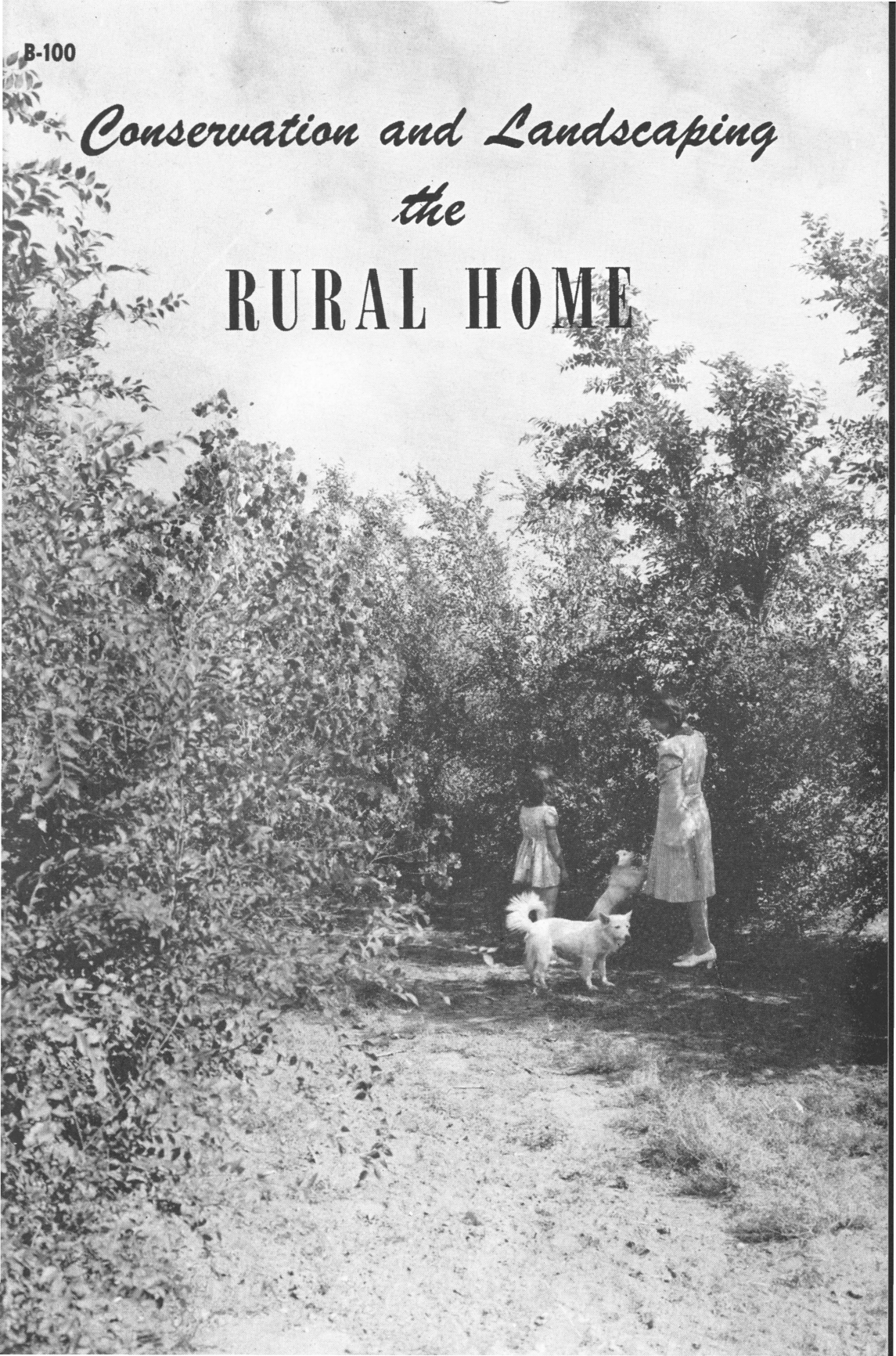


Conservation and Landscaping
the

RURAL HOME



THE PICTURE ON THE COVER

View of Cooke farm windbreak in Wilbarger County. This windbreak was two years old when the picture was made. It protects the house, garden, orchard and poultry yard, and it is a pleasant place for children to play. This windbreak was planted in cooperation with U. S. Forest Service. As the trees grow they can be thinned. The removed wood is useful for various construction jobs about the farm.

