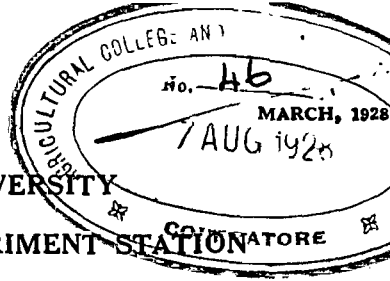


MOIR 111



CORNELL UNIVERSITY  
AGRICULTURAL EXPERIMENT STATION

A POPULATION STUDY OF THREE TOWNSHIPS  
IN CORTLAND COUNTY, NEW YORK

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In 1923-24 a survey of sickness in farm and village homes was made in the three townships of Willet, Virgil, and Harford, in Cortland County, New York (figure 1).<sup>1</sup> Incidental to this survey many facts concerning the composition of the farm and village population of these townships

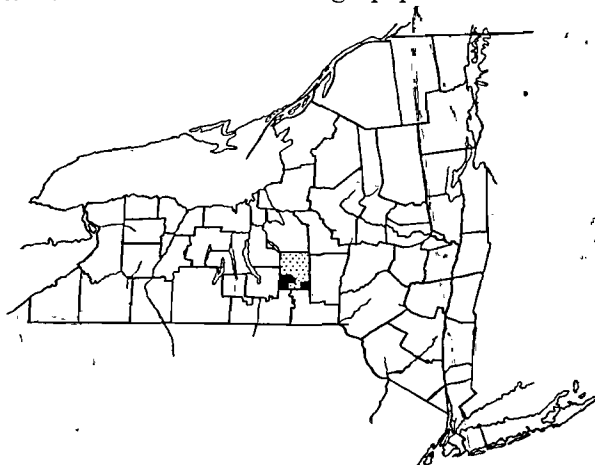


FIGURE 1. LOCATION OF TOWNSHIPS STUDIED

were obtained. Inasmuch as most of these data are not tabulated by either the federal or the state censuses, and particularly inasmuch as no population data are available for unincorporated villages, these facts are now published as a contribution toward a better understanding of the human composition of the rural community. Important differences are shown between the farm and the village population, which must have an important effect on the local problems of social organization.

These townships include the four unincorporated villages of Willet, Virgil, Harford, and Harford Mills, having 158, 134, 85, and 69 inhabitants respectively, and the hamlet of Messengerville with 31 inhabitants,

<sup>1</sup> This is reported in Memoir 112 of this experiment station, and includes observations on the economic status and the standard of living of the population of these townships.

included in the village population of the township of Virgil. The total number of persons on farms was 1357, and the number in other country houses was 226, making a total of 1583, or 77 per cent, living outside of villages, and 23 per cent in villages.

## AGE DISTRIBUTION

The distribution of the population by age periods for the three townships shows some facts of considerable significance for an understanding of rural society in central New York. The most important point is the difference between the age distribution in the villages and in the open country. This is given in detail in table 1, is summarized in table 2, and is shown graphically in figures 2 and 3. It will be noted that the farms have nearly twice the percentage of children under five years, and only half the percentage of persons over 65 years, as the villages. Only

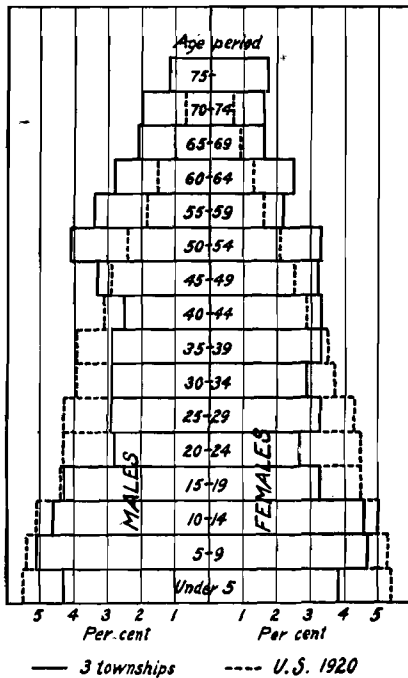


FIGURE 2. AGE AND SEX DISTRIBUTION OF THE POPULATION OF THREE TOWNSHIPS IN CORTLAND COUNTY, NEW YORK, COMPARED WITH THE SAME FOR THE TOTAL POPULATION OF THE UNITED STATES, 1920

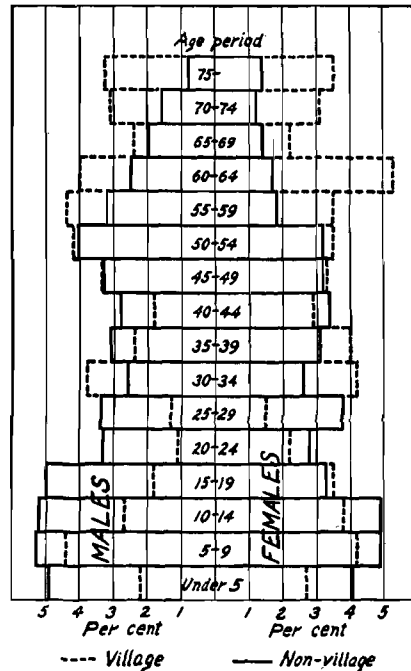


FIGURE 3. AGE AND SEX DISTRIBUTION OF THE VILLAGE AND NON-VILLAGE POPULATION OF THREE TOWNSHIPS IN CORTLAND COUNTY, NEW YORK, 1923-24

