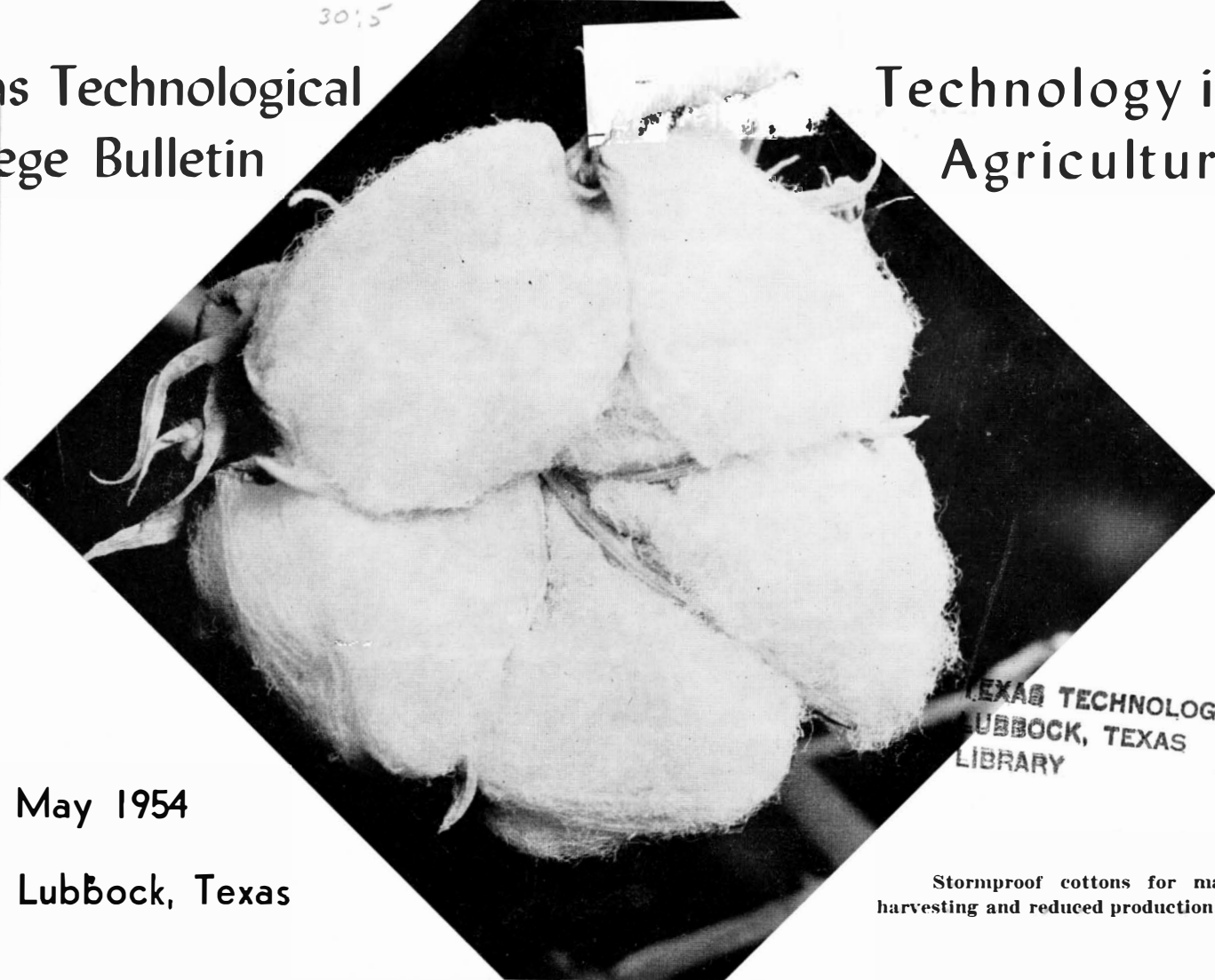


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ege Bulletin

Technology in
Agriculture



May 1954

Lubbock, Texas

TEXAS TECHNOLOGICAL COLLEGE
LUBBOCK, TEXAS
LIBRARY

Stormproof cottons for machine
harvesting and reduced production costs.