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Conservation and Landscaping the **RURAL HOME**

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If the soils of this country are to be conserved, recovered and built up, people living upon the soil must receive consideration. The state of the soil depends entirely upon the people handling it; the fate of our country depends upon the spirit of the men in possession of American farm land.

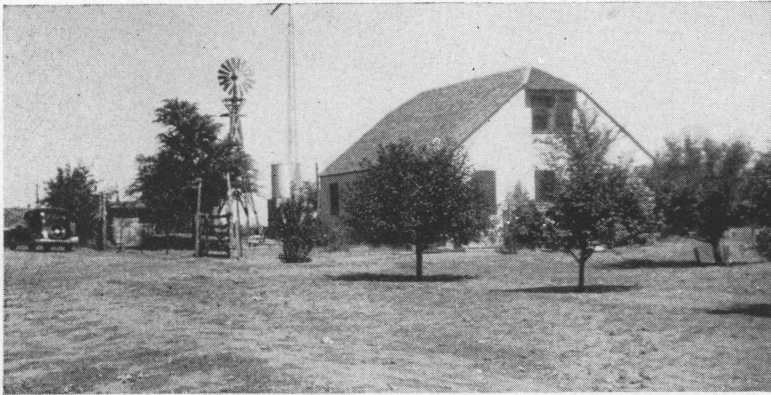
Conservation of land and the welfare of rural people are bound together.

Just as the body needs many kinds of food, so does the soul. Considered strictly from a material standpoint, the welfare of the

country home is necessary in the conservation of national land resources.

One substantial food for the soul which is within reach of every rural home is beauty. With thought and planning, each rural home can have its needed portions of it. There can be plenty for those who dwell within it and for neighbors and even for casual passers-by.

Human beings have an appetite for beauty. There is much evidence of hunger for beauty. Sometimes it is saddening; sometimes inspir-



View of the home of Mr. and Mrs. Vic Lemke in Oldham County several years after terraces were built to drain water into the orchard and home grounds. The orchard at the right is a popular place in summer when people come to buy fruit. Evergreens and flowering shrubs brighten the home grounds all the year. The average annual rainfall of Oldham County is about eighteen inches. The problem in west Texas usually is to conserve enough moisture to grow plants. The need to drain off excess moisture may be the problem in other parts of the state. Terraces and contours help solve both problems by turning the water as needed.

ing. In fields along the public roads there are unpainted weather-beaten houses where cotton is planted so near the house that it is possible to stand on the door step and touch the plants. About some of these homes discarded boxes and rusty tin cans are used for growing flowers. To grow them has required water. The many loops of rope at the well or the long path to the creek show the labor cost for the short-lived beauty of these few flowers.

The first aim in landscaping a rural home must be the efficient use of every part of the land so as to obtain the greatest efficiency and the most satisfaction from the farm or ranch. The aims in country home beautification coin-

cide with the aims of leaders and organizations who concern themselves with fundamental national welfare.

Among the practices which have been recognized in sound farm conservation programs are resceding ranges by deferred grazing, contour listing, construction of terrace ridges, spreader terraces and spreader dams, earthen tanks, and clearing range land of prickly pear, cactus, cedar, mesquite, and lechuguilla. These land improving practices are often needed to improve the appearance of rural homes. A home among spreading shade trees with a spacious lawn on all sides is possible in every region of Texas if soil and water are properly managed.



View of the Vic Lemke home in Oldham County before run-off water was saved for growing shrubs, trees and orchard.