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TABLE 1. POPULATION OF WILLET, VIRGIL, AND HARFORD TOWNSHIPS BY AGE PERIODS\*

Age period (years)	In villages						Outside villages						Total					
	Male		Female		Total		Male		Female		Total		Male		Female		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
90-.....	1	0.2	1	0.2	2	0.4	2	0.1	1	0.1	3	0.2	3	0.1	2	0.1	5	0.2
85-89.....	3	0.7	3	0.7	6	1.3	3	0.2	1	0.1	4	0.3	5	0.2	2	0.1	7	0.3
80-84.....	9	2.0	11	2.4	20	4.3	2	0.1	15	0.8	18	1.2	15	0.7	9	0.4	14	0.7
75-79.....	14	3.1	14	3.1	28	6.2	5	0.4	12	0.6	17	1.2	39	2.0	23	1.1	38	1.9
70-74.....	11	2.4	10	2.2	21	4.7	25	1.6	19	1.2	44	3.4	39	2.0	33	1.6	72	3.6
65-69.....	18	4.0	24	5.2	42	9.3	39	2.0	22	1.4	65	4.2	42	2.1	32	1.6	74	3.7
60-64.....	20	4.2	16	3.5	36	7.8	49	3.2	28	1.6	77	5.0	57	2.8	50	2.5	107	5.3
55-59.....	15	3.3	15	3.3	30	6.6	35	2.0	30	1.6	65	4.6	44	2.2	44	2.2	113	5.6
50-54.....	18	3.8	13	2.9	31	6.7	51	3.3	50	3.2	100	6.5	60	3.3	66	3.3	149	7.4
45-49.....	11	2.4	13	2.9	24	5.3	43	2.8	38	2.4	86	6.2	51	2.5	66	3.3	130	6.5
40-44.....	17	3.8	19	4.2	36	8.0	48	3.1	48	3.4	96	7.2	59	3.3	66	3.3	117	5.8
35-39.....	17	3.8	19	4.2	36	8.0	45	2.6	40	2.9	81	7.2	58	2.9	59	2.9	117	5.8
30-34.....	5	1.1	7	1.5	12	2.6	13	0.7	13	0.8	26	1.9	11	0.6	12	0.6	27	1.3
25-29.....	8	1.8	10	2.2	18	3.9	21	1.2	15	0.9	36	2.6	23	1.2	26	1.3	59	2.9
20-24.....	12	2.7	16	3.5	28	6.3	33	1.8	24	1.4	57	4.2	33	1.7	37	1.8	70	3.5
15-19.....	20	4.4	19	4.2	39	8.6	58	3.2	51	3.0	109	8.1	66	3.5	67	3.3	135	6.6
10-14.....	5	1.1	7	1.5	12	2.6	13	0.7	13	0.8	26	1.9	11	0.6	12	0.6	27	1.3
5-9.....	20	4.4	19	4.2	39	8.6	58	3.2	51	3.0	109	8.1	66	3.5	67	3.3	135	6.6
Under 5.....	10	2.2	12	2.7	22	4.9	32	1.7	26	1.5	58	4.2	32	1.6	38	1.8	70	3.5
Unknown.....	15	.....	11	.....	26	.....	23	.....	10	.....	33	.....	40	.....	21	.....	61	.....
Total.....	224	46.3	253	53.7	477	100.0	848	53.2	735	46.8	1,583	100.0	1,072	51.6	988	48.4	2,060	100.0

\* Percentages are based on the totals excluding those of unknown age.

TABLE 2. SUMMARY OF POPULATION OF WILLET, VIRGIL, AND HARFORD TOWNSHIPS BY AGE PERIODS\*

Age period (years)	In villages		Outside villages		Total	
	Number	Per cent of total	Number	Per cent of total	Number	Per cent of total
Under 5.....	22	4.88	140	9.04	162	8.10
5-19.....	92	20.40	443	28.62	535	26.76
20-44.....	114	25.28	479	30.94	593	29.66
45-64.....	143	31.71	356	23.00	499	24.96
65.....	80	17.74	130	8.40	210	10.50
Unknown.....	26	.....	35	.....	61	.....
Total.....	477	23.16	1,583	76.84	2,060	100.00

\* Percentages are based on the totals excluding those of unknown age.