TECHNOLOGY is science, art, and invention. It is tractors, combines, corn pickers. It is the testing of farm animals and the conquest of diseases. It is hybrid corn, new kinds of wheat, soy beans, kudzu, and lespedeza. It is road building and rural electrification. It is contour plowing, conservation of soil, management of forest, protection of wildlife. It is marketing and distribution. It is a race between insect pests and ways to kill them. Technology is in the workshop, in the laboratory, barn, grove, field, and home. It is a social and economic force that challenges thought and ability to plan, because its many-sided nature combines the intricate influences of getting and spending, savings and debts, employed leisure and unemployed relief. (United States Department of Agriculture. *Technology on the Farm*. August, 1940)

AMERICAN AGRICULTURE now faces its greatest challenge. Will it be able to meet the needs of our expanding population? Can our present standard of living be maintained or improved? The challenge will be met by agricultural technology, the application of science to farming and ranching.

ARE YOU INTERESTED in having a part in meeting this great challenge? There are so many interesting and profitable careers in agriculture.

WHY NOT CHOOSE A CAREER IN AGRICULTURAL TECHNOLOGY? On the following pages are some of the things you will study at Texas Technological College.

BULLETIN OF TEXAS TECHNOLOGICAL COLLEGE

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New grasses for pasture and forage may result in more animal products from ranges and pastures, as illustrated in this view of the grass nursery at Texas Technological College. At other experimental grazing plots on the College farms, more beef per acre is produced by cross fencing and grazing off small areas at a time.

LD 5317 T41 Vol. 30 1954 No. 5 Cop. 2



U.S.D.A. Photo

Range improvement is accomplished by uprooting mesquite trees. Yields of range forage are increased by control of brush. (The D-7 caterpillar tractor equipped with "stinger" was photographed in use on the S.M.S. Ranch, Stamford, Texas.)

