

Orchard Is Valuable Asset For Both Home And Commercial Uses

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THERE is no state in the south where conditions are more favorable on every farm for the production of fruits for home use than in South Carolina. The state is less adapted to apples and cherries than some of the other fruits, yet on farms in all sections of South Carolina certain varieties of apples are found growing successfully. Cherries do not seem to bear profitably except in a few of the western counties, where the soil is fairly stiff.

Such fruits as peaches, plums, grapes, strawberries, dewberries, and blackberries, however, grow and produce well in all sections. In the central section or Sandhill belt, dewberries, grapes, and peaches are especially profitable.

Care Of Orchards

After having worked with farmers in all sections of the state for several years, I am thoroughly convinced that there is only one reason why South Carolina farmers are not well supplied with fruit direct from their own farms the year round, and that reason is the lack of proper care of orchards.

To show the actual value in dollars and cents of a well kept home orchard, a number of result demonstrations in home orchard management were arranged several years ago. The demonstrators were required to keep accurate records of all expenditures, including spray materials, containers, and labor such as pruning, spraying, thinning, cultivation, worming, harvesting, etc.

A summary of results on 29 orchards shows that they contained 3,635 trees, which produced 5,442 bushels of fruit. Much of this was sold as fresh fruit and 4,133 quarts were canned and 456 pounds were dried. The total gross value from these orchards was \$6,869.13 and the cost was \$1,272.72, leaving a total profit of \$5,596.41.

Net Profit Substantial

According to these records, the average orchard consisted of 125 trees, which produced 188 bushels of fruit. Besides fresh fruit sold, the average amount canned from each orchard was 143 quarts and the average amount dried was 19 pounds. The average gross value of products per orchard was \$228.82, the average cost being \$43.98, leaving a net profit of \$184.84.

The fruits represented in these orchards and given in the order of their popularity are: peaches, apples, grapes, pears, cherries, plums, pecans, figs, and apricots. No one orchard had all of these fruits but they all contained two or more.

These figures serve to call attention to the possibilities which a well managed orchard possesses in supplying fruit for home use and to some extent for sale. They are well worth the consideration of those who have orchards which could be renovated or those who contemplate planting new ones.

Planting The Orchard

The following points should be considered when planning a home orchard:

The orchard should be on an elevated location. It is not wise to set trees in a "flat." In low places late frost often kills the fruit. The best soil on the farm is none too good for the farm orchard.

The soil should be prepared thoroughly before planting by breaking as deeply as possible and harrowing to pulverize.

It is always best to purchase trees direct from a reliable nursery that is inspected regularly by state officials.

Trees are propagated principally by budding and grafting. Seedling trees are undesirable, as they seldom produce good fruit. In planting trees, it is best to remove all injured limbs and roots and make holes large enough to allow the roots to take natural positions.

Cultivate Regularly

Trees should be cultivated regularly. They respond to good treatment as well as any of the cultivated crops.

Trees will not do well or produce good crops in poor soil without liberal fertilization.

For the first two or three years two or three rows of any of the low-growing crops can be grown between the rows of trees. Grain should never be allowed to mature in orchards.

Leguminous cover crops, sown regularly in September and turned under in early spring, will take the place of a large amount of fertilizer.

The diseases of the trees and fruits are numerous. The only method of controlling them is by spraying.

The best varieties, chosen to provide fruit the entire year, should always be selected for the orchard.

Planting Time Now

Tree planting time, just as soon as the frost has knocked the leaves from the trees and their dormant season has started, is about here. Tree planting time is over when the trees begin to bud in the spring. In South area climates it is generally a good plan to set the trees during November and December.

When a few hundred or less trees are to be set the following is a good method to follow. As soon as the trees arrive from the nursery they should be heeled-in to protect them from drying out before they are planted. Dig a hole two feet square and two feet deep. Put the soil that comes from the top of the hole on one side and the soil from the lower part on another side.

The roots of the young trees are pruned by removing all of the broken or injured ones and those that are too long for the hole. The earth from the top of the hole is thrown into the bottom and mixed with a couple of forksful of well rotted manure or a pound of bone meal or a pound of cottonseed meal.

Pruning New Trees

The tree is then set in the center of the hole. The hand is used to work some soil up under the roots and the tree is put into the hole one inch or so deeper than it stood in the nursery row. As more soil is thrown into the hole it is tramped down as tight as possible; some planters use a tamper or 3 x 4 to ram in the dirt. Fill the hole at the top with the soil from the bottom of the hole and be sure to fill the hole in a few inches higher than the surrounding land in order to take care of the setting.

After the planting is finished and all of the tools are taken to the next hole, then

FRUIT CROPS

Home Orchards Are Profitable



Spraying the apple orchard for control of bitter root and codling moth at Forest Knob, N. C.

