COOPERATIVE EXTENSION WORK

AGRICULTURE AND HOME ECONOMICS STATE OF OKLAHOMA

D. P. TRENT, Director

OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE AND UNITED STATES DEPARTMENT OF AGRICULTURE, COOPERATING

EXTENSION SERVICE COUNTY AGENT WORK STILLWATER, OKLAHOMA

Distributed in Furtherance of the Acts of Congress of May 8 and June 30, 1914

The Home Acre Orchard



By D. C. MOORING, Orchard and Garden Specialist.

Circular 163. Reprinted, 1929.

General Series No. 17.

The Home Acre Orchard

By D. C. MOORING,

Orchard and Garden Specialist.

Home orchards throughout the state as well as other states are becoming scarcer year by year. If better care of the trees and increased plantings do not take place, the home orchard soon will be a negligible factor in the fruit industry.

A properly planned, planted and cared for acre orchard should be one of the most valuable and appreciated plantings of the farm. However, if one does not anticipate giving an orchard at least as much care as the other farm crops, it will be neither profitable nor a source of pleasure. Our droughts, increased amounts of diseases and insects make it more difficult to raise good fruit than it was a few years ago. A properly cared for acre orchard should give a surplus of fruit, especially during a good fruit year, which could be marketed profitably in virtually any local community in Oklahoma.

Orchard Site

For convenience set the orchard near the house. Select a soil which has on open porous subsoil. Such a soil will permit of deep root development, which better anchors the trees in the ground and at the same time gives them a wider and deeper feeding area. Well drained soil should be selected. An elevated piece of ground is less subject to frost injury. Trees set on newly cleared ground are likely to die from root rot.

Blasting will pay where a thin hard pan is near the surface. Blasting is of only temporary value in a permanently hard, tight soil. Frequently blasting may prove deterimental. It may pack the walls of the hole and unless this packed wall is dug out it will act as a basin in holding water, which may drown the tree.

Preparing the Soil

Break the soil deeply and thoroughly and prepare it as though you were planning on seeding it to some crop.

A limited amount of well pulverized rotted manure may be thoroughly mixed with the soil and placed among the roots. Fresh manure should not be mixed with the soil placed among the roots of trees. Where fresh manure is used apply it after the trees are set and gradually work it into the soil.

Buying Fruit Trees

Deal only with reliable nurserymen. Such information can usually be secured from local growers. Buy trees of first quality as they will be the cheapest in the end. One year old trees are preferable to older ones as you can train them to suit your conditions. One year old trees are cheaper than older ones and are more likely to live, when transplanted.

Do not leave your trees and plants in the bundle or box. Open them up and untie the large bundles, leaving the same varieties tied together. Dig a trench and heel the plants in, that is, bury the roots and firm the soil about them. In case the soil is dry, water the roots, after a layer of soil is placed over them. Permit the water to soak in and then finish filling in the trench. In order to protect the plants from the wind the trees are usually heeled in a sloping position.

Submit your list of trees to several reliable nurserymen and have them bid on it. You may be surprised at the saving in the order.

Setting the Trees

Trees may be set in Oklahoma in the fall or spring. Except during dry seasons and in high wind exposed sites, fall setting is preferable. During the past twelve years there has been one or two dry falls, where fall planting would not have been advisable.

Where the trees are set in the fall, the roots callus, begin healing, and growth begins more readily in the spring. A complete variety list of trees, as well as better quality trees, is more likely to be procured in the fall than in the spring.

Lay the furrows off straight and keep the trees properly spaced and lined in the row. Where furrows are laid out, holes can be easily enlarged with a shovel. Make the holes plenty large to receive the trees without cramping the roots. Do not expose the roots of the trees or plants to the sun or wind. This may be avoided by wrapping the roots in moist sacks or hauling the trees or plants, with their roots in a tub or barrel of water, to a central point in the acre.

Cut off all broken or badly bruised roots, place the trees in the hole and cover the roots with well pulverized top soil. Pack the soil firmly over the roots and add and pack a second layer. Finally fill the hole with loose soil and leave it as a mulch.

Cultivation

Trees require cultivation just the same as any farm crop. Cultivated row crops, such as potatoes, may be grown in between the rows of the trees while young. As the trees enlarge in size less row crops should be grown until the entire space is left to the trees. A soil mulch established with whatever practical tool available, should be maintained about the young trees from early summer until the last of July during the average season. During a dry year continue your cultivation until August.

Importance of Orchard Plan

It is very important to have an orchard plan before you order your trees. Figure I is a suggested "Acre Orchard Plan," the varieties listed being adapted to Oklahoma conditions. A family orchard should contain an assortment of varieties of all kinds of fruits that will grow successfully in your locality. An assortment of varieties will afford a long ripening season, thus a long fresh fruit supply. The varieties listed, during a good fruit year, will furnish fresh fruit in the orchard from the latter part of May until October. The canned and stored fresh fruit should fill in the rest of the year.

The plan where followed will give a permanent record of the orchard, which is important. This record will enable one to identify each tree in the orchard.