23 per cent of the farm people are between the ages of 45 and 65, whereas 31.7 per cent of the villagers are of this age period. On the other hand, the farms have 13.88 per cent more of the population between the ages of 5 and 45 than have the villages. Practically 50 per cent of the population of the villages are over 45 years of age, and only 25 per cent are under 20 years. The farms have half again the percentage of persons under 20 years as have the villages, and the villages have half again the percentage over 45 years as have the farms.

In these townships the villages are resorts for the aged, and the farms are the homes of childhood and youth. As the institutions of the community are in the villages, where the villagers are aggregated, the latter exert a strong influence on these institutions and on community activities. It seems obvious that this concentration of the aged in the villages must have a very important influence on the social life of these rural communities. The nature and extent of this influence of the preponderance of the old people in the small villages is a matter for detailed sociological investigation, but the population statistics furnish a strong presumption that it exists.

In a study of the distribution of village population in New York State, Dr. B. L. Melvin has found that one-half of the villages in New York have a population of from 50 to 250. These small villages are the centers of the larger part of our rural communities, and are therefore the most important social units involved in the whole problem of rural social organization.

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The question arises as to whether the differences of distribution of population between the villages and the open country found in these three townships are typical or abnormal. The writer knows of no similar statistical data which separate the population of unincorporated villages and open country by age groups.

In an appendix of Dr. Fry's *American Villagers*,<sup>2</sup> L. S. Cressman has shown that the number of male children under 15 years of age in the open country exceeds that of the villages studied in the Middle Atlantic States by 11.3 points, and the number of female children by 10.1 points. But those data are based on thirty-three villages in New York, Pennsylvania, and Maryland with an average population of 1098, and the "open country" includes not only the farms but all the unincorporated villages. Those data show also that the proportion of persons over 45 years of age is much larger in the villages than in the open country. Mr. Cressman's data are summarized in table 3, which shows that there is more

TABLE 3. NATIVE-BORN WHITE POPULATION BY SEX, FOR VILLAGES AND OPEN COUNTRY IN THE MIDDLE ATLANTIC STATES\*

Age period	Male		Female	
	Village (per cent)	Open country† (per cent)	Village (per cent)	Open country† (per cent)
45-64 years.....	10.8	7.3	12.8	4.8
65 years and over.....	4.8	1.9	6.2	1.1

\* From Tables XIII and XIV, Appendix C, page 163, *American Villagers*.

† "Open country" includes all rural population outside incorporated villages.

than twice as large a percentage of persons over 45 years of age (total 34.6 per cent) in the villages as in the "open country" (total 15.1 per cent) as defined in that study. The general tendency toward an excess of children in the open country and of old persons in the villages, seems, therefore, to be clearly established for the Middle Atlantic States.

That the same general differences of age distribution between small villages and farms are common in central New York is shown by the data given in table 4, in which the three townships in Cortland County are compared with two townships in the adjoining county of Tompkins. The three villages in Tompkins County average 375 inhabitants, while the four studied in Cortland County average but 111. In the three villages of Dryden, Slaterville, and Brooktondale,<sup>3</sup> the percentage of

<sup>2</sup> Appendix C of *American Villagers*, by C. Luther Fry (1926), Table XI, page 162.

<sup>3</sup> The higher percentage of children under five years of age in Brooktondale may be due to the fact that in this village there are a number of families of railroad men and of men who work in the city of Ithaca.

TABLE 4. DISTRIBUTION OF POPULATION BY AGE PERIODS IN VILLAGES AND IN THE OPEN COUNTRY, IN CORTLAND AND TOMPKINS COUNTIES

(In percentages)

Age period (years)	In villages				Outside villages		
	3 town- ships, Cortland County	Dryden*	Slater- ville†	Brook- tondale†	3 town- ships, Cortland County	Dryden*	Caroline†
Under 5.....	4.9	6.0	8.1	9.0	9.0	9.1	10.4
5-9.....	8.6	7.0	9.9	5.8	10.1	8.4	10.0
10-14.....	6.4	7.6	7.5	7.6	10.0	10.2	9.6
15-19.....	5.3	7.6	5.6	6.9	8.2	9.1	7.8
Total 5-19.....	20.3	22.2	23.0	20.3	28.3	27.7	27.4
20-24.....	3.3	5.8	6.2	7.9	6.1	5.2	7.1
25-34.....	10.7	11.7	12.4	9.9	12.3	11.8	11.2
35-44.....	11.1	12.0	11.1	10.4	12.4	11.1	9.5
Total 20-44.....	25.1	29.5	29.7	28.2	30.8	28.1	27.8
45-64.....	31.7	23.9	23.7	23.5	22.9	23.8	25.4
65-.....	17.7	18.6	15.6	18.7	8.4	11.3	9.0
Population.....	477	687	161	277	1,257	671	939

\* From manuscript of thesis of Gladys M. Kensler (1926), based on personal tabulation of returns of New York State Census, 1925.

† From manuscript of thesis of Glenn A. Bakkmum (1927), based on personal survey.

children under 5 years of age is considerably larger than in the four Cortland County villages, but the percentage under 20 years and the percentage over 65 years is practically the same, while the percentage of adults between 45 and 64 years is much higher in the Cortland County villages. On the other hand, the percentage of distribution of the population outside the villages is practically the same in the townships of both counties.

