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SOME EFFECTS OF THE WAR UPON THE FARM LABOR  
SITUATION IN NORTH CAROLINA

by

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In Cooperation with

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Agricultural Economics of the United States Department  
of Agriculture

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Farm labor policies during wartime must be based upon facts--systematically collected and analyzed rather than upon rumors or upon publication of exceptional cases. The state and national departments of agriculture, working in close cooperation with the North Carolina Agricultural Experiment Station, made a systematic statewide sample survey of the farm labor situation during May of this year. In addition to collecting data on agricultural employment and wages, these agencies also obtained information relative to the number of men and boys who had left farms between December 1, 1941, and May 1, 1942, in order to enter military service, or to enter nonagricultural employment. It is the purpose of this report to summarize the results of this part of the survey. Other facts obtained from the survey have been published by the state and federal departments of agriculture.

50,000 MEN AND YOUTHS LEAVE FARMS

Between December 1, 1941, and May 1, 1942, approximately 50,000 men and boys left the farms of North Carolina. This movement is at the rate of 10,000 each month and is very likely continuing even now. About 44 percent of those leaving entered some branch of the armed forces and the remainder entered upon some nonagricultural occupation.

These 50,000 wartime migrants constituted about 9 percent of all males above 14 years of age on farms and 10.5 percent of those between 14 and 65 years of age. The single men between 20 and 45 accounted for 28,000 migrants; and about two-thirds of these single men went into the armed forces. During the five-month period, at least 29 percent of single men of draft age living on farms December 1, 1941, migrated--19 percent going to the armed forces and 10 percent to nonagricultural employment.

Other age groups were less affected. Only 8,000 married men 20-44 left farms, and only one-tenth of these went into military service. These married men constituted a little less than 5 percent of the available men in that class. The youngsters, 14-19 years of age, made up 12,300 of the migrants, but only 3,600 of these went into military service--the remainder going into some defense industry

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- 1/ A special report of the North Carolina Agricultural Experiment Station, North Carolina State College of Agriculture and Engineering, University of North Carolina, Raleigh, N. C.  
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or some other nonagricultural work. These 14-19 youths made up 9.5 percent of the farm labor supply in that class.

Only 1,600 of the migrants were from 45-65 years of age; and these constituted only 1.4 percent of the available workers in that population group. None of these entered the armed services. The oldest group, above 65 years of age, contributed a negligible number, less than 100, to the migration, and of course none of these went into the armed forces.

The following table summarizes all of the above facts and presents at the same time some additional details.

	Grand Total	Age Groups				
		14-19	20-44		45-64	65-up
			single	married		
Men and boys living on farms April 1, 1940						
Total (1940 Census)	559,869	130,061	96,250	170,328	121,286	41,944
Men and boys leaving farms December 1, 1941-May 1, 1942						
Total	49,868	12,342	27,697	8,116	1,647	66
For armed forces	22,083	3,571	17,721	791	0	0
For non-farm work	27,785	8,771	9,976	7,325	1,647	66
Percent of men and boys leaving farms						
Total	8.9	9.5	28.8	4.8	1.4	0.2
For armed forces	3.9	2.8	18.4	.5	0.0	0.0
For non-farm work	5.0	6.7	10.4	4.3	1.4	0.2

### CONCLUSIONS

The facts just presented reveal only a part of the farm labor picture. Obviously the male farm labor supply is being rapidly depleted. As the war continues, farm labor shortages are expected to become more serious. As for the present, farmers are attempting to meet the emergency by using more family labor. Farm women, younger boys and girls, as well as the aged are playing and must play an increasing part in meeting farm labor shortages. Recent surveys by the U. S. Department of Agriculture show that women and girls already make up over 20 percent of the farm laborers on North Carolina farms--and furthermore that this group is increasing steadily.

Not only are farmers feeling the loss of family labor, but they are finding it more and more difficult to obtain wage workers from nearby towns and cities, particularly during the harvest seasons. Farm wage rates are steadily rising and constitute another index of decreasing labor supply. The increasing cost and scarcity of farm labor is leading to a higher cost of producing farm products on the one hand and possibly decreased production in some areas. If present tendencies continue, as they most surely will, there will be need for more drastic action on the part of the government in meeting farm labor shortages,

particularly during harvest seasons. Failure to take such action may lead to further pressure for increasing farm prices and hence inflation.