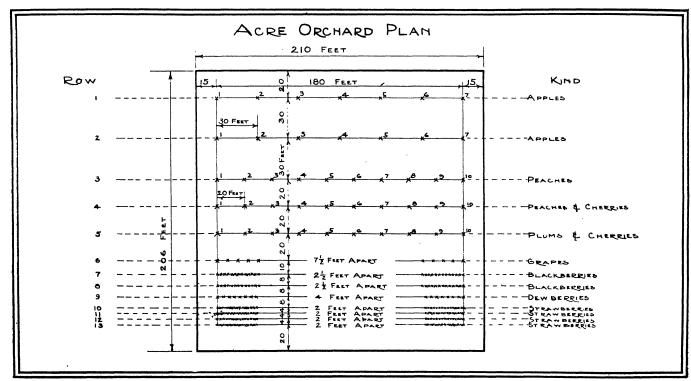


Figure I

Explanation of Plan

From boundary to boundary the orchard is 210 feet by 206 (See Figure I.) The first row of apple trees and last row of strawberries are 20 feet from the top and bottom boundary lines. The ends of the rows are 15 feet from the boundary lines. Reading across the plan from left to right shows the distance apart of the plants in the respective rows. Reading from top to bottom shows the distance apart of the rows.

Pears

It will be noted that pears are not listed in the plan. It is preferable to set the pears in the yard as they are less likely to blight than if set in the cultivated orchard. It is suggested that two Keiffer and two Garber pears be set in the yard.

Wild Currants

In the western counties, where wild currants are available, they may be substituted at least in part for the strawberries.

KINDS AND VARIETIES OF FRUIT

Apples

Row 1-

Trees 1 and 2, Yellow Transparent.

Trees 3 and 4, Summer Champ.

Tree 5, Jonathan.

Trees 6 and 7, Grimes Golden (Double Worked).

Row 2-

Tree 1, Delicious.

Tree 2. Golden Delicious.

Tree 3, King David.

Tree 4, Stayman Winesap.

Trecs 5 and 6, Winesap.

Tree 7, York Imperial.

Peaches

Row 3-

Trees 1 and 2, Early Wheeler.

Trees 3 and 4. Greensborough.

Trees 5 and 6, Carman.

Trees 7 and 8, Champion.

Trees 9 and 10, J. H. Hale.

Peaches and Cherries

Row 4-

Trees 1 and 2. Elberta.

Trees 3 and 4, Stump the World

Trees 5 and 6, Levy (Henrietta).

Trees 7 and 8, Salway.

Trees 9 and 10, Dyehouse Cherries.

Plums and Cherries

Row 5-

Tree 1, Abundance Plum.

Tree 2, Burbank.

Tree 3, Gold.

Tree 4, Lombard.

Tree 5, Damson.

Tree 6, Omaha.

Trees 7 and 8, Early Richmond Cherries.

Trees 9 and 10, Montmorency Cherries.

Grapes

Row 6-

Vines 1 and 2, Headlight, dark red.

Vines 3 and 4, Bailey, black.

Vines 5 and 6, Bailey, black.

Vines 7 and 8, Lucile, red.

Vines 9 and 10, Delaware, red.

Vines 11 and 12, Niagara, green.

Vines 13 and 14, Concord, black.

Vines 15 and 16, Extra, black.

Vines 17 and 18, Extra, black.

Vines 19 and 20, Ellen Scott, light purple.

Vines 21 and 22, Muench, black.

Vines 23 and 24, Catawba, red.

Blackberries

Rows 7 and 8-

75 Dillas; 75 McDonald.

Dewberries

Row 9-

50 Austin.

Strawberries'

Rows 10 and 11-

200 Klondike or Dunlap.

Rows 12 and 13-

200 Aroma.

Pears

2 Kieffer; 2 Garber (to be set in yard).

Pruning Young Trees

The pruning of young trees in order to form a proper frame work is very important. Low headed trees are preferable for Oklahoma conditions. A low headed tree resists the wind better. The trunk is not so apt to sunscald and the care of the tree is easier and cheaper.

The pruning of the cherry, plum, pear and apple the first year or two is not materially different as the modified leader type is desirable. In case of an unbranched one year old tree, cut back the tree to thirty inches in height. A, Figure II, shows a one year apple tree before being cut back. B, Figure II, shows a one year old apple tree after being cut back. Peach trees should be cut back to eighteen to twenty-four inches in height.

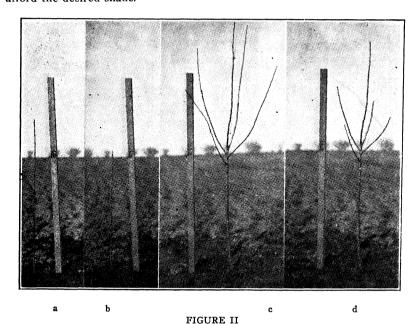
Grape vines should be cut back the first year to two to three buds.

Blackberries and dewberries should be cut back, leaving a stem four to

six inches depending upon the strength of the stem.

Figure II, (c) shows a two year old apple tree before pruning, while Figure II, (d) shows a two year old apple tree after pruning. In Figure II it should be noted that the lateral limbs are distributed around the stem as well as up and down the stem. Note the modified central stem serving as a leader. The next scaffold of limbs will grow on the modified central stem.

It will be noted in Figure II. (c and d), there is a temporary limb left pointing to the left. The tree, where such a limb is present, should be set so the bottom limb should point to the southwest as a protection from the hot afternoon sun, until the next limb pointing in the same direction will afford the desired shade.



Winter Protection

Frequently many young trees are destroyed during the winter by rabbits. Wrap the trunks of the young trees with paper or place screen wire about them.