

THE UNIVERSITY OF NORTH CAROLINA  
**NEWS LETTER**

The news in this publication is released for the press on receipt.

Published weekly by the University of North Carolina for its Bureau of Extension.

MAY 12, 1920  
CHAPEL HILL, N. C.  
VOL VI, NO. 25  
Editorial Board: E. C. Branson, L. B. Wilson, E. W. Knight, D. D. Carroll, J. B. Bullitt.  
Entered as second-class matter November 14, 1914, at the Postoffice at Chapel Hill, N. C., under the act of August 24, 1912

**AMAZING CROP VALUES PER ACRE**

**COOPERATIVE BUSINESS**

Cooperation as a form of business organization sanctioned by law is young as we go. It is less than three-quarters of a century old in any land, less than thirty years in many lands, less than half a dozen in North Carolina. Yet in every country where cooperative business has been intelligently and faithfully tried out has flourished like a green bay tree. A co-operation is legally distinguished from a corporation by two features: (1) by the one-man-one vote principle of organization and control, and (2) by patronage dividends as well as dividends paid on stock. Every cooperator has one and only one vote no matter how many shares of stock he owns. In a corporation the majority of men is what counts; in a co-operation it is the majority of stock that counts. One capitalizes men, the other capitalizes money. In the second place, the profits of cooperative business go to those who create them, (1) in ratio to the capital stock they own, and (2) in ratio to the use they make of the business as patrons. Thus in a cooperative credit union the dividends are distributed to members according to the amount of money they borrow from it as well as the amount of capital they invest in it; in a corporation the direct profits go to the shareholders alone. Corporation directors who declared patronage dividends would be violators of the law; but cooperation directors would be criminals if they did not declare patronage dividends, if any such dividends were in their treasury.

**Opposed to Socialism**

Another thing: a cooperation is non-political, and wise co-operators never mix politics and business. Cooperation is also social enterprise but co-operators are rarely ever socialists. Intelligent self-interest molds their actions and determines their policies. They are usually home-owning, home-loving people, and they cling tenaciously to the rights of private property ownership. You could never bewitch a true cooperator with the most alluring pictures of nationalized wealth. Violent social or political uprisings are no part of his program. The simple fact is that cooperation is the opposite of both socialism and bolshevism, just as Mr. John Sprunt Hill says. It is not only an opposite but an antidote. This is why we hold to the belief that Russia's 65 thousand cooperatives and 75 million co-operators are the light that will at last salt down her civilization into salvation. In the end they will overthrow both socialism and bolshevism; which by the way is not socialism at individualism gone mad. Co-operators learn slowly and cautiously, but in foreign countries at least they learn thoroughly. Their yearly transactions cover every commodity under the sun, and their operations run into billions. They were seven billions in cooperative credit alone in central Europe the year before the Great War broke out. In our own country the cooperator learns still more slowly. Cooperative business enterprise in many parts of the country is wholly unknown, or known only by hearsay only, or known not as business but as an empty sentiment. America has hardly begun as yet to learn cooperation upon the upper levels of spiritual enterprise.

**Carolina Credit Unions**

However, Cooperative Credit Unions are making notable headway in North Carolina. The first one was organized at Lowe's Grove, Durham county, Dec. 10, 1915, with twelve members. On the seventh day of the following January this credit union had 26 members, had received \$255 paid in on shares, and had total resources of \$1,602. In his statement of Feb. 29, 1920, the superintendent of cooperative enterprise shows that there are now 31 credit unions in North Carolina, with 1198 members. They have paid in \$16,728 on shares, and their total resources are \$87,179. All this in four years. What will the totals be in the next forty years? Feedstuffs, fertilizers, and seed are bought cooperatively by these credit union cooperatives. The farmers' money loaned among themselves for farm improvements and equipments. The total interest rate charged is 6 percent and interest at 4 percent is paid to depositors for the use of their money. These farmer-cooperators do more than borrow and lending. They learn

to trust one another and to deal sagaciously with one another and with outsiders according to approved methods of business. These credit unions are making business men out of our farmers. They learn how to save and to assemble resources, how to organize a credit machinery, and how to market credit among themselves. They learn the value of accounting, of keeping track of what they earn and what they spend. The whole family gets into habits of industry and thrift. The whole neighborhood develops social virtues and habits. Group life grows and flowers graciously in cooperative credit communities. If you doubt it move about a little in the Lowe's Grove or the Valdese communities.—E. N.

