

# A Population Profile of the Amish in Michigan

**Joseph F. Donnermeyer**

Professor Emeritus/Academy Professor  
School of Environment and Natural Resources  
The Ohio State University  
[donnermeyer.1@gmail.com](mailto:donnermeyer.1@gmail.com)

**Abstract:** This article is a review of settlement development and population characteristics of the Amish living in the state of Michigan. After a number of failed attempts to start communities in Michigan prior to 1970, the Amish presence has continued to grow. Today, Michigan is one of five states that host at least 50 settlements. Hostetler's (1980) theory of limited possibilities is used to interpret both the failed attempts before 1970 and the sustained growth since 1970. Through data collected from the 2019 directory of Amish households, various population characteristics are discussed. These characteristics compare Amish living in Old Order, Swiss, and other conservative settlements. For the most part, there are minor demographic differences among the three groups, with the exception of the occupations of men. Old Order men are less likely to be involved in farming when compared to men from Swiss and other conservative groups. Overall, the Amish in Michigan, like Amish throughout North America, are a high fertility group, which is illustrated both by the completed fertility of women who are 45 years of age and over and by the age-sex population pyramids for the three groups.

Submitted March 12, 2023; accepted May 23, 2023; published December 7, 2023  
<https://doi.org/10.18061/jpac.v4i1.9177>

**Keywords:** completed fertility, sex ratio, age-sex pyramid, birth order, occupations

Michigan was one of six states carved wholly or partially out of the Northwest Territories, which was the first region of geographic expansion of the United States westward, soon after the Treaty of Paris with Great Britain in 1783 (Rubenstein & Ziewacz, 2014).<sup>1</sup> Today, it is one of the most populous states, with about 10 million inhabitants and many large cities, especially in the area running east from Detroit to Grand Rapids on the west side. Its 96,000 square miles (of which 41,000 are water) are divided into two peninsulas, the lower and the upper (U.S. Census Bureau, 2021). The Upper Peninsula is much more rural, yet there are many woodlands, open-country areas, and agricultural regions in the Lower Peninsula as well, where the climate is milder and more suitable for growing food products. A relatively new characteristic in the history of Michigan is that it is a prime location for Amish communities.

This article presents a profile of the Amish population in Michigan based on the 2019 state directory (Miller, 2019)<sup>2</sup> and various supplemental archival sources (Stoltzfus, 2022). A small

---

<sup>1</sup> The other states are Illinois, Indiana, Minnesota, Ohio, and Wisconsin.

<sup>2</sup> A new directory for Michigan was published in October 2023.



monograph with excellent information, *Amish in Michigan*, was published in 2001 by Gertrude Enders Huntington, but since then, the number of Amish communities has nearly doubled. Time for an update!

## Methodology

The 2019 directory of the Amish in Michigan includes all but the newest communities and several settlements of very conservative Amish that will not allow household information to be listed in a directory. Altogether, *Michigan Amish Directory: 2019* (Miller, 2019) provides information on households living in 45 settlements, including all but one of the oldest and largest. Among the settlements missing from the directory, only the Beaverton/Gladwin settlement of Clare and Gladwin counties, founded in 1979 and considered a conservative Swartzentruber community, has more than one church district.<sup>3</sup> A precise count is not possible, but it is likely there are about 150 households in the settlement's six church districts, as listed by Raber and Raber (2023).

Dozens of directories of Amish settlements are published for various regions of Canada and the United States. The Michigan directory, published periodically by Abana Books of Millersburg, Ohio, is distinctive because it includes settlements for a single state, whereas most other directories provide information for settlements in a shared fellowship or for a single, large settlement and its smaller and newer “daughter” or “outlying” settlements.

The 2019 edition of the Michigan directory contains similar information to that provided in most other Amish directories. Households are listed in alphabetical order by the church district to which they belong, and each church district is listed by the settlement in which it is located. Information for each household includes the birth date of the husband, the birth date of the wife, the death date of a marriage partner if either spouse has been widowed, the date of marriage, and the birth date of every child. As well, the husband's occupation is listed, although it is often omitted for men from more conservative communities. Many directories also include the baptism status of each child, the name of the marriage partner of each adult child, and the name of the community in which they now reside. The Michigan directory, however, does not include baptism status, but does list the locations of adult children and their marriage partners.

Information about all the households in the Michigan directory was entered into an Excel spreadsheet.<sup>4</sup> Preliminary data runs showed a few data entry errors. After data cleanup, the computations shown in the tables for this article were completed.

---

<sup>3</sup> The 10 extant settlements that were not included in the 2019 directory are, in order by founding date, Beaverton/Gladwin (1979), North Adams (2010), Clare/Farwell (2014), Cornell (2019), Leslie (2019), White Cloud (2019), Sterling (2020), Albion (2022), Millersburg (2022), and Hanover (2023). Hersey (2003–2023) and Millington (2018–2023) appear in the 2019 directory but are now extinct. Also, Bronson (1971–circa 2021) had so few families by 2019 that it was not included in that directory. The locations of the extant settlements are shown in Figure 3, in italics. Beaverton/Gladwin and Cornell are Swartzentruber, North Adams is Swiss, Clare/Farwell is a conservative group originally from the Dover settlement, and Albion is a conservative group that is part of the Buchanan affiliation. The remainder are Old Order.

<sup>4</sup> I want to thank my wife, Diane Donnermeyer, for entering nearly all of the household information from the 2019 Michigan Amish directory.