Another check on whether the age distribution of these four townships is typical or abnormal is furnished by applying their percentages to the other non-incorporated villages and country population of Cortland County, and then determining the percentages of the total non-incorporated population in each age period and comparing them with the percentage tabulated by the United States Census for 1920. Such an estimate has been made and is given in column 8 of table 5,<sup>4</sup> which should be compared with column 2 of the same table.

<sup>4</sup> This estimate was made as follows: The fourteenth United States Census shows the population of the city of Cortland and three incorporated villages to be 17,252. From estimates of the population of the non-incorporated villages of Cortland County obtained by Dr. B. L. Melvin, their total was estimated at 2272. Deducting these from the total population of the county, 29,825, gives a non-village population of 10,101. The number of persons in each age group of the villages (2272) was estimated on the basis of the percentages given in column 2, table 4, and for the non-village population (10,101) on the basis of the percentages in column 6, table 4. The numbers of village and non-village population for each age period were then added, and the number for each age period was divided by the total non-incorporate population, 12,373, giving an estimated age-period percentage of the total non-incorporate population based on the assumption that the age distribution is the same for the rest of the county as for the three townships.

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TABLE 5. COMPARISON OF DISTRIBUTION OF POPULATION BY AGE PERIODS IN CORTLAND COUNTY  
(In percentages)

Age period (years)	Cortland County, non-in- corporate, 1920*	Willet, Virgil, and Harford townships†			Cortland, city		Cortland County, non-in- corporate, estimate‡
		Total	Non- village	Village	1915‡	1920§	
Under 5.....	9.0	8.1	9.0	4.9	7.7	8.4	8.2
5-9.....	9.3	9.9	10.1	8.6	.....	.....	10.1
10-14.....	8.8	9.0	10.0	6.4	.....	.....	9.3
15-19.....	7.7	7.6	8.3	5.3	.....	.....	7.7
Total 5-19.....	25.8	26.5	28.4	20.3	21.9	21.9	27.1
20-24.....	6.7	5.5	6.1	3.3	.....	.....	5.5
25-34.....	13.8	12.1	12.3	10.7	.....	.....	12.0
35-44.....	12.6	12.1	12.4	11.1	.....	.....	12.2
Total 20-44.....	33.1	29.7	30.8	25.1	43.0	38.1	29.7
45-64.....	22.7	25.0	22.9	31.7	20.4	..... ¶	24.7
65-.....	9.6	10.5	8.4	17.7	6.8	..... ¶	9.9

\* Excluding city and incorporated villages. United States Census, 1920. Specially tabulated for New York State Department of Health. "Non-incorporate" includes data for all persons not residing in cities or incorporated villages.

† Writer's survey, 1923-1924.

‡ New York State Census, 1915, special tabulation for New York State Department of Health.

§ United States Census, 1920.

¶ For method of computation, see footnote on page 8.

¶ Not separated.

The extent to which the percentages in these two columns disagree indicates in a rough way the deviation of the age distributions in the three townships studied, from those for the rest of Cortland County. This shows that the percentage of children under 5 years is below that for the county, due to the few of this age in the four villages, but that the total percentages of the ages 5 to 19, 45 to 64, and over 65, are practically the same (the percentage of those under 10 years is identical—18.3), while the percentage between 20 and 44 is lower than the actual rate.

Correlating this check with the data for the Tompkins County villages (table 4), it seems safe to assert that the percentages of children under 5 and of persons between 20 and 44 in the four villages studied, are 2 or 3 points lower than for other villages of similar size in Cortland County, but that percentages for the non-village population of the three townships are about the same as for the rest of the county, except that they are smaller for the ages 20 to 44. The percentage of persons over 65 years (9.9) is, however, practically the same, and this, with the evidence from the Tompkins County villages, shows that the larger percentage of



old people in the villages is usual in agricultural villages of this size in these counties.

A further comparison showing the excess in the number of persons over 65 years of age in these townships is given in table 6, in which the population of this age is compared with that in the Middle Atlantic States and with that in larger villages.

TABLE 6. PERCENTAGE OF POPULATION 65 YEARS OF AGE AND OVER IN THREE TOWNSHIPS OF CORTLAND COUNTY AND IN THE MIDDLE ATLANTIC STATES

	In incorporated villages			In the open country *			In small villages			Outside villages		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Cortland County	....	....	....	5.3	4.9	10.2	8.4	8.4	16.8	4.3	3.9	8.2
Middle Atlantic States†	4.8‡	6.2‡	11.0‡	1.9	1.1	3.0	....	....	....	....	....	....

\* "Open country," in Cressman's classification (*American Villagers*, pages 157 to 159), includes all rural population outside incorporated villages.

† Cressman in Appendix C of *American Villagers*, by C. Luther Fry, Table XIV, page 163.

‡ Thirty-three villages with an average population of 1098.