**BOOKS FOR BUSINESS MEN**

Daily reports from the Secretary of State show that North Carolina is forming more business corporations than at any time in her history. In order that these business and industrial ventures may be conducted along the best lines, it is important that those who direct their affairs should have the best information available. In many instances a good book written by a skilled business man furnishes the information and experience which leads to business success. In order to be of service to the business men of the state the School of Commerce at the University of North Carolina has prepared the following list of books and suggests that those interested place their order with the local book store in their community or order direct from some such general jobber in New York City as G. P. Putnam's Sons, 2 W. 45th Street, or Baker and Taylor, 354 Fourth Ave. The prices indicated are as of August 1919 and in some instances there may have been an advance since that date.

**Books On Business**

- 1. Business Organization and Management. Robinson—Organizing a Business, La Salle Extension Univ., \$2; Knoepfel—Installing Efficiency Methods, Industrial Management Library, \$3; Jones—The Administration of Industrial Enterprises, Longmans, \$2; Gowin—Developing Executive Ability, Ronald Press, \$3.
- 2. Marketing and Salesmanship. Ivey—Elements of Retail Salesmanship, Macmillan, \$2.25; Fisk—Retail Selling, Harpers, \$1.50; Nystrom—The Economics of Retailing, Ronald Press, \$3.
- 3. Foreign Trade and Exchange. Hough—Practical Exporting, American Exporter, \$4; Escher—Foreign Exchange Explained, Macmillan, \$1.50.
- 4. Business Finance. Lough—Business Finance, Ronald Press, \$4; Ettinger and Golieb—Credits and Collections, Prentice Hall, \$2.
- 5. Business Law. Spencer—Manual of Commercial Law, Bobbs Merrill, \$3.
- 6. Accounting. Paton and Stevenson—Principles of Accounting, Macmillan, \$3.25; Church—Manufacturing Costs and Accounts, McGraw Hill, \$5.
- 7. Advertising. Hess—Productive Advertising, Lippincott, \$2.50; Adams—Advertising and Its Mental Laws, Macmillan, \$1.50.
- 8. Business Statistics. Copeland—Business Statistics, Harvard University Press, \$3.75; Babson—Business Barometers, Babson Institute, \$2.
- 9. Labor and Employment Problems. Leitch—Man to Man, Forbes, \$2; Marot—The Creative Impulse, Dutton, \$1.50; Link—Employment Psychology, Macmillan, \$1.50.
- 10. Office Administration and Practice. Schulze—Office Administration, McGraw-Hill, \$3; Cahill and Ruggeri—Office Practice, Macmillan, \$1.
- 11. Business English. Gardner—Effective Business Letters, Ronald, \$2; Lytle—Letters that Land Orders, Ronald (out of print).
- 12. Business Morals. Page—Trade Morals, Yale University Press, \$1.50; Tarbell—New Ideals in Business, Macmillan, \$1.75.
- 13. General Economics. Clay—Economics for the General Reader, Macmillan (out of print); Ely—Outlines of Economics, Macmillan, \$2.25.
- 14. Business Magazines. System, A. W. Shaw and Co., \$3; Factory, A. W. Shaw and Co., \$5; Industrial Management, Engineering Magazine Co., \$3.

**THE COUNTRY EDITOR**

While we are waking up to the significance of the country school, not only as a means of making good scholars and citizens out of boys and girls, but as a factor in forming the new civilization that is overspreading rural life, we are still lia-

**A MATTER OF RELIGION**

An organized community can be what it wills to be. An unorganized community is in a state of decadence.—Bulletin, Illinois Agricultural College.  
Organized effort is one of the greatest factors in modern civilization; whether we have in mind educational, social, religious, political, or industrial activities.—John Lee Coulter.  
Membership in one body is a fundamental doctrine of religion. It is no less a fundamental doctrine of economics and sociology—and the church must lead men into it. Getting together and pulling together on earth is a preparation for dwelling together in Heaven.—E. C. Branson.

ble to overlook the importance of the country newspaper as an organ of education.

The country editor lives in his community and is visible to his readers. They are his neighbors and friends. He cannot write for his paper sentiments that his community repudiates, and cover his traces with the impersonal and undecipherable smokescreen of the unsigned contribution. In the conduct of his paper he has the same restraints and stimulants that other men have in their private and public relations with their fellow citizens.

