

# Benefits From Crop Rotation Compared With Fertilization Important Facts Discovered

By GUY A. CARDWELL

From long continued soil fertility tests, carried on in England and in this country, some important facts have been developed about crop rotation in its relation to soil productivity.

From the point of view of soil management practices, the average total produce per acre of wheat, corn and oats obtained in these experiments may be divided into three almost equal parts, a third being credited to the cultivation of the soil, almost a third to the use of fertilizers and lime and a third portion to rotation.

Three farm practices are represented in the following illustrations: cultivation of the soil; the use of fertilizers; and rotation. These indicate the comparative and relative values of rotation and help to bring out an emphasis on other relations. Crop rotation without the use of any manure or commercial fertilizer is nearly as efficient in effecting crop increases as those of fertilizers with rotation; in other words the average benefits of rotation are nearly equal to the benefits derived from fertilizers when they are applied to crops grown continuously on the same land.

For example, corn at the Missouri Experiment Station yielded 32.4 bushels per acre from cultivation alone. When the ground was manured the yield was increased by 14.7 bushels per acre. When it was grown in rotation with other crops the yield was increased by 15.1 bushels, or to 37.5 bushels per acre. However when both manuring and rotation were practiced, the acre yield was increased by 23.3 bushels, or to 47.7 bushels per acre. It will be noted that in these experiments the gain of 25.3 bushels is not fully additive, being less by 4.5 bushels than the sum of the separate gains, which show 52.2 bushels obtained from the use of manure and rotation.

These experimental results throw new light upon the problem of our future food supply and a permanent national agriculture. It would seem that we shall have to depend upon the cultivation of the soil for at least a third of our wheat, corn and oats production, collectively; upon the use of soil-improvement materials, such as manure, commercial fertilizers, lime and green manure, for another third; and upon rotation of crops for the other third. Just as the alternation of crops has played a large part in the improvement of husbandry in the leading nations of the world, particularly during the last half of the eighteenth century and since, so crop rotation in its improved forms is destined to become one of the three outstanding factors in the providing of food for our future millions of population.

## ROSE HILL NEWS ITEMS

(Intended for last week)  
ROSE HILL, Nov. 5th.—Both circles of the local Baptist W. M. U. met in joint session at the church on Wednesday afternoon. Mrs. Stokes Wells presided and presented the following program on the topic, "Crown Him Lord of All": "Lord of our Words," by Mrs. Graham Fussell; "Lord of our Thoughts," by Miss Ruth Murray; and "Lord of our Gifts," by Miss Besse F. Johnson.

The week of prayer and self denial is being observed by the Women's Auxiliary of the Mt. Zion Presbyterian church this week.

Mrs. C. F. Hayes is leading the afternoon studies in "That Other America."

Mrs. Joel Barden and Mrs. A. B. Wells entertained on Monday evening, in the home of Mrs. Barden, when a miscellaneous shower was given for Mr. and Mrs. Robert Forsiw, who are starting house-keeping. Many useful gifts were received. The hostesses served tea and small cakes.

Recent guests in the home of Mr. and Mrs. Oscar Fussell were Mr. and Mrs. John E. Fussell and daughter, Miss Elizabeth Fussell of Steadman.

Frank Jerome, who has been spending some time with relatives here, has left for Florida.

Mrs. J. C. Jerome had as her guests last week, Mrs. John Hair, Mrs. L. E. McKnight, E. C. Coddie, who is a former U. S. Marshall, Mrs. E. C. Coddie, all of Fayetteville.

The ladies of the Methodist Missionary Society are observing the week of prayer and conducting a Mission Study Class. Different members have charge of the class each afternoon.

Miss Bettie Wells Fussell is visiting in Goldsboro.

Rev. and Mrs. J. H. Barnes, who have been visiting their parents in Hiwassee, Ga., and in Isabelle, Tenn. have returned. While there Rev. Mr. Barnes was at his home in Isabelle, Tenn., he conducted a revival meeting at his old home church there, and he reports a great meeting.

The recent series of meetings conducted at the Mt. Zion Presbyterian church by the Rev. James E. Ward of Bainbridge, Ga. were greatly enjoyed. There was one addition to the church.