Look Ahead and Save Time

In a conservation program it is well to remember that all plantings should be arranged with an eye to the future. Many farm people find it convenient to make

some improvements each year for four or five years until their plan is completed. Accomplishing work in one section at a time makes it easier. Each unit should contri-

bute to completing a pleasing picture. Helter-skelter planting does not give satisfying results.

Since the beauty of a landscape is spoiled unless it is well kept, it should be planned so that it may be kept with as little work as possible. The lawn which needs to be mowed should be as small as a good appearance will permit. The soil next to walks and drives should be shaped so that the mower may be run across them. Shrubs scattered about make mowing a harder job than it should be. They

should be grouped into the screen or border or planted about the foundation of the house.

Annuals, perennials and roses planted in the vegetable garden require little work. Some grasses like the buffalo grass of west Texas and Manila grass adapted to the costal region require less mowing than Bermuda grass. Special gardens, lily pools and shrubs not adapted to local soil and climate make extra work for those who try to keep a neat, clean and orderly homestead.

The Plan Comes First

Dreaming dreams is not a waste of time. Dreams are practical and constructive if something is done about making them come true. Just as an engineer puts his dream of a great building or of a bridge

on paper, so should everyone planning arrangements or rearrangements for a rural home. A plan made with thought and information is a valuable guide. It prevents wasteful mistakes.



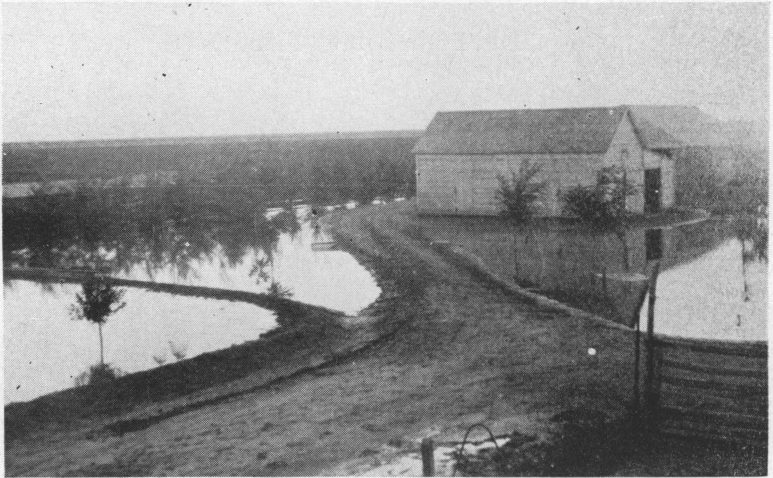
At the Lemke home just after a rain. The raised driveway where the car is standing water is allowed to soak into the soil before it is drained off. Note the lake at the right and beyond the road. Water standing in the orchard after a rain insures a fruit crop each year in an area where many people say fruit cannot be grown.

All the Family Should Take Part

Time and thought are required to work out a satisfactory landscape plan. This is true even when a landscape architect is employed to do all the drawings. Carefully thought-out suggestions should be made by the family which is to use the landscape. With some trained advice and much thinking, any family can make a good plan.

With an attractively landscaped home as a goal, working out the

details is a constant source of inspiration to each member. With each one making his contribution toward this pleasantly exciting achievement, there is developed a desirable unity of action which is needed in family life. Making a satisfactory plan may take many months but it is worth the effort. It is a real educational experience which will be helpful to children when they establish their own homes.



At the Lemke home water is held on a windbreak planting and shade trees for the barn lots. Soil removed to form depressions was used for building up roads, paths and barn areas higher than the water level. The depressions are allowed to hold water for three days after a heavy rain. Then it is drained off. This entire system was planned and arranged by Walter Lemke, when a high school boy.

Here is the Way to Begin

Think about and talk about all the different parts of the farm or ranch and the activities that are carried on there, whether work, play or rest. Then decide what walks, drives, windbreaks, shade trees and shrubs would make these

activities more pleasant and what arrangements would make work easier.