Hence it is to the interest of the country editor to keep his paper up to the standard of the community's moral life. And as a matter of fact, every State in the Union has a number of papers edited by men whose thoughtful expressions really carry weight and help to mold opinion in wide areas of population. The nation needs many more.

Every editor should qualify himself for his work by careful consideration of social and economic truths. Our higher schools and our colleges should never forget, in their direction of students to their work in the world, that the profession of the country editor opens signal opportunities to the laudable ambition of men and women writers.—The Public.

**AMAZING VALUES PER ACRE**

The value of crops produced in North Carolina in 1919 averaged \$86.60 per acre. On this basis of comparison, only five states stood ahead of us—New Jersey, Rhode Island, Arizona, Massachusetts, and Connecticut, in the order named. See the table in another column.

Arizona excepted, these are states in the great industrial area of the Northeast. Crop farming is a small detail in the occupational life of these states. Their per acre crop values are high because they are produced in the main by farm specialties—truck crops, fruits and the like. Arizona is an area of irrigated farms with less land in cultivation than in Johnston, Wayne, and Wake counties alone. Its high rank is due for the most part to alfalfa and long staple cotton, which averages a dollar or more a pound. There are nearly twice as many acres under cultivation in North Carolina as in all these five states combined.

**The Leading Crop State**

With these details in mind, we are justified in saying that North Carolina leads the farm states of the Union in the per acre value of farm crops.

We outrank South Carolina our nearest competitor in the South by \$12.00 per acre, Virginia and Kentucky by \$17.00 per acre, Georgia by \$37.00 per acre, and Texas by \$45.00 per acre.

As for the grain, hay and forage states of the Middle West, the best showing is made by Ohio with \$48.39 per acre and the poorest by North Dakota with \$15.35 per acre.

However, it is well to keep in mind the fact that this is an area of livestock farming mainly, and that crop values are there produced with machine power at a relatively low cost per acre. Which means low per acre values, but high per worker values, larger net profits, and greater accumulated farm wealth.

**Why Carolina Leads**

Our high average of per acre crop values is due to the fact that two-thirds of our total crop wealth in 1919 was produced by cotton and tobacco alone—cotton averaging \$70.87 an acre and tobacco \$285.37 an acre. We produce more cotton per acre than any other cotton state in the South, while we rank next to Kentucky in tobacco with 320 million pounds on our score card in 1919. Besides, our peanuts averaged \$91.00 an acre, our sweet potatoes \$134.00, and our cane-syrup crops \$203.00 an acre. The Middle West has no standard farm crop

**COUNTRY HOME CONVENIENCES**

**LETTER SERIES No. 9  
HORSE POWER VS ELECTRIC POWER**

Last week we showed how man-power costs from sixteen to twenty times as much as electric power. That is, when the North Carolina farmer hires a man to do a job that can be done by electric power he pays from sixteen to twenty times as much to get the job done as he would if he hired the universal servant—electricity. But there are a great many jobs that require more horse power than a man is capable of exerting, jobs that require a good strong horse or a mule. Let us see, therefore, how horse power compares with electric power.

When an engineer has to make a comparison between two kinds of power there are three things that he must consider, namely, first cost, depreciation, and cost of operation. Suppose we apply these to the case of horse vs electricity. Now the average North Carolina farm horse can work at the rate of only about two-thirds of a mechanical horsepower, perhaps a little less, certainly not much more. Such a horse would cost today about \$300; whereas a three-quarter horsepower electric motor would cost only about \$50.

A fair estimate of the life of an electric motor would be twenty years, requiring an annual charge to cover depreciation of say five per cent of the first cost. Likewise a fair estimate of the useful life of a horse would probably be about twelve years necessitating an annual charge of say eight per cent for depreciation. It will cost the farmer, therefore, for interest and depreciation alone fourteen per cent on \$300 or \$42 per year just for the privilege of owning a two-thirds-horse power horse. It will cost him eleven per cent on \$50 or \$5.50 per year for the similar privilege of owning a three-quarter horsepower electric motor.

Now when it comes to the cost of operation we immediately run across one striking, fundamental difference. Horse fuel must be fed to a horse just the same whether he works or not, while the elec-

tric motor consumes electric fuel only when it is actually doing work. Taking it by and large, a reasonable estimate of the actual working time of a farm horse would be not far from one hundred hours per month, or around two-fifths of the time of the work year. Assuming that the horse works these one hundred hours at full capacity, the farmer would then get in one year 800 horsepower hours or about 600 kilowatt hours of work out of his two-thirds horsepower horse. During this time it would cost him, at present farm prices of feed stuff in North Carolina \$168 a year for the fuel consumption of the horse. This same 600 kilowatt hours of work could be done by an electric motor, with electricity costing ten cents per kilowatt hour, for about \$80—allowing for the efficiency of the motor.

