven to be right. In the dairy end of it, it's gotten to be quite technical (the milking process), where you have these large herds to ensure sanitation in the milking. When I say sanitation, I mean from

the standpoint of infection in the cow, not necessarily dirt in the milk, because the milk is never exposed, literally, until a person almost opens the carton at home. But one of our farm advisors has been working on milking machines and he's made quite a few technical discoveries on the proper use of milking machines, the pipelines, and it isn't a matter of just having a machine with a vaccum on it. There're many factors entering in there and he did a lot of work on that, which makes a big difference in the cow herd. If, you might say, you literally destroy the udder of the cow or one quarter, or something like that, the cow is no go. And this is what could happen if they're not milked properly. So this is where I see Extension is still going to be involved. It's going to be more of a . . . almost research type of thing rather than a demonstration.

Knaster: Do you think that there is less and less of demonstrating? Do you see the Extension Service as having changed, in terms of increasing one aspect of its work and maybe decreasing or phasing out another aspect of its work?

Melendy: I think it's just changing and getting probably more highly technical. We do have a lot of our private seed companies who are developing their own varieties. Very [little] work is done in Extension any more on testing varieties, because the companies can do that, and if they get a variety that doesn't work, it may sell one year and that's it. So this no longer is one of the big phases of Extension. We used to test varieties of

vegetables, grains, many different things. No longer is that done to any great extent, because private industry does it. They do the same thing on a lot of their pesticides. They do a lot of the test work, where we used to do it and our men do get involved in it to some degree in working with them. I think it's a good thing, because a lot of times they're able to steer them in the right direction instead of somebody getting off on the deep end of it. Somebody that's completely impartial can say, "Wait a minute. That isn't working out the way you said it would." It's a cooperative thing really, but I would say it's more technical. I think the staff, it used to be, had to have a B.S. in agriculture or some related field; most of them now have a Master's degree or a Ph.D. I mean, it's just upgraded that much and the technical end of it is increased that much too.

Knaster: If you could change or alter in some way, maybe even undo an incident or a decision that took place during your time as farm advisor, what would that be?

Melendy: I don't know.

Knaster: That's great.

Viticulture

Knaster: There were several things I meant to ask you about and I don't want to forget. Is there any viticulture in this county?

Melendy: I would say practically none, and still say it with tongue in cheek. Yes, there are a number of small vineyards, but as big as a substantial industry, no.

Knaster: Was it ever substantial here?

Melendy: At one time we had quite a few wineries in the county. They had small acreages and they made their own wine and they marketed it.

Knaster: How long ago was this?

Melendy: Well, this was before my time, because I know when I came here after the war, a couple of them were coming back and trying to revitalize the vineyards and get things going again, and very few of them ever really did.

Knaster: Did the office have anything to do with grape growers?

Melendy: Yes, they worked with them. And in some of them it was really just a hopeless task, because they were not getting the yield that was necessary to compete with the vineyards in the irrigated areas. It was just about that simple. The quality of wine is what sold here when they did have the vineyards. It was a low-producing area, but the quality of wine was good. When others could develop and produce the quality of wine and get a much higher yield of grapes there's no way we could compete.

Knaster: Right.

Melendy: And so we have Bargetto's Winery, and I think there's one or two other small wineries that still have grapes in the county that they harvest and make wine out of, but they bring in grapes from other areas in the process.

Forestry

Knaster: How much does the office have to do with forestry in the county?

Melendy: Over the years quite a bit. In the old days one of the biggest problems was forestry. There was a lot of replanting of forests. Some of this was done through 4-H; some was done through the Farm Bureau organizations; some of it through Soil and Conservation Service—the actual harvesting of the forest areas—there was a program in that. We've got scads of pictures from back in the Thirties, when a lot of that was done—the Twenties and the Thirties. Recently, one of the biggest programs of course was the Christmas tree program. This county was really the originator, you might say, of most of the Christmas tree industry.

Knaster: In the state?

Melendy: In the state, yes. And it was quite a program. Still economically, it's not a big one, but we have quite a few growers. There still has been a certain amount of work done with the timber industry, though again they've found that it's to their advantage to just hire a forester for themselves. And they do that. And this is one thing that I say about Extension—I would like to see things develop to where the industry could get their own people and start

doing their own work and you might say phase Extension out. To me this is the way it should be. I do think we have to have an impartial party to some degree to protect everybody involved.