It is a good idea to put the plan on paper so that the details will not be forgotten before they are worked out. Many landscape dem-

onstrators have taken several years to achieve their original plans. With many other activities to consume time and thought, it is well to plan to use at least five years to complete the planting of a landscape.

A large piece of wrapping paper may be used for the plan. A great many demonstrators prefer to use graph paper which has about twelve small squares each way to the inch. A large sheet is preferable but since the paper in small sheets can be bought in any town where there is a high school, many people match and paste several small sheets together on a larger piece of paper or cardboard and let one small square represent one foot in making a map.

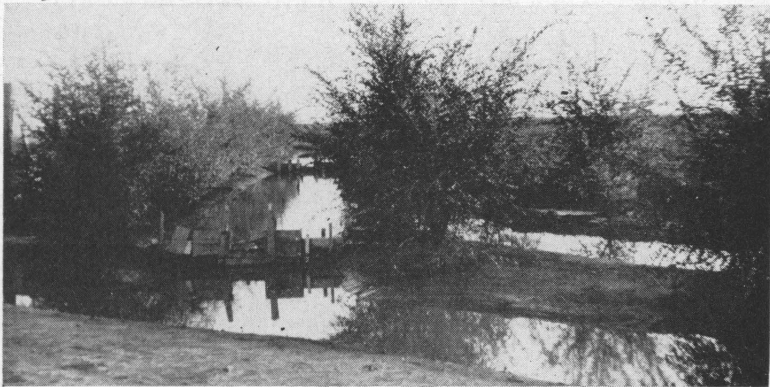
After the house is drawn in, indicate enough space about the house for a grass-covered lawn. All terraces or retaining walls needed should be shown on the map before shrub groupings are planned.

Plan for some space about the house for an outdoor living room,

for a wood pile, wash place or other work areas, and a space for children to play. If special gardens such as a rose garden or herb garden are desired, they should be drawn into the plan. Trees for morning and afternoon shade can be indicated by large circles. A few shrubs about the foundation of the house and some to screen off the work yard can be indicated by smaller circles. Some people like to drive pegs into the soil designating places for shrubs and trees to be planted.

Consider the well and whether or not the purity of its water is being endangered by such things as livestock pens, a toilet, or waste water from the kitchen. If the purity of the well water is endangered, the sources of contamination should be removed. Septic tanks, grease traps and relocating of livestock pens may be needed to insure safe drinking water.

For convenience, place the family vegetable garden near the kitchen. If the land near the house is not suitable for a good garden,



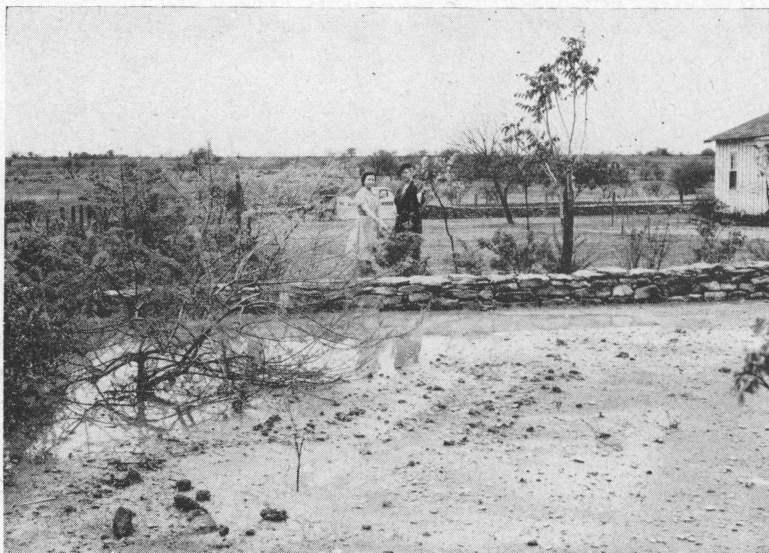
A series of gates made of scrap lumber are used for turning run-off water on to the orchard, the yard, the windbreak or for draining it off when it is not needed at the Lemke farm.

a frame garden may be located in the back yard. One-half to one acre may be terraced or drained and planted to soil building crops; later it may be built up sufficiently to grow vegetables conveniently near the house. One-half to one acre should be set aside for an orchard. It should be placed near the house. Sometimes it can be made to serve as a windbreak to help protect the garden.