The total number of households entered into the spreadsheet is 2,616.<sup>5</sup> For analysis, the data were categorized into three types of settlements.<sup>6</sup> Nearly half of all households lived in Old Order settlements (1,251), and about 20% (550) lived in Swiss settlements. The remainder, about 30% (815), lived in a variety of other conservative settlements, but none was sufficiently large to conduct a more detailed statistical analysis. Called “clusters” by Stoltzfus (2022), these other conservative communities include settlements known by their nicknames, such as Ashland, Buchanan, Dover, Kenton, Swartzentruber, and Troyer.<sup>7</sup> The three groups—Old Order, Swiss, and other conservative—were compared on their respective population characteristics.

### Settlement Development

Michigan gained statehood in 1835, but it was not until six decades later that the first Amish settlement was established. Founded in 1895, the name of that settlement was White Cloud, and it was located in the west-central region of Michigan (Newago County), about 30 miles directly north of Grand Rapids. At the time, this area of Michigan was opening up for farming after it had been cleared of much of its woodlands by timbering. The land was attractive to the Amish because of its low price. The first families came from the northern Indiana communities of Elkhart-LaGrange and Nappanee.<sup>8</sup> Advertisements in *The Budget*, a weekly newspaper widely read in Amish and Plain Mennonite communities, invited Amish and Mennonite families to settle in that part of Michigan. The White Cloud Amish settlement grew to about 50 families, but by the second decade of the twentieth century, the population had dwindled to only a few families. The land became increasingly unproductive, and some families joined nearby Mennonite congregations. The remainder dispersed to other Old Order Amish settlements. The date of White Cloud’s extinction is 1935, 40 years after its founding (Luthy, 2021). However, a new settlement of the same name was started in the same area in 2019.

As shown in Appendix A, eight of the first nine attempts at settlement development in Michigan eventually failed. Only the community of Centreville, founded in 1910 and now both the oldest and largest in the state, survives to the present time. According to the most recent edition of *The New American Almanac* (Raber & Raber, 2023), Centreville has grown to include 15 church districts, making it one of only about 40 settlements in North America with 10 or more churches. The reason for so much settlement failure early in the history of the Amish in Michigan is a combination of factors, from low fertility of the farmland and harsh weather conditions to issues associated with disagreement over the church discipline (Huntington, 2001; Luthy, 2021).

---

<sup>5</sup> This includes 24 households from the recently extinct Hersey and Millington settlements, representing .92% of total households entered into the Excel file.

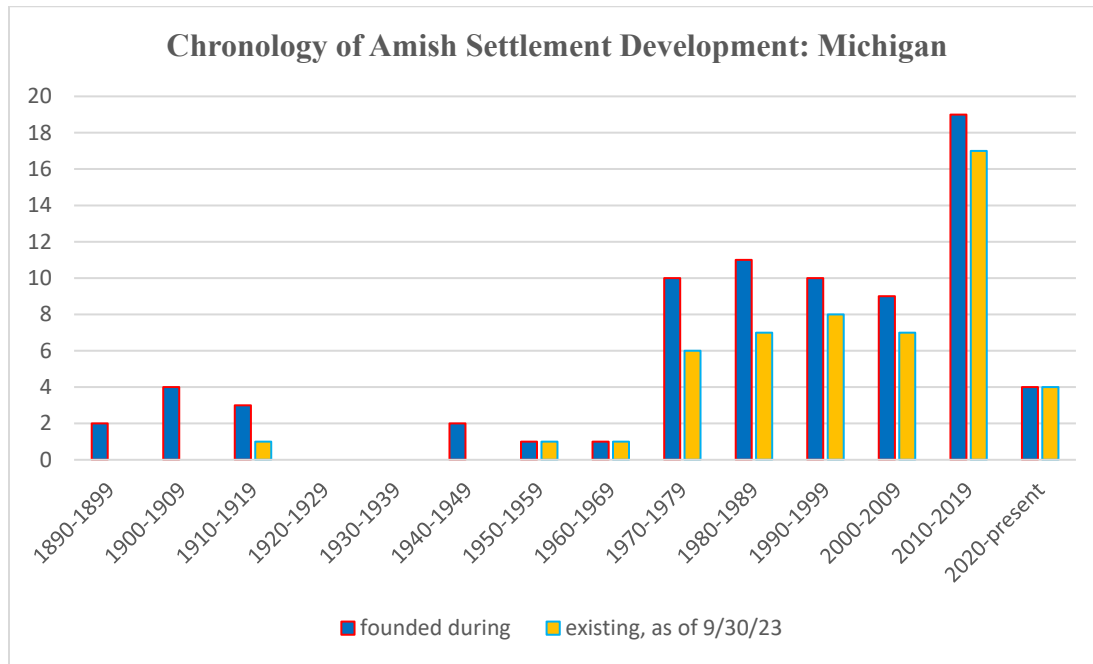
<sup>6</sup> Acknowledgement to Edsel Burdge Jr., demographic expert at the Young Center for Anabaptist and Pietist Studies, for information on the types of communities found in the Amish Michigan directory.

<sup>7</sup> For a brief description of each cluster of Amish, see Stoltzfus (2022, pp. 391–397).