## APPENDIX

### A Note on Method

The data for this study of North Carolina rural male population were taken from a recent farm labor enumeration conducted jointly by statisticians of the Bureau of Agricultural Economics of the U. S. D. A. and the N. C. State Department of Agriculture. Aerial photographs used in the selection of sample farms and descriptive data for the sample farms were made available by the state AAA office.

The Sample: Each county in the state was first divided into zones on the basis of farm population and acres of land planted in crops. Each zone was then divided into sections two miles square, and from two to six of these were chosen at random from each zone. From each section a sample group of five adjacent farms was chosen to represent the area; three farms were used in the sample and the remaining two were used as alternates. This procedure yielded approximately two percent of the total number of farms in the state.

The five farms from each section were ranked in order without regard to their characteristics for sampling purposes and the first three were enumerated; the remaining two were used as alternates in case the enumerator was unable to contact one of the first three farms.

Enumeration: This job was greatly simplified for the enumerator since the exact identification and location of the farms could be determined with the aid of the aerial photographs available. The questionnaire used by the enumerators included one group of items on the number of males living on the farm and whether they were working on or off the farm. A second group of items investigated the number of males leaving the farm between December 1, 1941, and May 1, 1942, for the armed forces or for nonagricultural work. Both groups of items were cross-classified by the selected age groups.

Estimates: The usual procedure for making population estimates is to compute an average for the sample data on a "per farm" or "per acre cropland" basis or the like, and then multiply that average by the total number of sampling units. In this sample the "per farm" average was found to be larger than the state average. In order to correct for differences in farm size, an adjusted "per farm" average on a population basis was used. This is known as the regression method and is applied by taking into account the relationship between the number of persons living on a farm and the cropland in the farm.<sup>1/</sup>

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<sup>1/</sup> A method for making this adjustment is described in an unpublished manuscript by Walter A. Hendricks, Agricultural Statistician, B. A. E., U. S. D. A.

Accuracy of the Results: It is interesting to note the close agreement between Table II, based on this survey, and Table I, taken from the U. S. Census of Population, 1940, though the figures are not exactly comparable because of the two-year interval between the populations represented.

The accuracy of the results of this survey may be attributed in no small degree to the loyal cooperation and efficient work of the local enumerators employed, under the direction of the Crop Reporting Service, by the Agricultural Marketing Service of the U. S. Department of Agriculture.

Conclusion: The study procedure just described can be used wherever there is available supplementary information for use as a base for expansion. Possible sources for this material include the U. S. and state Censuses, AAA data or assessor's data. This study demonstrates the possibilities of sample censuses covering a wide range of subject matter.

TABLE I.

Male Population on North Carolina Farms April 1, 1940, by Age and Crop-Reporting Districts\*

Crop-Reporting Districts	Total	Age Group			
		14-19	20-44	45-64	65-over
State	559,869	130,061	266,578	121,286	41,944
District 1	45,041	10,201	20,787	9,882	4,171
District 2	79,675	18,282	37,704	17,381	6,308
District 3	66,939	16,125	32,380	14,001	4,533
District 4	72,169	15,911	33,118	16,564	6,576
District 5	64,016	14,705	28,818	14,979	5,514
District 6	75,074	17,241	38,626	14,960	4,247
District 8	65,107	15,981	29,819	14,420	4,887
District 9	91,848	21,595	45,426	19,099	5,728

\* Sixteenth Census of U. S., Population, Second Series, Characteristics of the Population, N. C.--1940

TABLE II.

Male Population on North Carolina Farms May 1, 1942 by Age and Crop Reporting Districts