After the garden and orchard are placed, the poultry range should be located on the plan. If both turkeys and chickens are to be raised, the plan should place them as far apart as is convenient. Suitable pastures for all kinds of livestock should be considered.

Careful consideration of the prevailing winds will help to locate windbreaks where they are needed. All trees and shrubs planted should fit into the landscape picture. See B-76, *Beautifulizing Country Homes*, or F. B. 1087, *Beautifulizing the Farmstead*, which you can obtain from the office of your local Extension agents. See the list on the last page of this bulletin for other helps.

In making the plan remember that the idea is to have a pleasant view from every window, every door and every porch of the house. The whole arrangement of buildings, pastures and plantings should make a pleasant picture for those who pass near the house.



Rain water held on shrubs after each rain by a rock fence and retaining wall at the Arnold Boenecke Ranch, Brown County. During long rainy seasons a stone may be removed to permit drainage. This is an important arrangement because many plants die if water is permitted to stand on their roots for long periods of time.

Surround the Home With Beauty

For the purpose of improving the appearance of our countryside, trees and grass need to be planted on many Texas farms and ranches. These are conservers of soil and moisture. Grass forms the foundation or the canvas upon which the landscape picture is made. Without it the whole effect is barren and desolate. Without grass and its millions of leaves and stems to hold back rain water and soil, erosion sets in and destruction continues.

A large area of grass surrounding the home adds appreciably to the comfort of those who live in it. In summer, grass is constantly giving off moisture which is cooling. It relieves the glare from barren soils. In wet weather it decreases the amount of mud and in dry weather it reduces the amount of dust. Thus good landscaping helps to improve health.

A pasture of grass and shade trees with poultry or grazing livestock makes a pleasing scene. It is a token of a balanced farm program. From a livestock management viewpoint it is more convenient and efficient to have the live-

stock pastures and poultry ranges near the house rather than far removed.

For cheerful spots of green about the farm during winter, small grains and clover or alfalfa may be planted. In addition to relieving the depressing wintry look, they are soil holding crops and provide winter pastures for livestock. Clover and alfalfa not only serve these two purposes but add nitrogen to the soil. Small grains may be turned under for green manure.

When cultivated annual field crops are grown next to the home or nearby there is a pleasant outlook for only a part of the year. When the crops have matured and been harvested, there is a dreary, uninspiring view from the house. Such fields are often a source of dust, heat or glare. If they can be made into pastures and the more remote sections of the farm used for cultivated crops the satisfaction of living in the home will be increased. Housekeeping will be easier and sanitation improved by removing this source of dust.

Use Trees Freely

When plenty of trees are used to frame the house and soften its outlines, they help modify cold winds and hot sunshine. The cooling effect of trees is needed all over the state during every Texas summer.

Another profitable feature of planting trees is the fact that they

form a sanctuary for birds. Birds with their songs and their movements add interest to any landscape. It is well known that the destruction of insects by birds increases production of crops. For this reason birds are a practical and pleasing addition to any landscape.

Each year trees grow they in-



— Picture courtesy Spur Experiment Station.

At Spur, Texas, where street drainage water is allowed to collect and stand, Chinese elms make a more rapid growth than on well drained areas. The graded and surfaced street and drive way permit traffic after rains. It is necessary to have a method of draining any spot where shrubs or trees grow. Some, like the desert willow, which do well in a dry country may be killed by water standing on them for long periods of time.

crease in beauty, usefulness, and monetary value. They are like a sum of money invested at a high rate of interest with good security.