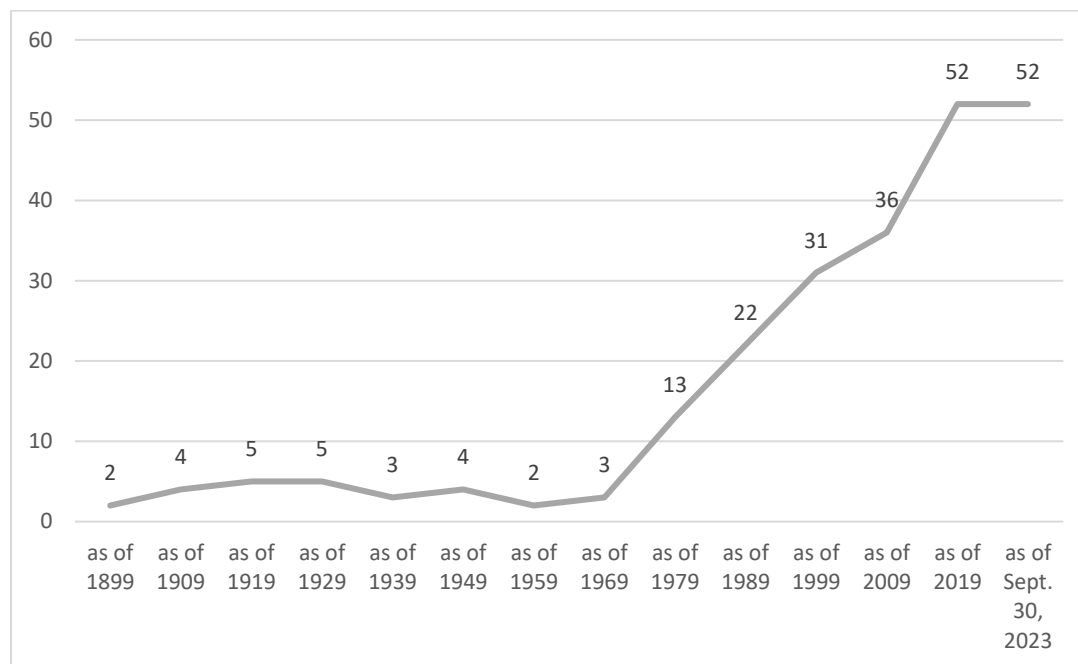
<sup>8</sup> The Amish settlement names in this article match those on the Amish Studies website of the Young Center for Anabaptist and Pietist Studies (2023) and in Stoltzfus (2022).

By the second half of the twentieth century, Amish fortunes in Michigan began to change. Camden and California Township (founded in 1956 and 1960, respectively) started a new trend so that today there are 52 Amish settlements in Michigan, a number that is expected to grow. Figure 1 shows the number of settlements founded decade by decade (the blue bars) and those still existing today (the yellow bars). The 1970s show a dramatic shift for Michigan as a suitable location for Amish settlements. Figure 2 displays the number in existence at the end of each decade. Since Camden started in 1956, 14 settlement attempts have not survived to the present time, all but four of which were founded in 1993 or earlier. (See Appendix A for a list of all existing and extinct settlements.) In the twenty-first century, the communities of Bronson (1971–circa 2021), Coral (1991–2008, 2008–2011, and 2011–2021), Elsie/Ovid (1987–2004), Hale (1978–2004), Hersey (2003–2023), Ludington (1981–2011), Millington (2018–2023), Rosebush (1981–2014), and Vestaburg (1993–2006) have failed. In the Millington settlement, the church discipline now allows the ownership of motor vehicles, a technological dividing line between buggy-driving Amish groups and more progressive Amish-Mennonite and Mennonite groups.<sup>9</sup> Hence, the families are still there, but no longer considered Amish. Coral is remarkable for being one of the few localities anywhere in North America where three distinct attempts at settlement have failed. At the beginning of the twenty-first century, there were 31 extant settlements in Michigan. Now, with 52 settlements, Michigan ranks with Kentucky, Missouri, New York, Ohio, Pennsylvania, and Wisconsin as states with 50 or more Amish settlements.

**Figure 1**  
*Chronology of Amish Settlement Development in Michigan by Decade*



<sup>9</sup> Information on Hersey and Millington comes from correspondence with Amish people who keep track of settlement establishments and failures.

**Figure 2***Number of Amish Settlements in Michigan by Decade*

Hostetler (1980) observed that the inability of the Amish to sustain newly founded settlements in the Great Plains region of the western United States could be understood by the “theory of limited possibilities.” The argument of this theory is that in the past the Amish often selected unrealistic localities, a conclusion also reached by Luthy (2021). As Hostetler observed, “Many of the settlements started in a different climate and at great distances from the mother communities have not endured” (p. 93). By “mother communities,” Hostetler was referring to those located primarily in Pennsylvania, Ohio, and Indiana from which the families came. His theory of limited possibilities is also applicable to the historical trend of failures and successes of settlements in Michigan, even though it is far to the east of the many extinct communities in Colorado and other states west of the Mississippi River.

Until the middle of the twentieth century, most Amish settlements were located in states to the south of Michigan, and most Amish men were involved in agricultural pursuits. As the occupational diversity of the Amish grew (especially jobs related to carpentry and sawmills), possibilities in Michigan and elsewhere for sustaining a community with a firm economic foundation expanded. As well, travel by bus and van service became easier, and telephones and other forms of electronic communication improved the possibilities for Amish located in newer communities in states like Michigan to maintain ties with extended family and former neighbors in the communities from which they originated. As Yoder (2022) observed about the early history of the Amish in Holmes County, there is a “chain of migration” for the Amish and many other migrant groups with strong ethnic and subcultural identities. By this, Yoder meant that migrants frequently attempt to reestablish their former social ecology (i.e., social, cultural, and economic characteristics) at the place to which they move. This is especially important for the Amish because

establishing a new settlement and then sustaining it over the years is a collective effort (Hostetler, 1993). Social links back to Amish in other settlements help reproduce and sustain a social ecology favorable to the long life of a settlement. It would be false to consider any single Amish community, of any age and of any size, to be entirely autonomous; every community is in some way codependent on other settlements for mutual aid and social interaction.