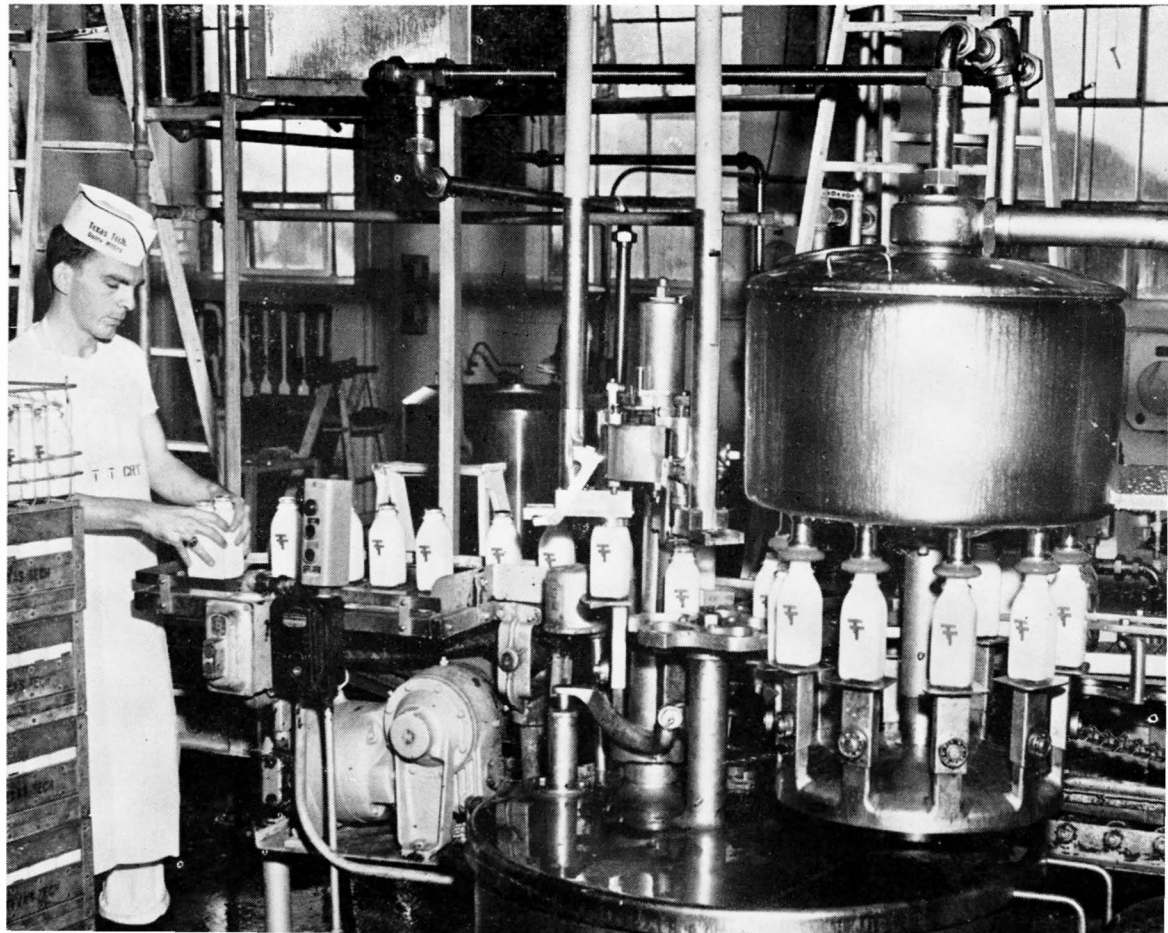


Maximum milk yield is obtained from pastures . . . labor is saved . . . soil is improved. The photo shows the Texas Technological College Holstein herd on winter grazing. Other programs of the Division of Agriculture include progeny tests in beef cattle to select outstanding herd sires, carried on at the College farm at Lubbock and at the College's PanTech Farm near Amarillo, and breeding experiments with cattle, hogs, and sheep.



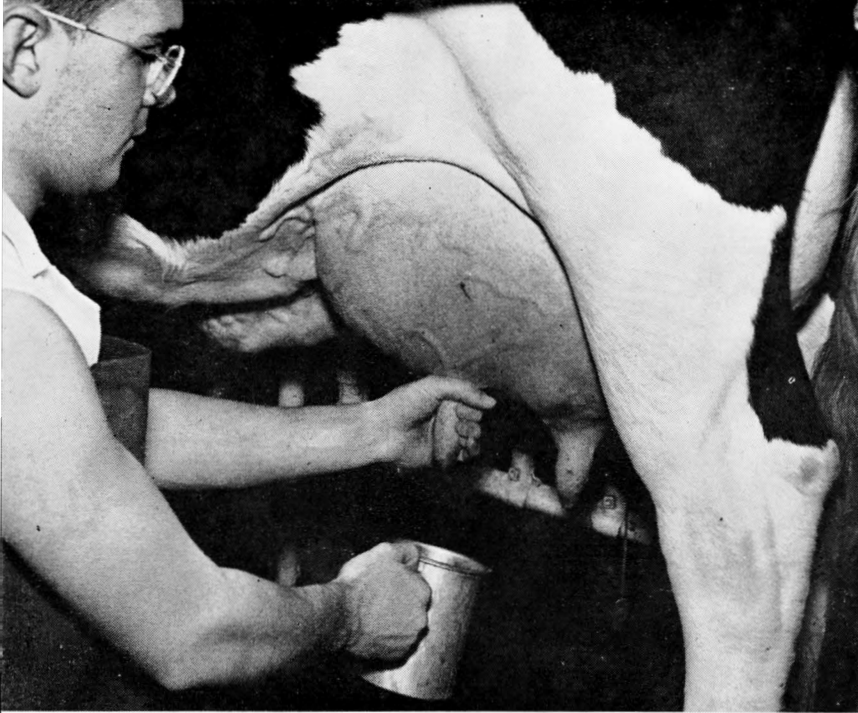
Keeping down
livestock diseases
increases efficiency
of production.
The photo shows
Dr. F. G. Harbaugh,
Texas Technological College
veterinarian,
drawing a blood sample
for laboratory tests.