Floriculture

Knaster: What about floriculture?

Melendy: That's one that has come in recently, the last ten years, I would say. Both taxes and air pollution I think have driven them out of the Bay Area, and we have some that have come in from back East. One's a grower from Massachusetts that moved out here, into the Pajaro Valley and the Salinas Valley, and it's a big industry. Now some people say well gee, why, if it's such a good place, why don't we just get all of our land developed into floriculture? Well, you could take the entire industry in the United States and put it in the Pajaro Valley, and you'd still have most of your land left over.

Knaster: (laughter)

Melendy: Even though it looks like well that's the logical thing to do, there just isn't that big an industry in the United States. I mean, it doesn't take that much land. The land requirement is low.

Knaster: Was there always floriculture in the county?

Melendy: Right after the war years they had the Easter lily. It was quite an industry over in the La Selva Beach area. They subdivided a lot of that land

into five-acre parcels and everybody was raising Easter lilies or bulbs of some sort. It was one of those things that didn't last very long and they just weren't big enough marketing, and with the foreign bulbs coming in, a lot these things competing with them, they went out of business. We have had field-grown flowers to some degree all of the time. But as far as an industry was concerned, the large greenhouses that you see now, no.

Aerial Spraying

Knaster: And there was one other thing. The use of planes. How prevalent is that in this county for agriculture?

Melendy: They do a lot of their pest control work with airplanes. A lot of it. Both the fixed wing and the helicopter. There are two reasons for it. One is that in some of the fields like the apple orchards in the winter time, when you've got to put on a spray material, a pest or disease is building up, and it's too muddy, you can't get in with ground equipment, you are forced to do it by air. The other is that air spraying is a lot faster.

Knaster: Is it more expensive?

Melendy: Probably not, probably not. I think their rates now are something like fifty dollar minimum and something like ten or twelve dollars an acre, to fly the material on. And then you figure a lot of the strawberries are treated by air. And when you take a strawberry field of ten, fifteen, or twenty acres

and you start spraying that by hand it takes a long time. You take it by air in a matter of half and hour you're done.

Knaster: What does it mean in terms of contamination of the atmosphere?

Melendy: They are limited as to what they can use as far as air application is concerned. At one time, there were literally no regulations. They could use pretty near anything. But they're rigidly regulated now, because there is this air drift. As far as the general pollution of the air is concerned, I would say that it was negligible simply because the materials they put on, they put it on in large enough droplets that they will fall to the ground rather than going back up in the air. If you put a spray material on under high pressure, you vaporize it, almost, and it will float. So they try to put it on in larger droplets and it will almost all of it go down into the crop. They are also regulated on the amount of wind that can be available when they're putting it on. They have to make reports on everything they do. There are certain problem materials. Severin is one with the bee industry. They had quite a fight over that, and it's one of the best materials we've got, one of the safest materials we have, and yet it's devastating to the bee industry. So there's a fine line as to when they can use Severin and when they can't, simply because a lot of bees are wintered in Santa Cruz County. So they can't just go out and use it anytime they may want to. And this is where the Agricultural Commissioner comes in. It's quite a hot seat to be in because you have farmers on both sides

of it in this case. The apple industry needs the bees to pollinate the apples, so...

Knaster: Yet they need to spray the trees to get rid of the . . .

Melendy: Yet they need to spray the trees, so a lot of these things are regulated in self-defense. They have to do things pretty well the right way.

Knaster: I didn't realize there was a bee industry in this county. I mean, do they produce an adequate amount of honey to actually consider it an industry here?

Melendy: Well, honey is a secondary crop as far as the bee industry is concerned. Bees are primarily used today for pollination, and like I say, we have a number of beekeepers in the county, but their bees don't stay here. They go over in the San Joaquin Valley or someplace like that to do their pollinating. And when the apples are blooming, of course they bring in bees and have them pollinate here, but then as soon as that's over they move them someplace else.

Knaster: I don't know why that strikes me as strange. Years ago, if people had an orchard and were growing some fruit and they needed pollination, did they go and get bees from someplace else, or did they just leave it to Mother Nature?