Consider, for example, the four oldest settlements in Michigan. Three of the four—Centreville, California Township, and Camden—are in southern Michigan, not far from the Elkhart-LaGrange and Nappanee communities on the other side of the state line in Indiana (Figure 3). Two of them (Camden and California Township) are of the Swiss variety, with founding families migrating north from Swiss settlements in northeast Indiana. The distances are less than 100 miles. The fourth oldest community of Mio also illustrates Hostetler's (1980) theory of limited possibilities, but in a different way. According to the brief history provided in the 2019 *Michigan Amish Directory* (Miller, 2019), Mio started up again in 1970 in the northern Michigan county of Oscoda, reestablishing an Amish presence after the Mio community founded in 1900 became extinct in 1954. The first Mio community began on land cleared from timber operations, and for many years, the first families (from the large Greater Geauga County settlement of northeast Ohio) raised vegetables and hay. The community grew rapidly, and by 1905, there were 55 families. However, soon after that, a more progressive Plain Anabaptist group also moved to the area, and the number of Old Order families dwindled as many drifted over to this Amish-Mennonite group that met in a church building (and subsequently dropped the word "Amish" from its name). The last ordained man for this settlement (a bishop) died in 1954, which set the extinction date for the Old Order community there (Luthy, 2021, p. 190). Nonetheless, a few families remained in the area, and they were placed under the supervision of a bishop from the Elkhart-LaGrange settlement.<sup>10</sup> In 1970, a new wave of families, again from the Greater Geauga County settlement, migrated to northern Michigan, and today there are three church districts and about 100 families in the Mio settlement. The leading occupation is timber/sawmill work, followed by carpentry. As the unnamed writer of the Mio history in the 2019 Michigan directory (Miller, 2019) states, "Farming or dairying in the area...has more or less taken a back seat over the years" (p. 411).

Figures 3 and 4 show the locations of both extant and extinct Amish communities in Michigan. Roughly, the distribution of existing settlements shows a distinct geographic pattern whereby about 30% of the 52 Amish settlements in Michigan are south of a line running from the Detroit metropolitan area to the Grand Rapids metropolitan area. Nearly half of the settlements are located