A planting of trees for woodlands or woodlot may prove valuable. It may serve many purposes such as producing wood for fuel, timber for posts, and material for general construction work about the farm. It may be utilized to reinforce a windbreak, to conserve soil and water, to protect wildlife, and to provide wholesome recreation. It can also be arranged to serve as an attractive background for the home. Exploring woods is

a wholesome source of entertainment for youngsters. It is an educational feature which may be used to help them enjoy home.

Any Texas home not protected from winter and spring winds needs a good windbreak. A windbreak needs to be a large planting and can be arranged with good effect as a background for the farm buildings. This protection not only adds comfort to the home and saves fuel, but gardens and field crops produce more abundantly when protected from drying winds in this way. Wind erosion of soil about the home is lessened.



Young red cedars and Chinese elm form a windbreak at Mrs. Laura Barnes' home in Ochiltree County. Clean and constant cultivation holds moisture after it is in the ground. E. W. Thomas, former County agricultural agent, who assisted in planning the windbreak and in arranging the contours and terraces to supply water, is examining the cedars.

Comfort for Livestock Pays You

A windbreak as a defense against heat and cold is needed not only about the house, but animals and poultry need it. They should have it, not only from a humanitarian standpoint, but dollars and cents will be added to the bank account by giving them protection from extreme temperatures.

Poultry and dairy cows, hogs and beef cattle must be shielded from extreme temperatures to make their best contribution to the family living. During periods of extreme temperatures many cattle in Texas have died from lack of protection. Natural protection can be given more cheaply than artificial, and natural protection is far more attractive.

An enclosure with trees, shrubs and grass should form the chicken yards. Chickens in fenced and protected areas can be fed and handled more efficiently than when

they are allowed to run about the entire farm. Diseases among them can be controlled and the sanitation of the whole farm may be improved. Since the beauty of a landscape is improved by the addition of a bit of green here and there, every farm plan should combine these two purposes in arranging and maintaining all-year chicken pastures of green forage.

Another pleasant spot may be created with trees, shrubs, alfalfa or grass. This, properly fenced, can serve as a range for turkeys; it is well known that these birds cannot be grown successfully with chickens. Trees which complete a landscape plan can be used as a shade for the turkeys. Alfalfa or grass pasture should be part of the beautification plan. Turkeys are very decorative and add life to rural landscapes.

Every Landscape Should Include Fruit and Nut Orchards

The beauty of a fruit orchard in bloom is a memory to be cherished. To have one for a while each spring is worth the work of planting and caring for the trees. When the practical value of the fruit is considered, it becomes evident that no rural home landscape is

complete without an orchard to supply fruit for the family.

Nut trees may be used for shade and for completing the landscape picture. Tree roots, together with a carpet of grasses or clovers, give protection against erosion by wind and water.

Save the Soil

Many of the homes in the hilly sections of Texas are in need of terraces and plantings about the foundations of the houses to retain soil. A glance at the foundation of many houses shows that water from the roof has washed away several inches of soil.

With a good planting of shrubs about the foundation, a few small terraces, and a good turf of grass, the top layers of the soil can be retained and the foundation of the house can be saved from undermining by erosion. Good underpinning with native stone or lum-

ber helps to protect the area under the house and adds to the appearance of the homestead.

Now and then shrubs and trees on hillsides and those near cut highways are uprooted by erosion. This can be prevented by terracing and planting grass. Trees and shrubs alone cannot hold the soil when the slope of the land is steep, but they are always helpful and should be aided in their beneficial work by terraces and retaining walls. Sodded retaining walls of earth or rock sometimes are needed.



Grass on the lawn and a retaining wall help hold the soil at the Steve Arthur home, Tarrant County. The steps and wall of native stone are interesting features of this landscape.

