

chard of twenty or thirty trees if he will plant the proven hardy kinds and plant them properly, prune, cultivate, fertilize, and, when they come into bearing, spray. This is all necessary for best results, but I want to place special emphasis on cultivation.

Had this been the Dairy instead of Horticultural Convention, I would like to have told you of the wonderful clover crops we raise up there and the great opportunities for dairying, but you have probably heard all about that before and, besides, I have taken up enough of your time.

THE MANITOWOC TRIAL ORCHARD

OTTO DREWS, Superintendent.

(From Reporter's Transcript.)

I was called upon by the Secretary to appear before your Society and give a report on the condition of our orchard, as it appears to me, and upon another question that was in my mind, as to whether it would prove profitable for any young man to go into the business of producing apples in our section of the country at this time.

Personally, I do not feel as though I ought to come before an intelligent audience like this, who are posted in horticulture, because I am only a novice in that line. Although I have taken an interest in horticultural work for years, I have never had an opportunity to practice it until I came to the place where I am now and we happened to have there the trial orchard. When I first saw the orchard, I formed a very poor impression of it, because it is, in the first place, poorly located. The soil is heavy and flat. We get those heavy rains down there in the springtime and the water seems to remain in the soil such length of time that we are often unable to do what we ought to do for the good of the orchard. It is very seldom during the seven years that I have been there that we have been able to give the orchard all the sprayings that it ought to have had. Last year we were fortunate, in a way. We were able to give it three sprays, but we were compelled to omit the first one and the most important one, the pink bud spray. We were absolutely unable to drive a team of horses in that orchard, so we could not do it, but we got the other three sprays on and the apples showed up in pretty fair shape.

The trees have made rapid growth, especially the Macmahons and the Northwestern Greenings. They were planted 24 feet apart, and they are now within 6 feet of each other, and they have grown rather high. The Wealthys have not grown quite as rapidly.

Another thing I should like to say about the orchard, to express my opinion, I do not know how the other members of the committee feel about it, and that is, there are two varieties of apples in that orchard that do not suit me at all. One variety the committee is not to blame for, because they bought the right kind, but did not get it and I do not know what the variety is that we did get and I do not believe they do either, but the kind I do not believe is a proper apple for that section is the MacMahon. I tried very hard last year to see what I could do with the MacMahon up there. I gave them a double dose of spray, and I found that only about 40 per cent of the MacMahons were fit to use, the other 60 per cent were practically worthless and covered with scab.

Now, the other varieties there, the Wealthys, the Northwestern Greenings and Fameuse, do not get that way; we treat them right and they will show up and produce. We have had a wonderful crop in the orchard this year. We have a 5-acre plot there, planted 12 years ago, and we had about 1,500 bushels there this year, and not all the trees bearing. I should judge that about two-thirds of the trees were bearing this last year. We have had some beautiful apples to look at. Persons driving by the orchard could not help but take notice. People from Milwaukee, Chicago, Kewaunee, Door county, drove by there on Route 17, and often inquired of the neighbors who owned that orchard, and they would ask permission to come in and look at it. This orchard has done a great deal to induce many of the more progressive farmers in the community to find out what we did with those trees, in order that they look so healthy, or so well pruned and have so little trouble with the worms. I have all kinds of questions to answer.

In regard to spraying, people come there continually, asking for information. I know that there are four or five who are going into the apple business there that have had large orchards before and have never taken care of them. They are now producing as fine apples in their orchards as you can buy anywhere from Michigan or New York.

Now, I should like to say a few words of what I think about the chances of a young man starting in the apple business in our section of the country. If I were a young man, I would not hesitate to do so. I find, however, that in order to make a success of the business, if we intend to depend upon our local market, we would have to go into the business of raising apples that mature in the latter part of the autumn, and we would have to have storage room to keep those apples until the market calls for what we have for sale. I do not believe that we could make it profitable up there to raise an early variety. You see, our farming communities have many of those varieties, and they dump them on the market, and our market is full of an inferior grade of apples. Our businessmen must take them, they cannot turn them away. There is an inferior apple on the market that spoils the market for the good ones, and I believe if we produce apples that are later and have the room to store them and keep them up to this time of the year (December or January), that we can demand a price greater than they can get them for from the eastern states.

I know there is a demand, because I have stored away about 250 bushels of Greenings and we have them in a refrigerator, and I could sell them any day I would want to sell them now for \$2.00 a bushel, without expense of delivery. We did not sell a barrel of apples to any dealer in the town, all the apples that we had for sale were taken right off the place. We graded them into three grades and we sold them for \$1.50 or \$1.75 a bushel. (1920.)

Now, if any young man wanted to start in that country, he would make just as big a success of the apple industry as they can out in the west or in the east, but I believe one thing he would have to have is a good storage cellar. I am going to try it if I stay long enough in that place. I am going to build a storage cellar, and I intend to make it a real storage cellar, and I do not believe the commissioners will kick on the price. I intend to build a cellar large enough to hold 2,000 to 3,000 bushels of apples, and I am going to ceil the walls of the cellar so that we can run our pipes in there from the ice machine and keep it cold in the early fall, and I believe in that way we can hold our apples until February and March and get a good price.