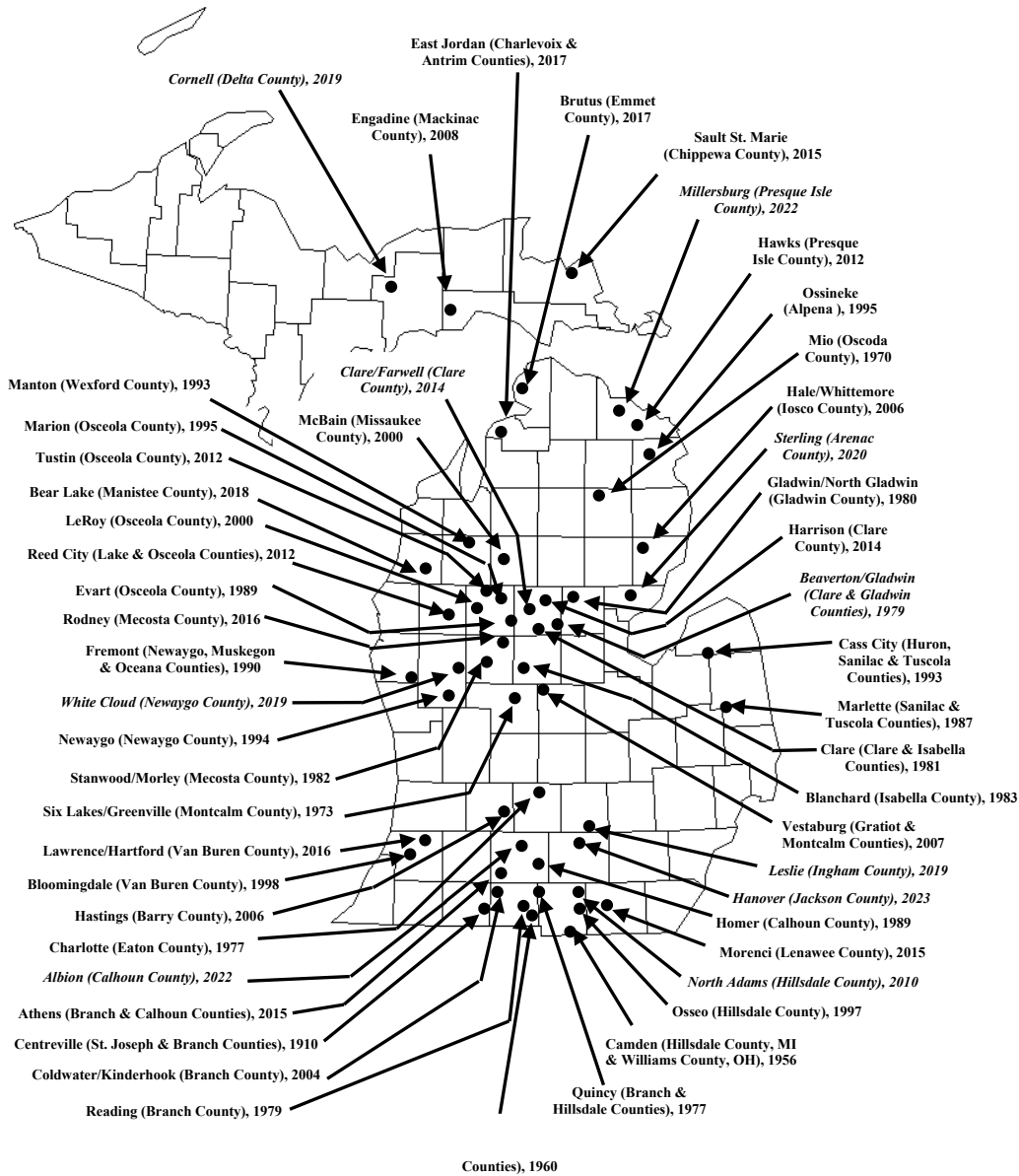
---

<sup>10</sup> Luthy (2009) defines an Amish community as a locality with three or more households who identify as Amish, prohibit the ownership of motor vehicles, and are able to hold a Sunday church service (often with the assistance of nearby settlements or families from the mother settlement when it is new and small in size). As he observes, "Each new settlement will either soon grow or falter and disband" (p. 1). In this respect, Luthy's definition can be described as minimalist; that is, the least required to start an Amish community. Luthy's definition also conforms with Hostetler's (1993) definition as a place where Amish families live close to each other and to more general sociological definitions of community (Liepins, 2000), which recognize that geographic proximity creates various place-based social and cultural patterns (i.e., social ecology).

in various counties of central Michigan to the north of the Detroit-Grand Rapids urban sprawl. The remainder are further north, including in the Upper Peninsula. All but four of the extinct settlements are located in central and northern Michigan, not in the southern region (Figure 4).

**Figure 3**

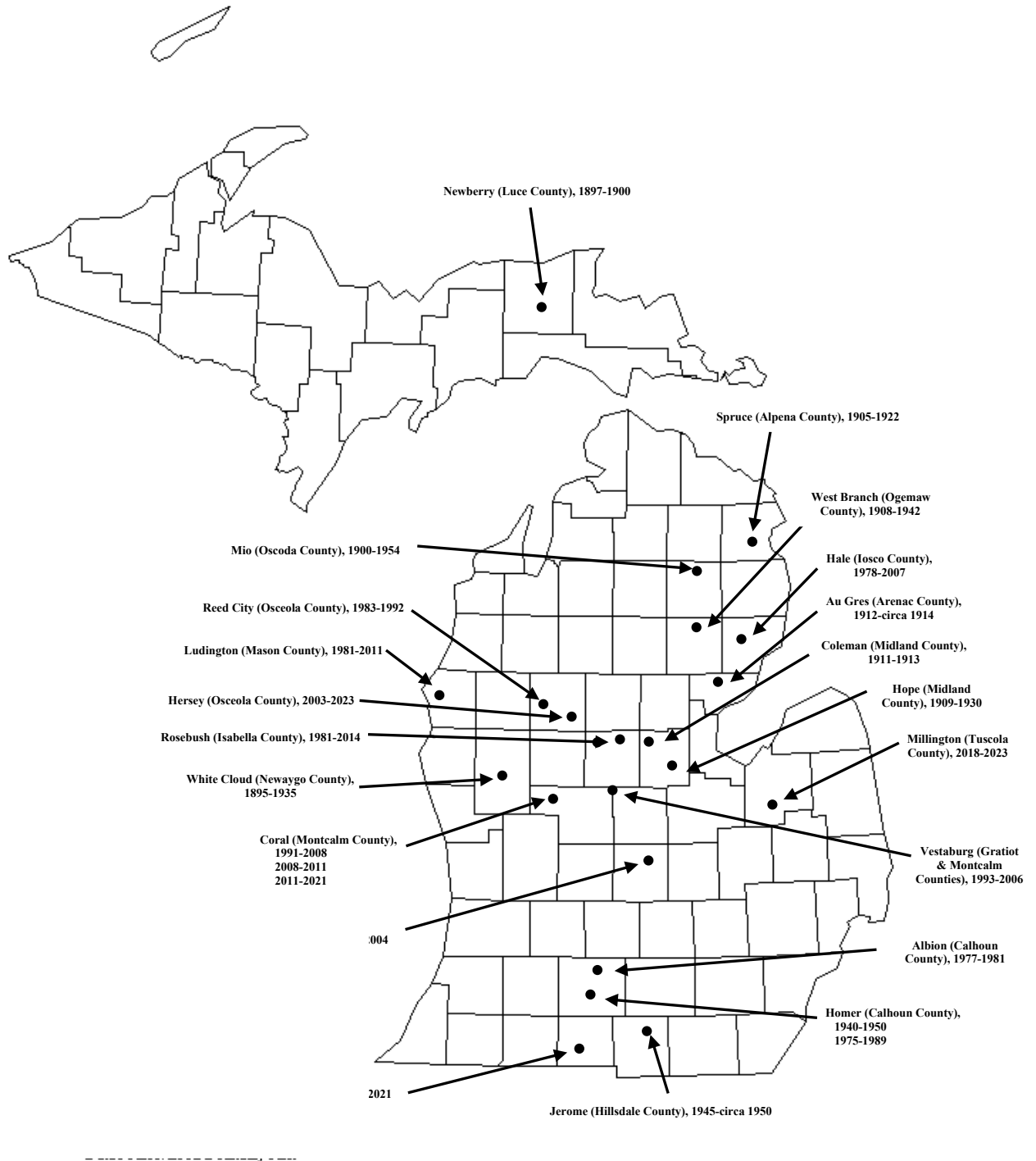
*Amish Settlements in Michigan, as of September 30, 2023*



*Note.* Map of Michigan from Michigan State University Libraries Digital Sources Center ([https://img.lib.msu.edu/branches/map/bounds/mi\\_bigger.GIF](https://img.lib.msu.edu/branches/map/bounds/mi_bigger.GIF)). Italics indicates settlements that are not included in the 2019 Michigan Amish Directory.