The chief value of these figures, however, is in revealing the marked difference between the age groupings of the population in small villages and on farms, and the desirability of an accurate study of census data for several counties to determine whether this difference is usual for small agricultural villages. Hitherto no evidence has been available on this aspect of the population composition of rural communities. If we are to have any correct understanding of rural society, these basic facts are essential.

#### AGES OF FARMERS AND THEIR WIVES

The ages of the farm operators and their wives for 320 of the 357 farms in the three townships studied, are given in table 7. (This does not include single or widowed operators.) The age period 50-54 years has the largest percentage of males and the period 40-44 years the largest percentage of females, the mean age of the males being 49.2 years and of the females 44.4 years. There are more farm operators over 60 years of age (22.8 per cent) than under 35 years (17.8 per cent). About 60 per cent of the operators are between 35 and 60 years of age.

#### SEX

In the four villages, 47 per cent of the population are males and 53 per cent are females, while outside the villages the reverse is true and 53.6 per cent are males and 46.4 per cent are females; in other words, the ratio of males to females in the villages is 88.7 to 100, and outside the villages is 115.5 to 100.

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TABLE 7. AGES OF FARM OPERATORS AND THEIR WIVES IN WILLET, VIRGIL, AND HARFORD TOWNSHIPS

Age period (years)	Male		Female	
	Number	Per cent	Number	Per cent
15-19.....	..	....	4	1.2
20-24.....	8	2.5	12	3.7
25-29.....	22	6.9	41	12.8
30-34.....	27	8.4	29	9.1
35-39.....	35	10.9	37	11.6
40-44.....	32	10.0	44	13.7
45-49.....	39	12.2	43	13.4
50-54.....	46	14.4	40	12.5
55-59.....	38	11.9	25	7.8
60-64.....	27	8.4	24	7.5
65-69.....	21	6.6	14	4.4
70-74.....	20	6.2	5	1.6
75.....	5	1.6	2	0.6
Total.....	320	100.0	320	100.0
Mean.....	49.2 years		44.4 years	

For the native white population of the 33 villages in the Middle Atlantic States, Cressman found the proportion of males to be 87.4, and in the "open country" it was 114.5.<sup>5</sup>

The same difference between villages and open country exists in Tompkins County. Miss Kensler found a ratio of 83.1 males to 100 females in Dryden village, and 109.2 males to 100 females in the open country; and Mr. Bakkum found a ratio of 85.2 to 100 in Slaterville Springs and 99.2 to 100 in Brookton village, against 108.7 to 100 in the open country of Caroline township.

This difference in the sex ratio between village and open country seems to be due, to a considerable extent, to the larger number of widows in the villages and of unmarried males in the country, as shown in tables 12 and 13 (pages 17 and 18).

PERMANENCY OF POPULATION

One of the chief factors influencing the rate of social change in rural communities is the permanency or the mobility of the population. For the farm population of the three townships this is shown in table 8, for 319 of the 357 farms. That there has been considerable shifting of the population is evident from the fact that 42.3 per cent had been on

<sup>5</sup> In Appendix C of *American Villagers*, by C. Luther Fry, Table X, page 161. See page 7 for explanation of Cressman's classification.

TABLE 8. NUMBER AND PERCENTAGE OF FARM OPERATORS IN WILLET, VIRGIL, AND HARFORD TOWNSHIPS, RESIDENT ON THE SAME FARMS FOR A GIVEN NUMBER OF YEARS

Township	Total number	Years of residence on same farm															
		Under 5		5-9		10-19		20-29		30-39		40-49		50-59		60-	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Willet.....	71	34	47.9	6	8.4	11	15.5	4	5.6	8	11.3	2	2.8	4	5.6	2	2.8
Virgil.....	191	82	42.9	33	17.3	31	16.2	22	11.5	13	6.8	6	3.1	3	1.6	1	0.5
Harford.....	57	18	31.6	10	17.5	15	26.3	8	14.0	4	7.0	1	1.8	1	1.8	0	0
Total.....	319	134	42.3	49	15.4	57	17.9	34	10.6	25	7.8	9	2.8	8	2.5	3	0.9

the present farm for less than five years; 33 operators, or 10 per cent of the total number, had been on the present farm for one year or less. On the other hand, 42.6 per cent had been on the same farm for ten years or more, and the weighted average of residence on all the farms is ten and one-half years.

Another method of measuring the permanency of the population is by the nativity of the parents. This is given in table 9, and the nativity of their parents is shown in table 10.

The most mobile element of the population are the parents living in the country who are not farm operators. This class includes workmen of various sorts and farm laborers, and comprises about 10 per cent of the total population. There are no very striking differences between the nativity of the parents on farms and of those in villages, except that more farm parents come from other States and from foreign countries. The significant facts are that 28.2 per cent of the parents were born in the same township, 11 per cent in an adjoining township, and 46.5 per cent in Cortland County, while 24.4 per cent were born in adjoining counties. Thus 70.9 per cent were born in the same county or in one adjoining it, and were from the same cultural area.<sup>6</sup> It is significant that the percentage of parents (15.7 per cent) born in other States was twice as great as that of parents born in the counties of New York not adjoining Cortland County (7.4 per cent). Only 5.6 per cent of the parents were of foreign birth.