Cleanliness and speed in processing perishable foods help produce part of the American high standard of living. The photo shows a portion of the equipment of the Texas Technological College creamery.





A search for new and more efficient ways of applying fertilizers results in this method of applying nitrogen in the form of anhydrous ammonia to the soil.



Careful preparation and sanitation in the milking process results in greater yields of a high quality product. The Texas Tech student in the photo above is using a strip cup for the purpose of detecting mastitis.

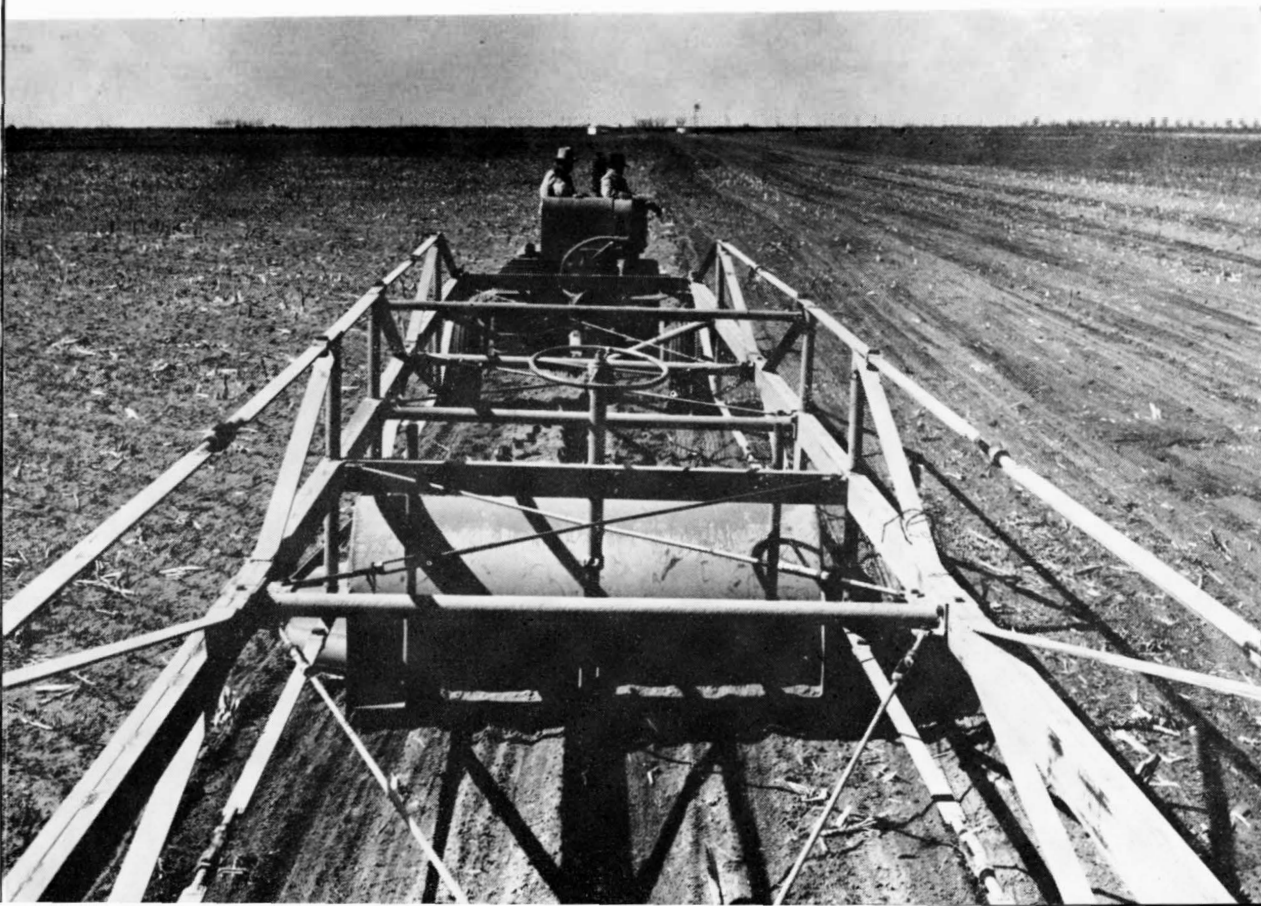
Storage of the roughage crop in the silo insures high quality and succulent roughage the year round. The photo below shows a workman filling a trench silo at the Texas Technological College Dairy Farm.