**Figure 4**

*Extinct Amish Settlements in Michigan, as of September 30, 2023*



*Note.* Map of Michigan from Michigan State University Libraries Digital Sources Center ([https://img.lib.msu.edu/branches/map/bounds/mi\\_bigger.GIF](https://img.lib.msu.edu/branches/map/bounds/mi_bigger.GIF)).



## Men's Occupations

Men's occupations<sup>11</sup> in Michigan illustrate the utility of the theory of limited possibilities (Hostetler, 1980) because they show the diversity of the occupational base of settlements today as compared to the past. Hostetler's (1980) theory was used in his discussion of the many failures of settlement attempts in the Great Plains states, where he observed that climate and other conditions made traditional farming practices more difficult for the Amish. Hence, the settlements were not sustained beyond the first few years of their founding. Conversely, Michigan's midwestern climate allows for not only various farming enterprises, but sawmills, furniture-making, construction, and other nonfarm enterprises.

Table 1 shows men's occupations, grouped into five categories for the purpose of analysis. One reason for grouping them is that there are no standardized occupational descriptions in the Michigan directory (or in any other Amish directory). Sometimes the name of the business is listed, which at least indicates that the occupation is nonfarm, although not the exact job responsibilities. The percentages reflect the proportion of men from the 2,188 who listed an occupation in the 2019 directory.

**Table 1**  
*Occupations of Men by Size of Settlement*

Size of settlement <sup>a</sup>	% in agriculture full-time and part-time (n = 903)	% in carpentry full-time and part-time (n = 746)	% in sawmill/logging full-time and part-time (n = 309)	% in traditional occupations full-time and part-time (n = 82)	% in other nonfarm occupations full-time and part-time (n = 611)
1 church district (n = 393)	32.57	41.73	21.37	4.33	21.63
2 church districts (n = 191)	30.89	47.12	15.18	2.62	22.51
3 church districts (n = 270)	52.22	22.96	23.33	3.3	16.30
4–5 church districts (n = 714)	52.24	42.86	13.59	3.78	16.81
≥7 church districts (n = 620)	31.29	20.32	11.77	3.55	51.45
Total % (n = 2,188)	41.27	34.10	14.12	3.75	27.93

*Note.* Percentages across each row add up to more than 100 because dual occupations are counted twice; that is, they are counted once in each occupational category.

<sup>a</sup> None of the settlements in the 2019 *Michigan Amish Directory* had six church districts.

<sup>11</sup> Unfortunately, the amount of information found in directories, including the Michigan directory, on the occupations of single female heads of households and widows is sparse; often no occupation is listed for these women.

“Agriculture” includes all occupations in which animals are raised or crops, vegetables, and other produce are grown, whether on a full-time or part-time basis, for commercial purposes. “Carpentry” includes all occupations in which wood is used—such as to construct buildings or building supports, such as trusses—plus any job-related activities associated with furniture-making and refinishing. “Sawmill/logging” includes all occupations that entail the harvesting of trees, including planing logs into slabs for use in carpentry. “Traditional” occupations are those that were part of pre-motor vehicle economies, including blacksmithing, buggy-making and repair, and making and repairing leather products such as saddles and collars for horses and other animals used in farm field work. The “other nonfarm” category includes all occupations that do not fit into the other three nonfarm categories, including masonry, plumbing, motor repair, electrical work, etc., and all occupations described by the name of the company for whom the person works rather than by what he actually does at his place of employment. Also included in the nonfarm category is the occupation generically described as “shop work.”

Despite the challenges of classifying occupations, it is obvious from Table 1 that the occupations of Amish men in Michigan today are diverse; hence, expanding the range of possibilities (Hostetler, 1980) and establishing the economic base for sustained communities. Slightly over two-fifths of Michigan men make a living from farming. Altogether, over 34% of men work full- or part-time in some facet of carpentry, from assembling trusses for housing construction to making furniture. In total, about one of seven men are involved in sawmill/logging, but only 3.75% of men make a full-time living at various traditional occupations. Finally, 28% of men work in nonfarm occupations other than carpentry-related jobs, sawmill/logging, and traditional occupations.

Table 1 also breaks down the occupations of men by size of settlement. Settlement size shows a nonlinear pattern whereby settlements of only one or two church districts and settlements of seven or more church districts have a smaller proportion of men who work in agriculture (either full-time or part-time). In settlements of three and four or five church districts, over half of the men support their families by agricultural pursuits, either full-time or part-time. As well, there are clear differences in the carpentry category, but less noticeable differences in sawmill/logging and traditional occupations. In settlements of seven or more church districts, slightly over half of the men are engaged in nonfarm occupations other than carpentry, sawmill/logging, or traditional.