Choose Grass Carefully

The section of the state determines the kind of grass which is best to plant. Here again observation and common sense may be employed to an advantage. Native buffalo grass, sometimes called curly mesquite grass, is one of the most satisfactory varieties for a large portion of central and west Texas. It withstands dry weather better than Bermuda and does not spread to cultivated fields. It requires little mowing.

Bermuda is widespread over the state and makes a satisfactory growth where moisture is fairly abundant. It can be started from seed or by planting runners with roots. Quicker growth comes from the rooted runners. Bermuda unfortunately will not grow in shade. It is hard to keep out of cultivated areas.

St. Augustine grass, mistakenly called carpet grass, does well along the Texas coast and inland for 100 miles or more. It is being grown with varying degrees of success in most of the state. It can be started on a lawn by planting runners. If a good start is not already to be found

on the place, it can be bought from a nearby nursery. In central and south Texas it is frequently combined with bermuda or buffalo grass because it will grow in dense shade while these other grasses thrive on the sunny portions of the lawn.

Blue grass does fairly well in high altitude sections of the state when given sufficient moisture. This grass will grow in a shaded place better than Bermuda.

Rescue grass grows in the shade and does well in the winter and spring. It dies in the summer.

For a winter lawn, Italian rye grass may be sown in early fall in the grass already on the lawn after it has been cut. Water thoroughly and it will come up and soon form a green lawn which will last all winter.

Several grasses, including centipede grass from China and Manila grass from the Philippines, are being tested. They do well in the moderate and warmer parts of Texas. Their value and habits are not fully known.

Select Naturally Adapted Trees

In regions of the state where there is a native growth of trees, it is well to take a lesson from nature and plant trees that are naturally adapted to that area. By looking about the neighbor-

hood one can determine the native and the introduced species which give the most satisfactory growth and which are likely to be of the greatest practical value. When there are no native trees for guid-



— Picture courtesy Spur Experiment Station.

Whether in a yard or along the highway, tree growth can be increased by contouring, terracing, and arranging soil to gather and hold moisture on roots for a few days after rains.

ance it would be well to consult representatives of the Texas Agricultural and Mechanical College.

Some trees may be used for many purposes. The black walnut is one of these. It makes a beauti-

ful tree, gives a good shade, furnishes food and produces valuable wood. Texas' state tree, the pecan, is considered even more valuable by many people.

Bulletins Help Solve Problems

Bulletins become exciting as they furnish ideas for a landscape plan.

In planning the arrangement of the farm, families may consult bulletins which make interesting reading and may be obtained free through Texas county agricultural or home demonstration agents. They are: B-76, Beautifying Country Homes; F. B. 1087, Beautifying the Farmstead. Each of these contains pictures and diagrams showing possible arrange-

ments of gardens, orchard, and pasture, shrubs and trees around the rural home.

If you are puzzled about the arrangement of livestock pens and farm buildings to insure the purity of drinking water, study "Rural Water Supplies". This bulletin is free and may be obtained from the State Health Department, Austin, Texas.

Among other bulletins which may be obtained free through Extension Service agents: MS-626,

Building a Grease Trap; B-70, Gardening; C-150, Fruit Varieties for Texas; B-73, Orchard Management; B-71, Poultry Yard Equipment; B-72, Turkeys; B-98, Successful Hog Feeding; B-82, Permanent Pastures; B-51, Terracing in Texas; F. B. 1405, The Windbreak as a Farm Asset; F. B. 1567, Propagation of Trees and Shrubs; C-123, You Can Grow Trees in Spite of Wind and Drought.

The following bulletins are free and may be ordered from the Agricultural Experiment Station, College Station, Texas: Bulletin No. 527, A Rating of Plants With Reference to Root Rot, a bulletin which guides in selecting shrubs and trees which resist root rot; No. 539, Small Grain and Rye Grass for Winter Pasture; Bulletin No. 447, Trees and Shrubs in Northwest Texas.



— Picture courtesy Spur Experiment Station

Trees near Spur Agricultural Experiment Station are given additional moisture by contours that hold water and make small lakes about each tree after rains.

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