Rev. S. C. Harness, his mother and sister, Mrs. Laura Harness and Miss Grace Harness had as recent guests at the Presbyterian Manse, Mr. and Mrs. John Oxtoby of Long Beach, California; Mr. and Mrs. Frank Harness, with their son and daughter, Miss Catherine Harness and George Harness of Walworth, Wisconsin; Mrs. Mary Harness of Algona, Iowa; Mrs. Mina Ward of Saguache, Colorado. Mr. and Mrs. Oxtoby were en route to Miami, Florida.

Mrs. Laura Harness and Miss Grace Harness are returning to their home in Lynhaven, Va., this week. They will be accompanied by Rev. S. C. Harness, who will spend ten days at this home.

Bruce Teachey, Jr., a student in Lenoir College, spent the week on dat his home.

Mrs. Lloyd Scott is quite ill at her home.

## RESOLUTIONS

The Resolutions Committee of the North Carolina Association of Superintendents of Public Welfare Herewith Submits the Following Resolutions for the Consideration of the Association: WHEREAS it appears that the Emergency Relief Administration is now in the process of liquidation and that much of its former activities has already been turned back to the State and County system of Public Welfare, and that the Works Progress Administration does not contemplate the assumption of the social work activities of the E. R. A. AND WHEREAS the State and County system of Public Welfare in North Carolina has been in existence and has become well established by both constitutional mandate and statutes, and is the official social work branch of the constituted government in North Carolina; AND WHEREAS the statutory duties and obligations assigned to the County Superintendents of Public Welfare inclusively cover in a broad sense the public welfare activities of all relief programs as

well as the social work activities contemplated under the National Security Act which could be properly integrated with the North Carolina system of Public Welfare;

AND WHEREAS the utilization of the State and County System of Public Welfare as a channel for administering the social work activities heretofore assumed by the E. R. A., and also the social work measures of the National Security Act, is a logical development in line with the State Federal policy of utilizing existing State agencies.

AND WHEREAS the State and County System of Public Welfare provides for local participation under State supervision;

AND WHEREAS the majority of the County Superintendents of Public Welfare now holding office functioned as County Administrators of E. R. A. throughout its existence prior to 1935 and therefore possess considerable public welfare administrative experience with Federal work activities;

AND WHEREAS a united program of public welfare including administration of relief and social security measures is recognized as preferable from a structural and administrative standpoint to a divided program;

AND WHEREAS it is a practical impossibility to adequately separate the activities of the general public welfare program from relief and social security;

AND WHEREAS the subsidizing by the State and Federal Governments of the State and County System of Public Welfare would most probably provide a means of administering any Federal relief and social security activities at far less cost than would be necessary by setting up a new organization, an avoid at the same time strengthen the usual public welfare activities;

THEREFORE BE IT RESOLVED That the members of the Association pledge to each other to the State Commissioner of Public Welfare and her Board, and to the Public in general their complete support for the further development of our public welfare work, by study, by close application of ourselves to our tasks, and by increasing our qualification in every way in such fashion as to merit the respect of the State and Federal Authorities who shall be responsible for the Administering of any Social Work Program in North Carolina growing out of the National Social Security Act: BE IT ALSO RESOLVED

That after full deliberation, detailed discussion, and consideration of the matters involved, the North Carolina Association of Superintendents of Public Welfare heartily commends the movement looking toward the integration of the terminating Federal Emergency Relief services and of all the social work services of the National Social Security Act with the North Carolina State and County system of Public Welfare;

BE IT FURTHER RESOLVED That copies of the foregoing preamble and resolutions be furnished to the aforementioned Federal authorities, the Governor of North Carolina, the North Carolina State Planning Commission, the press, and to any State or Federal officials desiring them.

Mrs. Blanch Carr Sterne, Chairman.

Miss Frances Lenton, Mr. Frank Sasser, Mr. A. W. Daughtry, Mr. George H. Lawrence.

Resolution Committee of the N. Carolina Association of Superintendents of Public Welfare at the Annual meeting of the Association October 25, 1935, Chapel Hill, N. C.

Twenty samples of Scotland County seed sent to Raleigh for a germination test showed clearly the waste of buying cheap seed. Only 59 per cent of the seed in one sample germinated.