There is no readily apparent reason to explain these differences in occupations by settlement size, but they do point to two possible conclusions. First, not all Amish settlements are alike. Each develops its own economic base, depending upon local economic conditions that generate jobs for Amish and non-Amish alike. Second, the theory of limited possibilities (Hostetler, 1980) is likely a way to understand differences by settlement size. Each settlement’s weather, soil fertility, natural environment, price of land, and proximity to urban centers may contribute to its distinctive pattern of employment type, as does the number of possible jobs that can be created in the area (Carson, 1998). Ultimately, therefore, the ability to take advantage of the local conditions is a contributing factor to the economic base of Amish communities and of their ability to grow.

Table 2 breaks down occupation by type of Amish group in the settlement: Old Order, Swiss, and other conservative. Differences here are most striking. Even though there is a much larger number of men from Swiss settlements who did not report an occupation, it is clear that agriculture is a much greater part of the economic life of these communities. Slightly over 77% of men in Swiss communities who listed an occupation are either full-time or part-time farmers. Plus, over half are involved either full-time or part-time in a carpentry trade. Agriculture is also important among Amish in other conservative settlements. In contrast, nonfarm occupations are a bigger part of the economic base of Old Order Amish settlements.

**Table 2**  
*Occupations of Men by Type of Settlement*

Occupation	Type of settlement					
	Old Order ( <i>n</i> = 1,115)		Swiss ( <i>n</i> = 309)		Other conservative <sup>a</sup> ( <i>n</i> = 764)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agriculture						
Only	177	15.87	112	36.25	184	24.08
Dual	109	9.78	127	41.10	193	25.26
Carpentry						
Only	263	23.59	54	17.48	163	21.34
Dual	57	5.11	103	33.33	110	14.40
Sawmill/Logging						
Only	103	9.24	5	1.62	74	9.69
Dual	43	3.86	17	5.50	61	7.98
Traditional						
Only	17	1.52	3	0.97	19	2.49
Dual	14	1.26	6	1.94	20	2.62
Other nonfarm						
Only	370	33.18	5	1.62	102	13.35
Dual	67	6.01	4	1.29	63	8.25
Missing	73		239		32	

<sup>a</sup> Other conservative includes settlements known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber.

### Ordained Men

Table 3 presents a summary of ordained men in the 45 settlements included in the 2019 Michigan Amish directory. The number of ministers per church district is three times larger than either the number of bishops or the number of deacons (see bottom row). Differences by size of settlement show several interesting variations. There are fewer bishops (.60 per church district) in settlements that are only one church district in size. The average number of deacons is nearly the same (.64 per church district). When examining the ordination status of men in communities founded since 2010, the reason for these numbers suggests a likely conclusion. Of the 13 newest settlements that

appear in the 2019 Michigan directory (see Appendix A), only seven have bishops and a mere four have deacons. Only two have a “full bench”: a bishop, two ministers, and one deacon (Hostetler, 1993; Kraybill et al., 2013). These newest Michigan settlements likely rely on a neighboring settlement or settlements from elsewhere within the same fellowship for assistance from a bishop or deacon when the occasion calls for it. Some are daughter settlements, or perhaps part of the Michigan Circle (see Burdge, 2022). As these newer settlements mature, men will be nominated and selected for the three ordained positions; most settlements will eventually have a full bench.

**Table 3**  
*Ordained Men per Church District by Size of Settlement*

Size of settlement by number of church districts	Bishops		Ministers		Deacons	
	<i>n</i>	average per church district	<i>n</i>	average per church district	<i>n</i>	average per church district
1 church district (25 settlements; 25 districts in total)	15	0.60	75	3.00	16	0.64
2–3 church districts (8 settlements; 20 districts in total)	22	1.10	56	2.80	22	1.10
4–5 church districts (8 settlements; 33 districts in total)	26	0.79	85	2.58	29	0.88
≥ 7 church districts (4 settlements; 34 districts in total)	29	0.85	99	2.91	26	0.76
Total (45 settlements; 112 districts)	92	0.82	315	2.81	93	0.83

Of the 92 ordained bishops listed in the 2019 Michigan directory, 89 were men who were already ordained ministers, which is consistent with previous research (Kraybill et al., 2013). Only three bishops did not have previous experience as either a minister or a deacon. It is possible that these three cases reflect exceptional situations or that their prior minister or deacon ordination dates were simply omitted from the directory. The average number of years between ordination as a minister and ordination as a bishop was 8.27 years, with a range of only one year for 10 men and over 20 years for nine men. Among the 315 ministers, only seven had been ordained as deacons previously.

The average age at first ordination (using cases for deacons or ministers only) was 36.41 years. There was little variation in average age across the three types of settlements. For Old Order settlements, the average age was 37.98 years, and it was slightly lower for men from Swiss communities (35.47 years) and other conservative communities (36.08 years).

The occupational status of ordained men shows that a higher proportion were involved in farming, either full-time or part-time, when compared to the general male population. For example, among the 228 cases of ordained men (men ordained twice were counted as two cases) from Old Order communities, 25.44% were full-time farmers, and another 12.72% were part-time agriculturalists, with the majority of those also employed in some kind of carpentry work. Of the

101 cases of ordained men in Swiss communities, nearly half (50) did not list an occupation. Of the remaining 51, 24 (47.06%) were full-time farmers and 17 (33.33%) were part-time farmers. Again, most part-time farmers were also engaged in carpentry. Of the 171 cases of ordained men in other conservative settlements, 35.09% were full-time farmers and 25.15% worked part-time in agriculture.