Melendy: It's kind of an ironic thing. They will bring in bees to pollinate the apples to get an apple set, and then they will use Severin, one of the materials that will thin apples. They have a number of apple thinning materials, and then they will come in and they'll spray the apples at a certain stage to thin them, in other words, knock some of the set. After the bees set the fruit, then they will knock some of it off. And then they have to go through and even hand pick 'em.

Knaster: Right.

Melendy: And it's kind of an ironic thing that you get the bees in to get an apple set, and then you go and spray them to thin them. But apples, if you don't watch them very carefully and handle them right, they'll become alternate bearing. One year they'll have a tremendous crop, the next year they will have nothing.

Knaster: Right.

Melendy: So this is one of the mechanisms they use to guarantee a crop every year.

Knaster: Now, if they have to send bees to another valley or another county from Santa Cruz, is it because what they need the bees for was originally not in that area, is not native to that area, and so there weren't bees for that purpose?

Melendy: No, that's not the reason. You take some crops like alfalfa seed production, for example. If you're going to get a seed crop up you have to use bees. It's a matter of triggering the blossom in order to get it open and to pollinate it. So you have to use bees no matter where you raise the alfalfa. I would say there probably were never enough native bees in California to really be of any significance. I know when I was a kid we used to find bee trees and had lots of fun robbing them and getting honey out of them and that, but I don't think they were a very significant thing as far as the actual pollinating, as far as agriculture was concerned, ever. But a lot of these things, like the pollinating of alfalfa, they have found through work at Davis that this is a necessary thing if you want a yield. They have quite an aviculture department at Davis, and they've done a tremendous amount of work on bee associations with crops.

Loss of Agricultural Land

Melendy: I think a basic decision that was made was wrong or it should have been different. I would certainly like to see a different development pattern in Santa Cruz County than has happened.

Knaster: You mean land development?

Melendy: Yes. Land use patterns. I would certainly like to see something a little different have happened to that, but . . .

Knaster: If the power had been in your hands for that development how would you have done it?

Melendy: When you say the power in your hands, if you're going to have the power on that you're going to be a dictator. Because you're going to tell a man, no, you can't sell your land or yes, you can sell yours. And this is what it would have to be, because on any of this type of thing, if a man has a piece of land and he wants to sell it, and ultimately if it's going to be developed, it'll be developed. I think still the proper way of controlling development, if that's what you're going to do, and I think that's what should be done, is through basic ordinances. In other words, if a person is going to divide a parcel of land into certain size pieces, there should be requirements. They must provide water. They must provide streets up to county standards. They must have gas, electricity, all utilities, sewers, everything. If they did that you wouldn't find a subdivision mushrooming off in the boondocks somewhere. You just wouldn't have it if they had these ordinances and enforced them. But with so many of these ordinances, someone decides, well if you do something else, why, it's all right if you do this and this and this, and there are too many loopholes. But to me that would be the proper way to control development.

Knaster: Can you talk a little bit about the pattern of development that you've seen since the Forties?

Melendy: Well, I think really the development is hurting agriculture more in the Watsonville area than it is here. See, very little of our coastal land has been developed. There has been a little bit of encroachment just to the northwest of the city limits, but not much. A lot of the small farming that was in the Soquel Valley of course is gone. And that is developing into rural home sites. Seascape was a large ranch at one time. The person that owned it did not necessarily farm it. He didn't farm it for a living—it was more of a hobby. It was a big ranch, but it was a hobby for him. And that is now developed. I don't think it was necessary, frankly, to develop that. And in fact, we could still I think double our population and not develop any new land in Santa Cruz County, and I'm talking about all the way from Aptos to the northwest of Santa Cruz. You look at all the land in Live Oak, and all the land between Soquel and Aptos in the Aptos area that has been subdivided and has not been built on yet. You do all that building and you really wouldn't have to go out and subdivide any more land, and we could, I think, double our population.

Knaster: If you could revamp the position of farm advisor, in its structure or functions, what would you do?

Melendy: I've always believed it was an excellent type of education organization. It's a cooperative type of organization that involves federal, state, and county funds, plus private funds. Agriculture and farmers put a lot into it too. When you take a couple of acres of their land and use it for test

property here that's the same as cash out, and today they do contribute quite a bit to a lot of the various programs that we have, so I think that is an excellent procedure. But I think it's a type of education that I'm not sure could be improved.