INCOME Secretary Morgenthau says that the government's income for the first three months of the present fiscal year was \$998,000,000, or a bit above the estimates of last January, even with \$81,000,000 in processing taxes imposed by the Courts and not included in the total.

CHECKING PWA Fifty trained investigators will be supplemented by as many more in order to fight corruption in the PWA. Payments and spending will be checked to see that the money is properly expended.

The crop of Danish cabbage grown in Avery County this season has been sold at good prices.

The Davidson County Farmers Exchange did \$37,159.67 worth of business between January 1 and September 30, 1935.

# Kellam Jones, Chinquapin Heads 4-H County Council

(By MISS JAMIE MARTIN Home Agent)

The first meeting of the 4-H County Council was held in the home agent's office at two o'clock Saturday, November 9th.

Sixteen officers of the six 4-H Clubs were present and officers of the County Council were elected. They are as follows:

President, Kellam Jones, Chinquapin school; Vice - President, Jewel Clifton, Faison school; Secretary, Albert Stroud, B. F. Grady school; Treasurer, William Lee Herring, Historian, William Merritt, Rose Hill.

A committee was selected to decide what would be taken up at the next meetings. The following topics were decided on:

- November - Posture, Health, and Appearance.
- December - Grooming and Health.
- January - Clothing Styles and Colors for the individual.
- February - Clothing needs and budgets.
- March - Home Standards of Living.
- April - Good Manners.

## Hold Leaders School At Kenansville

Miss Mamie Whisman of Raleigh held a leaders school in House Furnishing at the Woman's Club, Kenansville, Wednesday, November 6th. She gave a very helpful, as well as instructive demonstration on slip covers. Seven house furnishing leaders were present.

## Outlaw's Bridge News

The Community Club will meet for the regular monthly meeting in the school building Saturday night. Mrs. Ivey Sutton will be in charge of the program.

Mrs. W. F. Casey of Piney Grove Sampson county visited in the home of her brother, Mr. J. H. Parker last week.

Mr. and Mrs. Sam Price of Grants Chapel and Mrs. M. H. Whitfield and children of Garner's Chapel were visitors with Mr. and Mrs. A. D. Outlaw Sunday.

Mr. B. F. Outlaw spent Saturday night and Sunday with Messrs. George and James Rouse at Liddell.

Among the visitors with Mr. and Mrs. R. G. Maxwell Sunday were Mr. and Mrs. O. P. Johnson and Mrs. Groom of Kenansville, Evander Grady, Misses Myra Maxwell and Goodwin of Wilson and Otis Lee of Mt. Olive.

Mr. and Mrs. Albert Nichols and boys, A. J. and Dennis of Sims and Mr. and Mrs. D. H. Outlaw of Mt. Olive were guests of Mr. and Mrs. J. H. Parker Sunday.

Mr. Otis Lee, Misses Ruth Hinson and Annie Maxwell visited in Goldsboro Sunday afternoon.

Friends will regret to learn that Rev. John T. Fitzhugh, local pastor here continues ill in the Goldsboro hospital.

The Box Party and Hen-pecked Husband Contest Friday night was well attended and enjoyed. Mr. Faison Smith won in the contest and received a prize of one dollar.

The Sunday School is indeed grateful to all who helped to make the evening's entertainment a success.

BUTTON SAVES BOY Toledo, O. - Eddie Hightower, 6, owes his life to a button. As he climbed the stairs to his home, a growler fired a bullet which ricocheted from the button, inflicting only a bruise on his stomach.

NOTICE OF ADMINISTRATION The undersigned having qualified as administrator of the estate of Thomas L. Quinn, deceased, notice is hereby given to all persons having claims against said estate to present the same to the undersigned administrator on or before the 16th day of November, 1935, or this notice will be pleaded in bar of recovery. All persons indebted to said estate are requested to make prompt payment to the administrator.

This 14th day of November, 1935. R. L. QUINN, Administrator of Thomas L. Quinn, Deceased. Dec. 19-35. - pd.