The males born in the same township exceeded the females by 8 per cent, whereas the females born in adjoining townships exceeded the males by 5.4 per cent, and the females born in adjoining counties exceeded the males by 5.8 per cent.

The same general relations obtained for the parents' parents (table 10). Of these, 16.4 per cent were born in the same township as the present householders, 10.2 per cent were born in an adjoining township, and 31.8 per cent were born in Cortland County, while 25.7 per cent were born in adjoining counties; so that 57.5 per cent were born in Cortland County or in an adjoining county.<sup>7</sup> Thus the children in one-sixth of the present families are of the third generation resident in the same township, and one-third are of the third generation resident in Cortland County.

The percentages shown in table 9 may be compared with similar data given by E. C. Young<sup>8</sup> for Dryden township in Tompkins County and

<sup>6</sup> Dr. Roy L. Gillett (Bulletin 164, Department of Farms and Markets of the State of New York [1924], page 64, table 57) found that 80.3 per cent of the farm operators in southeastern Seneca County were born in that county or in the adjoining counties of Tompkins and Schuyler.

<sup>7</sup> In Seneca County Dr. Gillett found that 56.3 per cent of the fathers of operators were born in that county or in adjoining counties.

<sup>8</sup> The movement of farm population. By E. C. Young. Bul. 426, Cornell Univ. Agr. Exp. Sta., 1924, table 57, page 54. It should be noted that Dr. Young's figures do not include the whole population of the townships, but only that of the farms surveyed.

TABLE 9. NATIVITY OF PARENTS IN WILLET, VIRGIL, AND HARFORD TOWNSHIPS, CORTLAND COUNTY, NEW YORK, IN PER CENT OF THE TOTAL NUMBERS FOR EACH SEX

Birthplace		Present residence			Total
		On farms	In country*	In villages	
In same township	Male.....	32.5	22.6	35.1	32.2
	Female.....	24.0	13.2	28.8	24.2
	Total.....	28.3	18.2	31.7	28.2
In next township	Male.....	8.1	0.3	4.3	8.3
	Female.....	11.7	1.1	9.0	13.7
	Total.....	9.8	0.7	6.6	11.0
In other townships of Cortland County†	Male.....	16.3	15.1	20.6	17.2
	Female.....	18.4	24.5	20.1	19.4
	Total.....	17.3	19.8	20.3	18.3
In adjoining counties	Male.....	21.0	18.8	23.6	21.5
	Female.....	26.6	24.5	30.2	27.3
	Total.....	23.7	21.7	27.1	24.4
In other counties of New York‡	Male.....	7.5	7.5	11.4	8.5
	Female.....	6.7	7.5	5.3	4
	Total.....	7.1	7.5	8.2	7.4
In other States of the United States	Male.....	16.3	22.6	6.1	14.4
	Female.....	17.5	24.5	13.4	17.1
	Total.....	16.9	23.6	10.0	15.7
In foreign countries	Male.....	6.1	13.2	3.0	6.1
	Female.....	6.7	5.6	2.0	5.3
	Total.....	6.4	9.4	2.5	5.6
Total instances (= 100 per cent)	Male.....	356	53	131	540
	Female.....	342	53	149	544
	Total.....	698	106	280	1,084

\* "In country" includes all residing outside of villages but not on farms; that is, all who are not farmers.  
 † Percentages of those born "in next township" are included, but those born "in same township" are not included.

‡ Not including adjoining counties.

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TABLE 10. NATIVITY OF PARENTS OF HUSBANDS AND WIVES IN WILLET, VIRGIL, AND HARFORD TOWNSHIPS, CORTLAND COUNTY, NEW YORK, IN PER CENT OF THE TOTAL NUMBERS FOR EACH SEX

Birthplace	Parents of	Present residence of husbands and wives			Total
		On farms	In country*	In villages	
In same township	Husband.....	20.1	10.0	20.8	19.3
	Wife.....	14.0	6.6	15.6	13.6
	Both.....	17.0	8.2	18.0	16.4
In next township	Husband.....	6.5	17.7	8.0	8.0
	Wife.....	10.0	18.6	15.6	12.3
	Both.....	8.1	18.2	12.4	10.2
In other townships of Cortland County †	Husband.....	13.0	12.2	15.1	13.6
	Wife.....	17.6	17.5	15.6	17.1
	Both.....	15.4	14.9	15.6	15.4
In adjoining counties	Husband.....	24.1	22.2	20.4	2.1
	Wife.....	28.9	22.0	28.1	28.0
	Both.....	26.5	22.1	24.7	25.7
In other counties of New York †	Husband.....	16.2	23.3	28.9	19.7
	Wife.....	11.4	16.4	19.4	13.9
	Both.....	13.7	20.0	23.6	16.7
In other States of the United States	Husband.....	12.9	18.8	7.1	12.2
	Wife.....	14.7	26.3	15.2	15.9
	Both.....	13.8	22.6	11.6	14.1
In foreign countries	Husband.....	13.4	13.3	7.1	12.0
	Wife.....	13.2	11.0	6.1	11.1
	Both.....	13.3	12.1	6.5	11.5
Total instances (= 100 per cent)	Husband.....	642	90	211	943
	Wife.....	657	91	263	1,011
	Both.....	1,299	181	474	1,954