Knaster: What recommendations would you make to future farm advisors if someone was coming in new? I don't know if you have this kind of training where you give advice to the incoming person.

Melendy: Well, no I don't get that chance, but I would say that even though they may feel they're working with big agriculture, they're still working with people. Your big agriculture, your big corporations, where you do have some of them, those are still run by people, and you're still working with people, and if you can't work with people you're going to have problems. You have to enjoy working with people. So I've always felt that we do have to have some advisors who are pretty much technical and they seem to get along also, but Extension is there to work with people.

Knaster: I understand that at one time you were county director of Agricultural Extension. How different is that from being farm advisor?

Melendy: It's actually one and the same thing. You're still a farm advisor. The only thing is you have the responsibility for the hiring, and the operations—day-to-day operations of the office. You have the responsibility

of developing budget expenditure of county funds, personnel problems, this type of thing. But you also have your farm advisor responsibilities.

Knaster: Could you give me some chronology on when you were farm advisor, 4-H advisor, or whether these things were at the same time, county director, what years?

Melendy: Well, when I started my primary job in 1946, I think it was, 1947, when I came here, I was working with the 4-H program and animal science. I worked with those two programs until 1955, when Henry Washburn retired, and then I was appointed county director. I was county director, I think for ten years. As county director I still worked with the animal science end of 4-H. I was not actually responsible for the 4-H program during those ten years. That period of time was when we saw the phasing out of the poultry industry, and a beginning of extremely rapid growth in the 4-H program. And it got to a point where, from the standpoint of agriculture, I really didn't have a program, because the poultry was no longer here. So what we did, we made a shift then. One of the other fellows took over the county directorship and then I took over the 4-H program and we had a staff change at that time also. So it worked out that I could take over the 4-H program again, along with the other animal science programs in the county. I think that was about 1965. I worked with those programs until I retired.

Knaster: And from 1965 until 1976 you were considered farm advisor?

Melendy: Right.

Knaster: Youth advisor?

Melendy: Well, whatever work I was doing. I was either farm advisor or youth advisor. You could go either title. This was something that was always kind of amusing to me, is the changes in our titles over the years. When I first came I was farm advisor, and when I left I still considered myself as a farm advisor.

Knaster: (laughter)

Melendy: I mean, I had all kinds of titles in-between but I never paid much attention to them.

Women in Farming

Knaster: I was wondering how much work you ever did with women, whether there were women on the staff or women farmers?

Melendy: As far as women on the staff, we had a home advisor, and of course in the 4-H program I worked very closely with her. In some of the adult home economics programs the agriculture staff would work with them in various phases, depending on what particular thing it was. If it was the plant science/gardening or something like that, if it was the preparation of meats, depending on whose field it was, we would work with them on some of their programs. It wasn't to any large extent. As far as women being in

farming, I think you would have to say these family farms, the women and the men were equals as far as the farm was concerned. I mean, there were responsibilities they both had, and if they didn't do them, why the farm just wouldn't function.

Knaster: Well, when you were called into a farm, would you be working with the man on the farm, or would the women be part of the demonstration?

Melendy: In the poultry industry I would say that a major portion of the time men and women were both involved in work. I mean, a lot of it was economics, labor saving, or time saving. Both men and women were involved because those were strictly family affairs, and they both worked.

Knaster: How many women were actually farming? You say that most of the people you've dealt with have been families. Did you see farms that were purely run by women?

Melendy: You didn't find many of those. I think the reason is that you also didn't find many that were run strictly by men. I mean, when you have a family farm, it's a family affair, is what it amounts to. Recently there have been situations where women are running farms. In the Watsonville area there's a woman that has quite a few cattle. She runs the herds, and she rents land and she runs quite a spread. There's another woman that was starting, (when I say starting, she was one of the unfortunate casualties on the Canary

Island plane wreck), but she worked with our office quite a bit, and she was going into farming.

Knaster: Does this come as a surprise in the county?

Melendy: To have women farming by themselves? I don't think so. I think there have been some where the man has passed away and the woman has continued the operation. I know one situation where the man is disabled and it has always been both of them worked on the farm. The woman can run the farm just about as well as the two of them together.

Knaster: Have you ever seen women inherit farms from their parents? Usually those things are passed down through the son.

Melendy: No, they don't. Usually it hasn't been through the son.

Knaster: Oh.