A search for new and more efficient ways of applying fertilizers results in this method of applying nitrogen in the form of anhydrous ammonia to the soil.

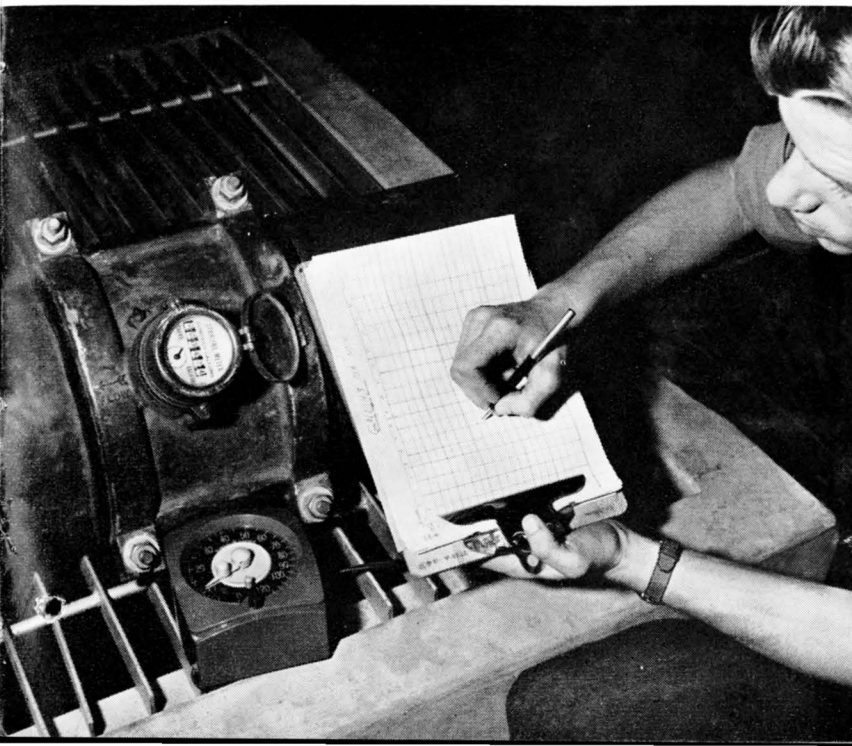
The land leveling machine now makes possible the irrigation of areas formerly too uneven or too sloping. The picture was taken on the Texas Technological College Agronomy Farm.



●
Level bench irrigation systems hold irrigation water and rain water without waste. The result is more uniform distribution of water.

●
Underground irrigation pipe systems allow faster irrigation with less labor and less waste of water.

A student (below) uses a flow meter which measures the amount of irrigation water available and helps plan the irrigation system.



Good irrigation equipment saves water and labor and improves efficiency. The picture above shows aluminum pipe in use on the Texas Technological College Farm.



Plowing 18 inches deep brings up clayey subsoil to assist in controlling wind erosion on deep sands. The photo above was taken on the Vernon Wilhoit Farm near Tahoka, Texas.