\* "In country" includes all residing outside of villages but not on farms; that is, all who are not farmers.  
 † Percentages of those born "in next township" are included, but those born "in same township" are not included.  
 ‡ Not including adjoining counties.

Candor township in Tioga County, which show 52 and 47 per cent, respectively, of the farm operators born in the same township, and 14 and 10 per cent born in other townships of the same county.

The nativity of fathers and of fathers-in-law of farm operators is given in table 11. These figures are comparable with the data for Dryden township in tables 58 and 60 of Young's bulletin. In both cases about 50 per cent more of the fathers than of the fathers-in-law of the farm operators were born in the township of the operator's residence. In both generations from one-fourth to one-third of the farm operators born in the township married wives from outside the township.

TABLE 11. NATIVITY OF FATHERS AND OF FATHERS-IN-LAW OF FARM OPERATORS IN WILLET, VIRGIL, AND HARFORD TOWNSHIPS, CORTLAND COUNTY, NEW YORK

Birthplace	Fathers		Fathers-in-law	
	Number	Per cent	Number	Per cent
Township of operator's residence.....	74	22.7	49	14.8
Other townships in Cortland County....	40	12.3	53	16.1
Adjoining counties.....	72	22.1	91	27.6
Other counties in New York.....	50	15.3	38	11.5
Other States of the United States.....	42	12.9	51	15.5
Foreign countries.....	48	14.7	48	14.5
Total.....	326	100.0	330	100.0

#### MARITAL STATE

The marital state of the population over 15 years of age is shown in table 12. Unfortunately these data could not be obtained for a considerable number of persons (3.5 per cent of the total), but these are mostly single and widowed males in the villages and will not materially affect the important differences in the distribution. The most striking contrasts are in the much higher percentage of married males (74 against 64.5 per cent) in the villages and the larger number of married females (74.9 against 65.8 per cent) in the country; the higher percentage of unmarried males (27.5 against 13 per cent) in the country; and the higher percentage of widowed females (18.1 against 9.1 per cent) in the villages.

The smaller percentage of single persons in these townships in comparison with that in rural New York and in larger villages in the Middle Atlantic States is shown in table 13. Due to the considerable number of persons of unknown marital state (table 12), the total percentage of single males is probably 3 or 4 points, and the percentage of females

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TABLE 12. MARITAL STATE OF POPULATION 15 YEARS OF AGE OR OVER IN WILLET, VIRGIL, AND HARFORD TOWNSHIPS

Marital state	Sex	In villages		Outside villages		Total	
		Number	Per cent	Number	Per cent	Number	Per cent
Married.....	Male.....	131	74.0	370	64.5	501	66.7
	Female.....	131	65.8	370	74.9	501	72.3
	Total.....	262	69.7	740	69.3	1,002	69.4
Single.....	Male.....	23	13.0	158	27.5	181	24.1
	Female.....	28	14.1	70	14.2	98	14.1
	Total.....	51	13.6	228	21.3	279	19.3
Widowed.....	Male.....	8	4.5	23	4.0	31	4.1
	Female.....	36	18.1	45	9.1	81	11.7
	Total.....	44	11.7	68	6.4	112	7.8
Unknown.....	Male.....	15	8.5	23	4.0	38	5.1
	Female.....	4	2.0	9	1.8	13	1.9
	Total.....	19	5.0	32	3.0	51	3.5
Total.....	Male.....	177	....	574	....	751	....
	Female.....	199	....	494	....	693	....
	Total.....	376	....	1,068	....	1,444	....

probably 2 points, too small. But even with these corrections the total percentage of single persons is considerably lower in these three townships than for rural New York as a whole. The percentage of single persons of the age period 15-24 is the same for the males as in rural New York, but for the periods 25-34 and 35-44 it is very markedly lower for both sexes. The percentage of males over 15 years of age who are single is twice as high in the country (27.5 per cent) as in the villages (13 per cent), whereas the percentage of females is about the same for country and village.

The smaller percentage of single persons is correlated with a higher percentage of those married, as is evident in table 14, which shows a higher percentage of married persons in these three townships as compared with rural New York, practically equal to the difference in percentage of those single (table 13).