Melendy: It's to all the children. And what they will end up with is, one or the other may buy the rest out if possible, or they will lease, one will lease it from the rest, or they all say they don't want anything to do with it and they'll lease it out to somebody and split the income, or they'll sell it. But I don't think I know of any cases where the farm has been handed down to the son rather than the daughter. It's to the whole family.

Knaster: Do you know what kind of training home demonstration agents get?

Melendy: The requirement's been that they have a degree in home economics, basically, and it can be in textiles, or it can be in foods, home management as the major. But basically that has been the requirement. I think today you'll find some of them that have some of the social degrees; some of the work is a little different. There are many phases of family and consumer science is what they call it now. There are several staff levels, if you want to call it that, involved. And this involves some of the federal programs that have come out. The federal government gave the programs to the University to administer through the Extension Service, because the Extension Service had been successful in working with families in the past. So several programs have been given to them on that basis. There are some counties that have a staff of twenty or thirty people working in the family consumer sciences field. I mean, Los Angeles, some of your big counties. In fact, that staff was much bigger than the rest of the staff.

Knaster: Would you say that the services that the home demonstration agents performed have changed over the years?

Melendy: Well, I think greatly, yes. It was a matter of working, again with women in usually organized groups or as individuals.Today, it's more of a multiplier type of thing. The home advisor here works with a nutrition counselor, and through that works with the nutritionist in the county working with other organizations, rather than trying to do the work herself.

She works with them and through the nutrition counselor, and in this way can expand the work many, many times over.

Knaster: I think I asked you about the 4-H clubs and whether they were co-ed or separate.

Melendy: They are a co-education program, and that's one of the things I liked about it. Again, it's a family. And you're working with families, and not talking one segment of the family, or else the other segment. You're working with the family and the parents are involved. They have to be involved, especially if the kid's got a calf or poultry or something at home, they have to be involved. So, it's co-educational, and the age runs from nine through nineteen now, so you've got quite a broad spectrum of age.

Knaster: Within the club, are boys and girls taught the same things?

Melendy: All the projects no matter what they are, are available, whether they're boys or girls.

Knaster: I'm wondering whether they separate themselves out or not, whether there are certain areas that only boys are drawn to, maybe working with animals . . .

Melendy: No, I think we have more girls working with animals than we do boys.

Knaster: Oh.

Melendy: Horses, especially. The livestock here, it's probably pretty close to fifty-fifty. You get into something like woodworking, that's mostly boys. Of course clothing is mostly girls, though we have some boys get involved in some phases of clothing. The foods project—now this is one where we do get some boys in it and generally they're not a mixed group. Generally you will have a boys group and a girls group, and I think the primary thing is that you're talking about kids at an age when the boys don't want anything to do with the girls. And you start mixing those in the kitchen, it just isn't compatible.

Knaster: (laughter)

Melendy: But when they get into demonstration contests and things like that, why, all of that's by the board and they're all working together.

Knaster: You came to the county in 1946, 1947, by that time the war was over. I was wondering if you knew anything about the Women's Land Army, and whether there was anything like that in Santa Cruz.

Melendy: I don't know anything about anything called the Women's Land Army. I know that the farm advisor in the county was responsible for the Home Guard and the organization, I think they called it the Home Guard or Militia or something, but during the war years they had actual training programs, in case there was an actual invasion or something like that or

somebody was trying to put somebody ashore. They had an organization and knew what to do. Extension was deeply involved in that.

Knaster: I think that I heard something about the Land Army and I don't think it was necessarily related to militia activities but, I think, putting women out into the fields. I heard something about victory gardens, do you know what . . .

Melendy: Well, they had a big program on victory gardens.

Knaster: Here in Santa Cruz?

Melendy: Oh, yes. That was one of the big things in the 4-H program. And of course the home advisor's job was, what do you do with the stuff after you raise it. I mean, the preservation, this type of thing. Yes, there was a big victory garden program.

Knaster: What were victory gardens?

Melendy: Just home gardens. Really, that's all they were. It was an emphasis on home gardens, and we're seeing the same type of thing now. Instead of being a victory garden, they're wanting to combat inflation, you might say. Hopefully, so we're seeing much the same type of thing. People are interested in raising things. They like to see things grow and it's quite intriguing. People get interested and especially if their pocketbook is being hit, why, then it's an incentive.