Terracing and strip cropping are valuable for the prevention of wind and water erosion. Crops such as rye and vetch increase organic matter in the soil and help prevent wind erosion. Machines such as the stubble mulcher help prevent wind erosion. These and other such projects are carried on at Texas Technological College.

Contour rows hold water on the field (below).

U.S.D.A. Photos

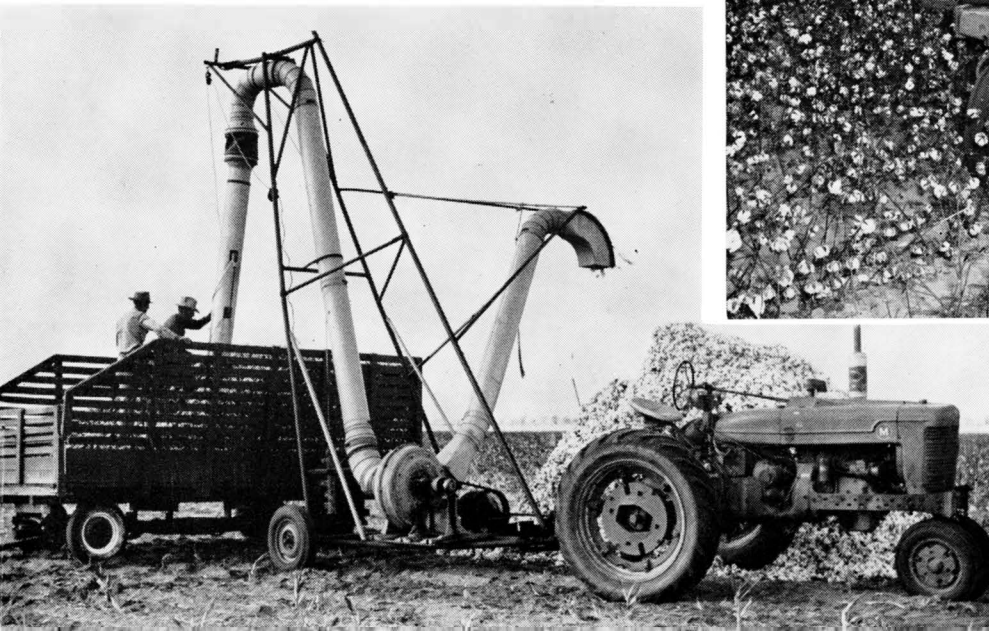




U.S.D.A. Photo

Rye and vetch on the Arch Lamb Farm near Lubbock, Texas, increase organic matter in the soil and help prevent wind erosion.

The mechanical loader loads and unloads cotton with equal ease, saves labor and time in a busy season. The photo below was taken on the Texas Technological College Agronomy Farm.



Mechanical gathering speeds the harvest of the cotton crop after defoliation makes possible earlier harvesting as well as improving quality. The photo above was taken on the Texas Technological College Agronomy Farm.

