

AGRICULTURAL ENGINEERING  
Sub-Project I.

Terracing

**OBJECT:** To spread the teaching and practice of terracing for the purpose of preventing soil erosion, conservation of soil moisture and improvement of the soils.

**IMPORTANCE:** Soil erosion occurs to some extent in practically every county of the state. In at least 25% of the counties it constitutes a serious problem. Soil erosion results in considerable loss of fertility. Soil scientists say erosion takes 20 times more out of the soil than does the growing of crops. If not checked in time, erosion will necessitate the ultimate abandonment of the land.

Investigations conducted in Charlotte County show that 89% of the farm land is subject to erosion and that over 4000 acres were abandoned to cultivation last year as a result of excessive erosion.

**PLAN OF WORK:** Promote terracing through terracing schools which include demonstrations, meetings and propaganda. The county agent will assume leadership in all terracing activities in his county. Definite demonstrators will be selected in communities from farmers requesting aid in terracing. These demonstrators will agree to advertise the meeting in their community, provide necessary tools and power, and agree to complete the terraces as laid out.

The County Agent will:

1. Promote the project in his county by distributing the publicity material, etc. furnished by the department.
2. Select reliable farmers in different communities who have land in need of terracing, and who agree to follow instructions.
3. Make all necessary preliminary arrangements for holding demonstrations or schools. Advertise the demonstration.
4. Obtain a record of the results secured in his county due to the work of this project.

The Cooperating Demonstrator will:

1. Record results of terracing relative to crop yield, land value, etc.
2. Help county agent secure an interested group of men at the demonstration.
3. Report on other terracing work done as a result of his demonstration.
4. Help his community to practice extension teaching in terracing and uphold extension standards set out in demonstrators agreement.

The Agricultural Engineering Department will:

1. Supply county agent with educational publicity material for use in local papers; supply bulletins and other information on

terracing for distribution; furnish agents with complete instructions on method of handling this project.

2. Send an engineer to the county to assist the agent in handling the school; the engineer will assist the agent in giving instructions on handling the level, building terrace drag, and constructing at least one model terrace at each demonstration; help the agent with the solution of any particular soil erosion problem that may arise.

**GOAL:**

To insure each county, men experienced in terracing who can take care of the terracing needs of the county, so that the agents future effort in terracing will be purely instructional and advisory. Results will be measured by number of men trained to do terracing, and number of acres terraced as a result of demonstration.

**INSTRUCTIONS TO DEMONSTRATOR**

Cooperative Demonstrator \_\_\_\_\_ Co. Agt., \_\_\_\_\_

**History of the piece of land**

Crop grown in 1925	Yield per acre
1926 _____	" " " _____
1927 _____	" " " _____
1928 _____	" " " _____

Topography \_\_\_\_\_ Soil type \_\_\_\_\_

The assistance given you in terracing is being given for the purpose first of helping you to save or rebuild the top soil on your farm, and second for the purpose of influencing other farmers in your community to adopt the same extension practices. This would result in building up a fertile soil in your community.

As a cooperating demonstrator it is expected that you will study the terracing bulletin to be secured from your county agent, and apply the methods they present.

Your terraces should be built at least 20 feet wide at the base, and 2 feet high in the middle as soon as possible after work has started.

It is necessary to build all fills over gullies extra heavy. The terraces outlets must be big and generous.

You should farm terraced land as nearly as possible with the terraces at least for the first year.

During the first rain storm after building, it is important that you visit your terraces prepared with a shovel to help prevent any breaks.

You should encourage your neighbors to terrace and you are expected to report to your county agent on a blank furnished by him the results of your terracing. This report will give information on cost and benefits of terracing.

Gladys, Virginia  
December 11, 1929

Mr. J. A. Waller, Jr.  
Blacksburg, Va.

Dear Mr. Waller:

I am glad of the opportunity to tell you what I think of the system of terraces you built on my farm this fall.

I do not consider any phase of agricultural improvement of more vital importance to the state than this work. Personally I have suffered more from erosion than any destructive agency on my farm. Your system of terraces solves this problem nicely.

I consider the method of demonstrating this work, the terracing school, as an ideal arrangement, since it reaches so many at one time.

Thanking you again for your assistance and trusting we may have the pleasure of having you with us again, I am

Cordially yours,

(Signed) W. T. Oakes

Chase City, Virginia  
Nov. 19, 1929

Mr. J. A. Waller, Jr.,  
Specialist in Agr. Eng.,  
Blacksburg, Va.

Dear Jack:-

I appreciated your help last week and enjoyed your visit but am awfully sorry I did not succeed in getting out larger crowds. I am very glad that you taught me how to lay off the terraces myself so that I can go ahead with it now.

Some of the paint manufacturers have a motto, "Save the surface and you save all." This can aptly be applied to terracing for if we check soil erosion, we not only save the land but we maintain fertility and by wise handling, our farmers can increase fertility at less cost.

In this section that is rolling, and where many farmers do not practice good systems of crop rotation, the loss from erosion is fearful. The best way to check this in my opinion is by terracing altho some people think that the seeding of grasses and other cover crops will check or control it. It may check it but not control it as effectively as the two combined, i. e. terracing the land and then seeding the cover crops.

With kind regards, I am

Very truly yours,

(Signed) N. H. Williams,  
County Agent

# HALIFAX COUNTY TERRACING SCHOOL

Farm Demonstration Agents of the Extension Division, Virginia Polytechnic Institute, have secured the services of the Extension Specialist in Agricultural Engineering to instruct the farmers in their counties in the use of the level, how to lay out terrace lines and how to construct terraces. There will be a meeting Monday, Tuesday and Wednesday nights beginning at 7:30 o'clock and a big field demonstration on Thursday. The schedule for your county is as follows:

**Monday Night, November 4th, Turbeville School**  
**Tuesday Night, November 5th, North Stanton School**  
**Wednesday Night, November 6th, Rosa School**

**THE FIELD DEMONSTRATION** will be held Thursday, November 7th, beginning at 9:00 A. M., on the farm of Mr. H. T. Crews. This place is located eight miles North of Halifax on the Lynchburg road.

Farmers in this section of the state can do no more important work than preventing their soil from washing away. Terraces accurately laid out and properly constructed do this very effectively. Come out to the night meeting nearest you and to the field demonstration.

**C. L. HALL, COUNTY AGENT**  
Halifax, Virginia