Number Of Apple Trees Decreased By 120,800,000 In Last 30 Years

NUMBER of apple trees in the United States today is considerably less than half the number reported in the agricultural census of 1910. From 1910 to 1925 there was a net decrease of 79,100,000 trees. From 1925 to 1930, there was another decrease of 21,700,000 trees, making a total decrease of 46 per cent in the 20-year period.

Since 1930 a further decrease of 30,000,000 trees has occurred, bringing the total of all apple trees in commercial and farm orchards down to about 96,000,000.

Although this tremendous falling off has been due largely to economic forces, the cold winters of 1933-34 and 1934-35, and recent drought years have taken a heavy toll. Sixteen per cent of the reduction in the last five years is attributed by the bureau of agricultural economics to this cause. Ninety to 95 per cent of trees killed in this manner were of bearing age.

The 1935 Crop
During the five years from 1930 to 1934 production has averaged about 152,000,000 bushels a year, a decrease of 5.5 per cent from the previous five year period. The 1935 crop is estimated now at 168,000,000 bushels, a relatively large production.

Although the number of apple trees of bearing age has decreased 20 to 25 per cent in the last ten years, potential producing capacity of all orchards has been nearly maintained by an increased producing capacity per bearing tree, and there has been no shortage of apples on the average.

Fruit Production Increases Despite Acreage Decrease

Production Per Bearing Tree And Abandonment Of Speculative Planting Chief Cause.

(By A Staff Writer)

Combined acreage of all fruits in the United States has been declining for the past 25 years. While it seems paradoxical, there has been a steady increase in production in spite of the acreage decline. Increase in citrus fruit production, largely due to speculative and promotional planting, is a primary factor back of the paradox.

Decline in tree numbers accompanied by increased production is indicative of the character of the shift which has taken place in certain of the fruits, and is taking place at the present time in others.

Heavy planting of apple trees between 1905 and 1912 was made in many localities not

pruned the newly set tree. If pruned before setting a limb is apt to be broken or injured during the planting; it is therefore preferable to leave the pruning until the last.

Never expose the roots of a tree to the sun or wind while taking it to the field or getting the hole ready for the plant. If there is delay put the young tree to one side and cover its roots with a few shovels of earth until ready to place it in the hole.

Avoid planting trees while the ground is wet or so damp that it will stick or puddle while being tamped into the hole.

Apple prices declined sharply from 1929 to 1932, largely because of reduced consumer buying power. Owing to a reduction in the crop in 1934, prices went up to 90 cents a bushel. In the South Atlantic States this year they averaged 90 cents as against 80 cents last year.

Eastern States Suffer
During the last five years—1931 to 1935—the eastern states, which include New England, the middle Atlantic and the south Atlantic states, produced about 64,000,000 bushels of apples per annum, or about 41 per cent of the total United States crop.

The freeze of 1933-34 killed or so badly injured that they are expected to die, at least 2,400,000 trees, and severely injured many more. Most of these of course were in New England and New York. Production in this area declined in 1934-35 by 7,800,000 bushels as a result, and a large part of this decrease represents a permanent reduction in the potential bearing capacity in these states.

The Export Situation
Apples have been an agricultural export for over 100 years, assuming their greatest importance following the World war. As much as one-fifth of the commercial crop of the United States has been exported in some seasons.

Exports have declined since the depression, owing to a combination of unfavorable circumstances. Probably the most important factor has been the raising of trade barriers in many countries. Other reasons have been small American crops, increasing competition from the fruit of other exporting countries, and reduced purchasing power in all importing countries. Apple exports cannot be expected to expand much unless present trade barriers are modified or removed.

well adapted to commercial apple production. During the next 30 years, many of these trees went out of production, and between 1910 and 1930 apple tree numbers declined about 46 per cent. Plantings in favorable locations remained, however, and these with additional plantings, have resulted in an increase in the average production per bearing tree of about 50 per cent during the same 20 year period.

Other fruits have passed through the same cycle. Plantings of citrus trees was heavy between 1920 and 1930. Low producing acreages of citrus are passing out of production.

Since the consumer demand for all fruits combined is such that small crops tend to result in about the same gross return to producers as large crops, changes in the total gross income for fruit are dependent largely upon changes in consumer buying power. Thus, as consumer buying power is expected to be higher in 1936 than in 1935, some increase in total gross income from fruit production may be expected. This at least, is the forecast of the bureau of agricultural economics of the USDA.

Foreign fruit crops will be smaller, generally. This appears to be favorable to the export trade in the United States during the balance of this year. From the long-time standpoint, however, producers in this country are more interested in the fact that many of the European countries are making good progress in improving and expanding the home industry.

This will mean that a larger proportion of the requirements of the European consumer will be supplied from home orchards. Fruit exports have been relatively well maintained throughout the depression period, and may be expected to benefit to some extent by improved economic conditions.

Trend of pear production in the United States, which has been decidedly upward for the last 30 years, is likely to continue in that direction for the next ten years, provided no unusual reduction in tree numbers takes place.