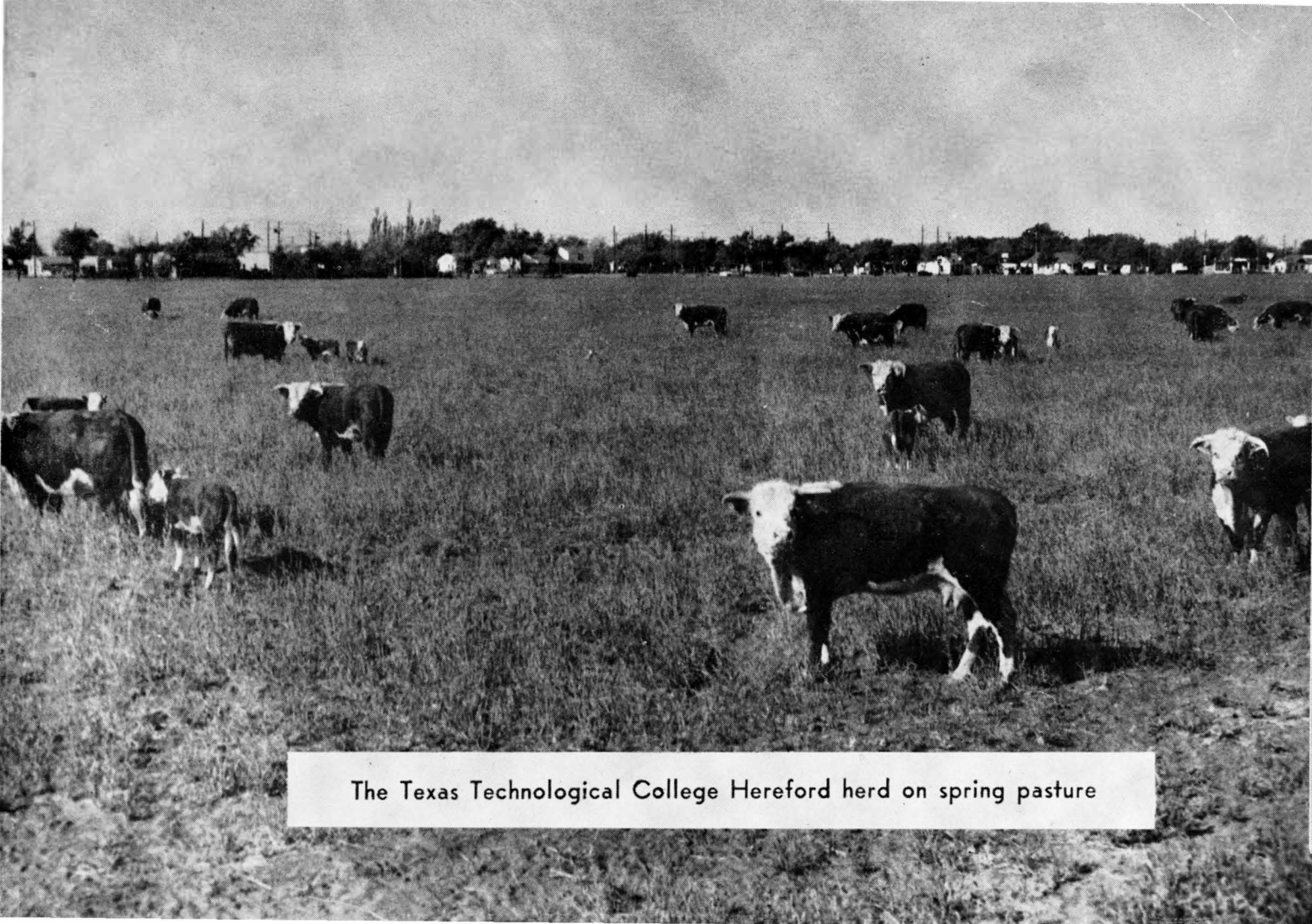
THERE ARE MANY MORE ASPECTS OF AGRICULTURAL TECHNOLOGY. At Texas Technological College the agriculture student learns not only about technological practices, but he studies the basic sciences underlying them. Completion of the four-year course in agriculture leads to the Bachelor of Science degree in agriculture. The student specializes in one of the following fields:

Agricultural Economics
Agricultural Education
Agricultural Engineering
Agronomy
Animal Husbandry
Dairy Industry
Horticulture and Park Management

VISIT OR WRITE the Texas Technological College Division of Agriculture and talk over your plans for a career in

Farming . . . Ranching . . . Teaching . . . Extension
Research . . . Government Service . . . Banking
Business . . . Radio . . . Journalism
and other fields

THERE IS A POSITION OF LEADERSHIP AND RESPONSIBILITY awaiting you in the great fraternity of farmers, ranchers, teachers, county agents, business men, and agricultural specialists.



The Texas Technological College Hereford herd on spring pasture