TABLE 13. PERCENTAGE OF SINGLE PERSONS 15 YEARS OF AGE OR OLDER, BY AGE PERIODS, IN THREE TOWNSHIPS OF CORTLAND COUNTY, IN RURAL NEW YORK, AND IN VILLAGES OF THE MIDDLE ATLANTIC STATES

Age period (years)	Three townships in Cortland County						New York State, rural, 1920*		Villages in Middle Atlantic States†	
	Total		In villages		Outside villages		Male	Female	Male	Female
	Male	Female	Male	Female	Male	Female				
15-24.....	88.0	65.3	91.6	84.6	87.6	60.0	88.5	72.3	82.1	73.6
25-34.....	18.1	5.6	13.0	0	30.1	7.0	34.2	19.9	27.5	26.7
35-44.....	8.2	5.7	10.0	19.0	8.0	3.0	18.3	12.0	14.1	15.6
45-54.....	4.0	0.7	3.0	0	3.0	1.0	....	....	10.4	13.8
55-64.....	1.5	2.1	0	5.0	2.0	0	....	....	7.3	11.7
65.....	2.7	2.0	0	0	4.0	3.0	....	....	5.8	10.5
Total.....	24.1	14.1	13.0	14.1	27.5	14.2	33.0	24.7	27.2	27.3

\* Fourteenth United States Census. Native-born whites. Includes incorporated villages under 2500 population.

† Cressman in Appendix C of *American Villagers*, by C. Luther Fry, Tables XXIX and XXX, pages 186 and 187, for native-born whites.

The percentage of males widowed, 4.1 per cent, is considerably smaller than for rural New York as a whole, which is 6.2 per cent (the same as that found by Cressman for 33 Middle Atlantic villages); while the percentage of females widowed, 11.7 per cent, is about the same as that for rural New York, which is 12.3 per cent, though in the larger Middle Atlantic villages Cressman found 16 per cent.

TABLE 14. PERCENTAGE MARRIED, 15 YEARS OF AGE OR OLDER, IN THREE TOWNSHIPS OF CORTLAND COUNTY, IN RURAL NEW YORK, AND IN THE MIDDLE ATLANTIC STATES

	In incorporated villages		In the open country*		In small villages		Outside villages	
	Male	Female	Male	Female	Male	Female	Male	Female
Cortland County.....	....	....	66.7	72.3	74.0	65.5	64.4	74.9
Rural New York†.....	....	....	60.2	62.5	....	....	....	....
Middle Atlantic States‡	66.1	56.1	52.8	64.2	....	....	....	....

\* "Open country" includes all rural population outside incorporated villages, except as relates to rural New York, for which see next footnote.

† Fourteenth United States Census, vol. 2, table 23, page 590. These figures are for total rural population, including incorporated villages under 2500 population. They are not, therefore, strictly comparable with the figures for Cortland County and those for the Middle Atlantic States.

‡ Cressman in Appendix C of *American Villagers*, by C. Luther Fry, Table XX, page 170, for native-born whites.

Half of the females 65 years of age or older are widows, but only 16.5 per cent of the males of that age period are widowed, and there is little difference in the percentages for village and for country (table 15).

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TABLE 15. PERCENTAGE WIDOWED, 65 YEARS OF AGE OR OLDER, IN THREE TOWNSHIPS OF CORTLAND COUNTY AND IN THE MIDDLE ATLANTIC STATES

	In incorporated villages		In the open country*		In small villages		Outside villages	
	Male	Female	Male	Female	Male	Female	Male	Female
Cortland County . . . . .	.....	.....	16.5	50.5	15.0	55.0	17.4	47.5
Middle Atlantic States†	25.1	56.9	28.4	47.2	.....	.....	.....	.....

\* "Open country" includes all rural population outside incorporated villages.  
 † Cressman in Appendix C of *American Villagers*, by C. Luther Fry, Table XXIV, page 176, for native-born whites.

SIZE OF FAMILY

The average size of the families and households is given in table 16. The term *family* as here used is the natural family of parents and their own children. The *household* includes all residing together in one house, including relatives, boarders, and laborers. There may be two families

TABLE 16. SIZE AND COMPOSITION OF FAMILIES AND HOUSEHOLDS IN WILLET, VIRGIL, AND HARFORD TOWNSHIPS

	Average number of children at home per family	Average number of parents per family	Per cent of families with no children at home	Average number of persons per family	Average number of persons per household
Outside villages . . . . .	1.52	1.86	31.0	3.36	3.77
In villages . . . . .	0.90	1.80	51.0	2.71	3.00
Total . . . . .	1.36	1.84	36.3	3.26	3.56

in a household, and there may be two households in a dwelling if they live in separate apartments. The outstanding fact is the smaller size of the family in the village, 2.71 persons, as compared with that on the farms, 3.36 persons. This is due to the smaller number of children in the village families, there being only 60 per cent as many children in a village family (0.90) as in a family outside the villages (1.52). The average size of household in these three townships is 3.56 persons, as compared with 3.9 persons for rural New York according to the federal census of 1920.

Of all the families, 36 per cent had no children at home and 24 per cent had no children whatever,

Memoir 100, *A Study of Pogoniris Varieties*, the eleventh preceding number in this series of publications, was mailed on May 25, 1927.