Cold Storage Stock Of Apples Forecast Better Price Level

(By Our New York Correspondent)
Despite the heavy crop of apples this year the cold storage holdings as of November 1 were lighter than last year. The storage holdings are usually a good indicator of the surplus of apples left after fall harvest.

The smaller reserves are undoubtedly due to the large crop of early varieties this season, severe freeze damage in the Northwest late in October and to good consumptive demand during the past two months. Apples have been cheap and people have been using a lot of apples.

This season's greatest surplus of apples was in Virginia and adjacent states so the storage holdings in the South Atlantic group of states totals 5,295,000 bushels, or a larger quantity than in any of the past five years. However, the export demand has been heavy this season and seems likely to continue so, which will tend to absorb the surplus in that area.

Prices Have Improved
Prices of apples were relatively low during the harvest season but since then prices have improved slightly and seem to be in a strong position at present. Curiously enough, the large sized fruit is more difficult to sell in some instances than the small and medium because of the heavy surplus of large sizes. Export markets require small to medium sizes for the most part and supplies have been barely adequate of these sizes to supply both export and domestic trade.

This seems to be one of those years when the supply of late keeping apples is light in proportion to the total crop and after all of the early varieties are cleaned up, a somewhat firmer situation may develop. Citrus fruits are lighter than last season, which should tend to strengthen the market through increasing the demand for apples.

Acreage In Peaches Expands Rapidly In Western S. Carolina

Rapid expansion of peach acreage in Western South Carolina during recent years, is a subject of comment in the annual outlook reports of the bureau of agricultural economics, recently released. The bureau says that some abandonment of old orchards in the Sand Hills district of the Carolinas has occurred, but new plantings in South Carolina tend to offset it.

A large part of the market supply of fresh peaches from June to the middle of August is produced in seven southern states, namely, Georgia, North Carolina, South Carolina, Alabama, Tennessee, Arkansas and Texas. With average growing conditions, a crop of about 15,000,000 bushels is likely to be produced in these states.

Receive Better Care
The number of bearing trees in these seven states has declined during the past four or five years. Southern orchards in general, however, are receiving better care than a few years ago, and production may not decline in accordance with the decrease in vitality of the trees. In many districts of the south a rather large proportion of trees are beyond their producing prime.

Developments in the peach industry include a continuation of the increasing trend in marketing by motor truck, and a tendency to plant early-maturing varieties in an effort to lengthen the marketing season.

With a crop of 52,000,000 bushels in 1935, the average price of peaches was 85 cents a bushel. In the south Atlantic states the average was 90 cents a bushel.

Peaches used for canning purposes are mostly California clingstone varieties. Exports of fresh peaches are relatively unimportant.

GRAPE CROPS INCREASED

Indicated United States production of table-grape varieties for 1935 is 630,000 tons, of which California produced 362,000 tons. This is approximately 12 per cent greater than the productivity of the present acreage at average yields. Since repeal, considerable quantities of table-grape varieties have been used for the manufacture of commercial wine and brandy.

MICE ATTACK APPLE TREES

By gnawing away sapwood from the trunks and roots of apple trees, field mice will sometimes ruin a good orchard during a single winter. These pests may be controlled by destroying grass and weeds under the trees and by putting out poisoned wheat bait. The bait may be placed in old tin cans or bottles laid on their sides.

CANNING CONTEST WINNERS

Cleveland and Rutherford counties, N. C. won first place in the annual home demonstration canning contest held at State College. The contest was conducted in two divisions, one sponsored by the Ball Brothers Company, which offered \$75 in prizes, and the other by the Kerr Company, with \$50 in prizes. Winners of the first contest were: Mrs. Hunter Ware, of Cleveland County, \$25; Mrs. Annie Godwin, of Cleveland, \$15; Mrs. Victor Penny, of Johnston, \$12; Miss Ellen Dixon of Alamance, \$10; Mrs. J. G. Geer, of Rutherford, \$8; and Mrs. F. S. Hagar, of Gaston, \$6.

In the latter contest the winners were: Mrs. C. Y. Nannery, of Rutherford, \$20; Mrs. A. F. Falls, of Cleveland, \$15; Mrs. Annie Godwin, of Cumberland, \$10; Mrs. W. G. Watkins, of Vance, \$8; and Mrs. W. F. Somers, of Alamance, \$2.

PLANNING THE HOME GARDEN

"One of the greatest pleasures I have is planning, planting, and caring for our home garden. It means so much to the health of our family I don't know what I would do without it," said Mrs. Ernest P. Scott, Robeson county, N. C. farm woman. "We once had the idea that a spring and summer garden was sufficient, but now we have learned better. When we did have a fall and winter garden, we ate too much pork."

"As a result, our complexions were bad, we suffered from constipation and other ailments, and we felt awfully sluggish. But now that we have plenty of vegetables, these troubles are eliminated."