APPLICATION FOR PARDON OF HENRY RODGERS Application will be made to the Governor of North Carolina for the pardon of Henry Rodgers, convicted at the March, 1934 term of the General County Court of Duplin County, for the crime of assault

on female and sentenced to the House for a term of two years. All persons who oppose the granting of said pardon are invited to forward their protest to the Governor without delay. This the 13th, day of November, 1935.

Wm. E. POWELL, Atty for Henry Rodgers. Nov. 21-23 - W. E. P.

NOTICE OF SALE Under and by virtue of the power of sale contained in a certain order of re-sale signed by Hon. Henry A. Grady, resident Judge of the Sixth Judicial District of North Carolina, at Chambers in the City of Clinton, North Carolina, on the 9th day of November, 1935, the undersigned receiver will offer and sell to the highest bidder for cash at the Courthouse Door of Duplin County, Kenansville, North Carolina, on Monday, December 16th, 1935, at the hour of 12:00 o'clock noon, the following described real estate of the Rose Hill Telephone Company, lying and being in the town of Rose Hill, Duplin County, North Carolina, adjoining the lands of W. H. Fussell and others and bounded and described as follows, to-wit:

Situated on the East side of the Wilmington and Weldon Railroad, beginning at a stake, H. Fussell, Jr., and Henry Ward's corner, 55 feet from the center of Main Tract of the A. O. L. R. R., running thence parallel with said A. O. L. R. R. about N. 15 1-8 W. 25 1-8 feet to a stake, opposite the corner of the door way of the Bank of Rose Hill and Rose Hill Telephone Company building; thence as the center of the stairway about N. 74 7-8 E. 50 feet to a stake in the W. H. Fussell line; thence Fussell's line about S. 15 1-8 E. 35 1-8 feet to a stake in Fussell's and

Ward's line; thence their line to the beginning about 1-25 of an acre, except that only 1-25 undivided interest is hereby conveyed in that part of the above described parcel of land lying South of the Bank of Rose Hill and Rose Hill Telephone Company buildings. Advertised this the 9th day of November, 1935. C. M. MILLER, Receiver. Dec. 5th-4t. - N. B. B.

FORECLOSURE SALE Under and by virtue of the power contained in that certain deed of trust executed by Mamie Brown, unmarried, registered in Book 315, at page 274, Registry of Duplin County, North Carolina, default having been made in the payment of the indebtedness thereby secured, the undersigned trustee, will on Monday, December 9th, 1935, at 12:00 o'clock noon, at the courthouse door of Duplin County, Kenansville, N. C., offer for sale to the highest bidder for cash, all that certain tract of land situate near Bowden station, Duplin County, North Carolina, and bounded and described as follows:

All of her right, title and interest in and to that certain tract or parcel of land situate in Duplin County, State of North Carolina, formerly owned by Maloney D. Brown, containing seventy three and one half acres more or less. It being all of the 150 acre tract of land described in deed from Daniel Bowden and wife to Michael Bowden and wife, recorded in Book 33, at page 737, Duplin County Registry, except the part owned by Anne Elizabeth Brown.

This the 8th day of November, 1935. LOTTIE E. LEWIS, Trustee, Box 652, Raleigh, N. C. Dec. 5th-4t. - L. E. L.

HIGHEST CASH PRICE - FOR - CHICKENS AND EGGS Pete Davis BEAUTANCUS MT. OLIVE, RT 2

TIDE WATER POWER COMPANY CONGRATULATES KENANSVILLE UPON ITS SECURING ANOTHER IMPORTANT INDUSTRY, THE PRINTING PLANT OF THE DUPLIN TIMES. THE TIMES IS ALSO TO BE CONGRATULATED -- ON THE EXCELLENCE AND PROGRESSIVENESS OF ITS NEWSPAPER. TIDE WATER WELCOMES THIS INDUSTRY TO ITS SYSTEM IN KENANSVILLE AND IS DEEPLY INTERESTED IN THE PROGRESS OF THE DUPLIN TIMES AND THE TERRITORY IT SERVES.

Camels don't get your Wind. I CAN CERTAINLY BACK THAT UP. I SMOKE CAMELS AS FREQUENTLY AS I LIKE, THEY NEVER GET MY WIND. I LIKE THAT RICH CAMEL FLAVOR TOO. SOMILD ARCHBISHOP E. M. JOHNSON COSTLIER TOBACCOS