Crop Reporting Districts & Type of Work	Total	Age Groups					
		14-19	20-44			45-64	65-over
			total	single	married		
State: total	541,430	131,133	243,618	73,194	170,424	130,182	36,497
In farm work	461,471	115,936	203,457	57,764	145,693	116,603	25,475
In non-farm work	53,283	8,658	33,654	12,450	21,204	9,414	1,557
Others	26,676	6,539	6,507	2,980	3,537	4,165	9,465
District 1: total	40,247	7,343	17,726	4,403	13,323	11,803	3,375
In farm work	35,064	6,481	15,017	3,441	11,576	11,151	2,415
In non-farm work	3,204	425	2,127	585	1,542	547	105
Others	1,979	437	582	377	205	105	855
District 2: total	86,081	21,477	37,757	12,928	24,829	20,914	5,933
In farm work	72,465	19,305	30,892	10,009	20,883	18,201	4,067
In non-farm work	8,496	1,257	5,480	2,438	3,042	1,470	289
Others	5,120	915	1,385	481	904	1,243	1,577
District 3: total	56,761	17,236	23,889	8,913	14,976	12,152	3,484
In farm work	51,239	15,956	21,398	7,820	13,578	11,547	2,338
In non-farm work	2,327	322	1,582	661	921	238	185
Others	3,195	958	909	432	477	367	961
District 4: total	72,254	17,244	30,623	10,685	19,938	21,065	3,322
In farm work	54,044	12,677	22,052	6,413	15,639	17,760	1,555
In non-farm work	12,305	1,873	7,377	3,448	3,929	2,612	443
Others	5,905	2,694	1,194	824	370	693	1,324
District 5: total	59,949	13,356	25,210	7,891	17,319	16,200	5,183
In farm work	49,482	11,156	19,777	5,848	13,929	14,206	4,343
In non-farm work	8,714	1,954	4,995	1,831	3,164	1,689	76
Others	1,753	246	438	212	226	305	764
District 6: total	68,739	15,885	34,711	8,503	26,208	13,986	4,157
In farm work	62,428	14,950	31,666	7,683	23,983	12,711	3,101
In non-farm work	3,396	342	2,376	728	1,648	597	81
Others	2,915	593	669	92	577	678	975
District 8: total	60,426	13,713	27,022	7,307	19,715	14,461	5,230
In farm work	49,206	12,240	20,919	5,619	15,300	12,653	3,394
In non-farm work	8,296	1,239	5,572	1,407	4,165	1,306	179
Others	2,924	234	531	281	250	502	1,657
District 9: total	96,973	24,879	46,680	12,564	34,116	19,601	5,813
In farm work	87,543	23,171	41,736	10,931	30,805	18,374	4,262
In non-farm work	6,545	1,246	4,145	1,352	2,793	955	199
Others	2,885	462	799	281	518	272	1,352

TABLE III.

Number of Males Leaving North Carolina Farms between December 1, 1941,  
and May 1, 1942, by Age and Crop Reporting Districts

District and Destination	Total	Age Groups					
		14-19	20-44			45-64	65-over
			total	single	married		
State: total	40,868	12,342	35,813	27,697	8,116	1,647	66
For Armed Forces	22,083	3,571	18,512	17,721	791	0	0
For Non-Agric. Work	27,785	8,771	17,301	9,976	7,325	1,647	66
District 1: total	3,537	992	2,324	1,742	582	221	0
For Armed Forces	1,506	246	1,260	1,119	141	0	0
For Non-Agric. Work	2,031	746	1,064	623	441	221	0
District 2: total	8,935	1,785	6,823	5,223	1,600	327	0
For Armed Forces	3,692	412	3,280	3,200	80	0	0
For Non-Agric. Work	5,243	1,373	3,543	2,023	1,520	327	0
District 3: total	4,294	1,253	2,950	2,382	568	91	0
For Armed Forces	1,735	276	1,459	1,421	38	0	0
For Non-Agric. Work	2,559	977	1,491	961	530	91	0
District 4: total	7,451	1,576	5,652	4,673	979	223	0
For Armed Forces	3,389	471	2,918	2,744	174	0	0
For Non-Agric. Work	4,062	1,105	2,734	1,929	805	223	0
District 5: total	6,320	1,293	4,492	3,410	1,082	479	56
For Armed Forces	3,077	462	2,615	2,559	56	0	0
For Non-Agric. Work	3,243	831	1,877	851	1,026	479	56
District 6: total	5,160	1,759	3,218	2,335	883	173	10
For Armed Forces	2,512	847	1,665	1,563	102	0	0
For Non-Agric. Work	2,648	912	1,553	772	781	173	10
District 8: total	5,308	1,449	3,743	2,595	1,148	116	0
For Armed Forces	1,979	208	1,771	1,622	149	0	0
For Non-Agric. Work	3,329	1,241	1,972	973	999	116	0
District 9: total	8,863	2,235	6,661	5,337	1,274	17	0
For Armed Forces	4,193	649	3,544	3,493	51	0	0
For Non-Agric. Work	4,670	1,586	3,067	1,844	1,223	17	0