The case of horse vs electricity therefore stands as follows:

	Horse	Electric Motor
Interest and Depreciation	\$42.00	\$5.50
Fuel Consumption	\$168.00	\$80.00
Total cost per year	\$210.00	\$85.50

The lesson to be drawn from this comparison is this: wherever electric power can be applied to do the jobs for which horses have always been used, the work can be done for less than half of the cost if electricity can be obtained for ten cents per kilowatt hour. We don't for a moment want to imply that electric power can completely replace horse power on the farm; we don't for a moment want to imply that the electric motor will do the horse on the farm what the automobile has done for him on the city streets. But when native American genius really gets to work on some of the industrial problems of the farm as it has on the industrial problems of the city, who can really say where the line will finally be drawn between horse power and electric power?—P. H. D.

that will begin to compare with these in gross yields per acre.

We have indeed such an advantage over the middle western farmers in our soils and seasons, in the high per acre value of our standard farm crops, and in our livestock possibilities, that if ever we balance up our farm systems sanely, we shall be the richest agricultural area on the globe.

**Twenty Year Gains**

Our gross crop values in 1919 were 683 million dollars or \$86.60 per acre average. Twenty years ago our gross crop total was only 69 millions and the per acre average was only \$8.24. Here is a ten fold gain in twenty years! Which means that North Carolina is striding forward in the seven league boots of the fabled giant. It means better seeds, fewer acres per farm worker, and immensely improved tillage, along with the price levels produced by the war.

Inflated prices for farm products are likely to last for many years to come, in our opinion. But meanwhile the decrease

in farm labor calls for larger farms, more improved farm machinery, more work-stock per farm, more acres not fewer per farmer, more and better meat and milk animals, and a better balance between crop farming and livestock farming.

Otherwise we are not likely to cash in our largest agricultural possibilities, and to hedge safely against the boll weevil and the falling prices that are inevitable in the days ahead.

Prudent farmers in North Carolina will foresee approaching evils and find a way of escape; foolish farmers will be as heedless as usual and will pass on into punishment. Foresight is rare, hind-sight is the rule. Opportunity must be seized by the forelock, not the fetlock, on the farm as everywhere else.

This study concludes for the present the wealth studies of North Carolina that have been running in the University News Letter during the last six weeks or so. They will be resumed just as soon as we can get advance sheets of the Industrial Census of 1919.

**GROSS CROP VALUES PER ACRE IN 1919**

Based on Reports of the United States Department of Agriculture  
Miss Henrietta R. Smedes

Department of Rural Social Science  
University of North Carolina  
Per acre average for the United States, \$42.82. For North Carolina, \$86.60

Rank	State	Value	Rank	State	Value
1	Connecticut	\$128.81	25	Delaware	\$48.87
2	Massachusetts	123.69	26	Oregon	48.79
3	Arizona	103.40	27	Ohio	48.39
4	Rhode Island	103.10	28	Nevada	47.30
5	New Jersey	90.16	29	Louisiana	46.77
6	North Carolina	86.60	30	Utah	46.04
7	California	78.36	31	Wisconsin	45.44
8	South Carolina	74.48	32	Michigan	45.28
9	New Hampshire	70.63	33	Texas	41.55
10	Virginia	69.56	34	Colorado	40.70
11	Kentucky	69.20	35	Indiana	39.80
12	Maine	65.44	36	Iowa	39.63
13	West Virginia	64.08	37	Alabama	39.60
14	Florida	63.29	38	Illinois	38.27
15	Mississippi	61.29	39	Oklahoma	36.44
16	New York	59.43	40	Missouri	35.15
17	Maryland	57.41	41	Wyoming	33.70
18	Pennsylvania	56.01	42	New Mexico	32.83
19	Arkansas	54.32	43	Minnesota	30.93
20	Vermont	52.50	44	Nebraska	28.57
21	Idaho	50.66	45	Kansas	26.96
22	Washington	50.49	46	South Dakota	21.02
23	Tennessee	50.18	47	Montana	16.99
24	Georgia	49.51	48	North Dakota	15.35