Knaster: Except often I hear that people who raise their own vegetables wind up paying more than they would if they went to the store, but there's the joy of raising your own.

Melendy: I think you can say that with most of your animals. It's going to cost you more than if you went to the store and bought it. I don't think so on vegetables, if you do it right and you're careful. Your seed is not that expensive and usually you've got the land. There's no cost there. If you start hiring somebody to come in and work the land up and then you have to hire everything done, and you can go overboard in buying equipment, this type of thing, no way can you come out on it. But all you need is a shovel and a hoe probably, and a hose to water it with.

Knaster: Right.

Melendy: That's really all you need.

Knaster: You went into becoming farm advisor. Did you want to become a farmer yourself?

Melendy: I always had that kind of in the back of my mind. You would work with someone and you would see the potential in a particular business and you'd wonder, well, why doesn't somebody really develop that potential, and you stop and think about it. Like poultry. Many times I've thought about it, and then you stop and think well, but that's seven days a week 365 days a year and it isn't what I would really want. Dairying is the same way. Getting

into the cattle business, I never had too much ambition to do that, primarily because it would take an awful lot of land and a lot of investment. It could have been done, but it just didn't really appeal to me. This Christmas tree deal that we're in now is something that over the years, this is what we recommended many, many people to go into as a small cash crop, and a lot of them would do it but they would never follow up on it. I just felt that there was potential so this is what I decided I wanted to do.

Knaster: What is this Christmas tree business that you're talking about?

Melendy: We have a Christmas tree farm.

Knaster: Here in the area?

Melendy: It's in Watsonville. And we've had it now about ten years.

Knaster: What's it called?

Melendy: Green Bough. It's on San Miguel Canyon Road, about five miles out of Watsonville.

Knaster: And so you grow Christmas trees.

Melendy: Yes. We've got about twenty-five acres in trees.

Knaster: Is that the extent of your involvement in agriculture today?

Melendy: Yes, it's full time.

Knaster: Yeah?

Melendy: Oh yeah, I spend full time on it.

Knaster: Oh, I'm sure it's a lot of work.

Melendy: We're also raising Christmas trees for a party down in Los Angeles. We've got into that fairly heavily, so it's quite time consuming.

Knaster: In what direction do you see agriculture taking in the future in this county?

Melendy: Well, if they can keep from building on the land, I think that we have around somewhere in the neighborhood of 25,000 acres of irrigated land that there's no reason why it can't just continue producing. We have a climate here that is unique. Certain crops can be grown here that can't be grown any place else, and I see no reason why, if we can keep the land from being developed, why we can't continue with agriculture. Inevitably the tax structure enters in here. If you start taxing land too heavily and you can't make it (you can't make the income out of it), it's going to be developed. This is where the Williamson Act and the open space laws come in, because there's a lot of land in the county put into those, and they do get a break on taxes, but they have to commit themselves, I think, for ten years. If they decide they want to break the contract with the county, or the county vice versa, they notify each other and then the tax is increased in increments over the ten years up to what it would be normally. So in the process, even though

they may not pay as much tax for a number of years, in the end they pay a pretty good share of it anyway. But we do have quite a little land that is under the Williamson Act and also the Open Space Act.[6]

Knaster: What would you say about agriculture in the future on a state level?

Melendy: Oh, I think California is still going to be the leading agricultural state in the nation for a long time. I don't see any reason why not. What we see when land like the Santa Clara Valley is taken out of agriculture, all the prunes and the apricots, the cherries, all those crops have been moved over into the San Joaquin Valley or someplace else. And they're still all being raised. These water projects that are developed—there's still many thousands of acres of semi-arid land. It's excellent land if they can get the water to it. Now, again, economically, you can only pay so much for water. You can get water anyplace, but you many not be able to use it. I think that we're going to see California being a big agricultural state for a long time to come. This area, as I say, is unique in climate. And the crops we raise here, apples are going to be very difficult to raise someplace else.

Knaster: Brussels sprouts.

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6. The California Land Conservation Act of 1965—commonly referred to as the Williamson Act—enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

Melendy: Lettuce. Brussels sprouts. Artichokes.

Knaster: Right.

Melendy: They're specialty types of crops. Strawberries. They grow strawberries down south. They grow a lot of them down there, but again, most of it's along the coast.