### **Marriage**

In the fourth edition of his now-classic book *Amish Society* (1993), Hostetler reported the average age of marriage for males as slightly more than 23 years, and for females as slightly under 22 years. The results for the Amish in Michigan show that not much has changed. Data for men from Old Order settlements in Michigan show the average age of marriage as 23.33 years, with men from Swiss settlements 1.25 years younger, and men from other conservative settlements .73 years younger. (See Table 4.) Women from Old Order settlements were, on average, 22.22 years old, or slightly more than one year younger than their marriage partners. Women from Swiss and other conservative settlements were a bit younger when they married, and like Old Order women, were slightly younger than their marriage partners. Table 4 also shows the age range of marriage. The distribution of marriages across all three types of settlements is very similar. Only a few men and women 17 years of age or younger were married. Likewise, a relatively small percentage of men and women married for the first time at 26 years of age or older.

**Table 4**  
*Age at First Marriage for Men and Women by Type of Settlement*

	Old Order		Swiss		Other conservative <sup>a</sup>	
	Men	Women	Men	Women	Men	Women
Average age at first marriage	23.33	22.22	22.07	21.74	22.64	21.91

Age at first marriage <sup>b</sup>	Old Order		Swiss		Other conservative <sup>a</sup>	
	Men	Women	Men	Women	Men	Women
≤17 years	4 0.35%	10 0.87%	7 1.39%	8 1.52%	0 0.00%	1 0.13%
18 years	8 0.69%	40 3.49%	49 9.72%	52 9.85%	3 0.38%	12 1.54%
19 years	48 4.16%	147 12.83%	76 15.08%	92 17.42%	23 2.94%	72 9.22%
20 years	140 12.14%	263 22.95%	80 15.87%	83 15.72%	121 15.49%	210 26.89%
21 years	229 19.86%	213 18.59%	59 11.71%	107 20.27%	232 29.71%	224 28.68%
22 years	204 17.69%	142 12.39%	69 13.69%	57 10.80%	160 20.49%	104 13.32%
23 years	158 13.70%	116 10.12%	54 10.71%	53 10.04%	75 9.60%	53 6.79%
24 years	124 10.75%	68 5.93%	32 6.35%	21 3.98%	61 7.81%	30 3.84%
25 years	78 6.76%	42 3.66%	30 5.95%	16 3.03%	69 8.83%	21 2.69%
≥26 years	160 13.88%	105 9.16%	48 9.52%	39 7.39%	37 4.74%	54 6.91%
Total	1,153	1,146	504	528	781	781

<sup>a</sup> Other conservative includes settlements known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber. <sup>b</sup> In 266 cases, the birth date of either the husband or the wife was missing, incomplete, or entered incorrectly, creating obviously incorrect years for age at marriage.

Table 5 displays the day of marriage and the month of marriage, broken down by type of settlement. Across all three types of settlements, Thursday was the preferred day for marriage. This corresponds with the analysis of wedding days by Troyer (2021) and Donnermeyer (2023). However, the month of marriage varies considerably between the Greater Lancaster County settlement (Donnermeyer, 2023) and the Greater Holmes County settlement (Troyer, 2021). Troyer, noting that weddings are perhaps the most important social event among the Amish and a great opportunity to visit other settlements and see old friends and extended family, found that over time marriages in the Greater Holmes County settlement shifted from a post-harvest pattern to a preference for spring weddings or weddings earlier in autumn. In contrast, Donnermeyer

(2023) found little change in month of marriage in the Greater Lancaster County settlement over a period of 100-plus years. The results in Table 5 shows that the Amish in Michigan follow the Greater Holmes County pattern. More Old Order marriages are now in May and June than in any other month, and September and October are also popular months. Marriages in Swiss communities are in May, September, October, November, and June. Amish in other conservative settlements tend to get married in May, followed by October, March, and November. Clearly, what is different today is that marriages in Michigan occur throughout the year. With the exception of the Greater Lancaster County settlement, and likely its daughter settlements, there is no longer a clearly and universally defined Amish wedding season. It depends on the settlement or the traditions of the fellowship with which a settlement identifies or both.

**Table 5***Day and Month of Marriage by Type of Settlement*

Day of marriage	Old Order		Swiss		Other conservative <sup>a</sup>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Monday	5	0.43	1	0.19	2	0.26
Tuesday	84	7.29	9	1.71	95	12.16
Wednesday	108	9.38	7	1.33	47	6.02
Thursday	783	67.97	414	78.56	619	79.26
Friday	133	11.55	3	0.57	3	0.38
Saturday	9	0.78	7	1.33	8	1.02
Sunday	30	2.60	86	16.32	7	0.90
Total	1,152	100.00	527	100.00	781	100.00

Month of marriage	Old Order		Swiss		Other conservative <sup>a</sup>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
January	11	0.95	11	2.09	33	4.23
February	18	1.56	15	2.85	55	7.04
March	42	3.65	37	7.02	86	11.01
April	88	7.64	46	8.73	68	8.71
May	239	20.75	81	15.37	131	16.77
June	191	16.58	57	10.82	53	6.79
July	57	4.95	24	4.55	21	2.69
August	110	9.55	49	9.30	46	5.89
September	164	14.24	64	12.14	67	8.58
October	143	12.41	64	12.14	104	13.32
November	62	5.38	61	11.57	76	9.73
December	27	2.34	18	3.42	41	5.25
Total	1,152	100.00	527	100.00	781	100.00

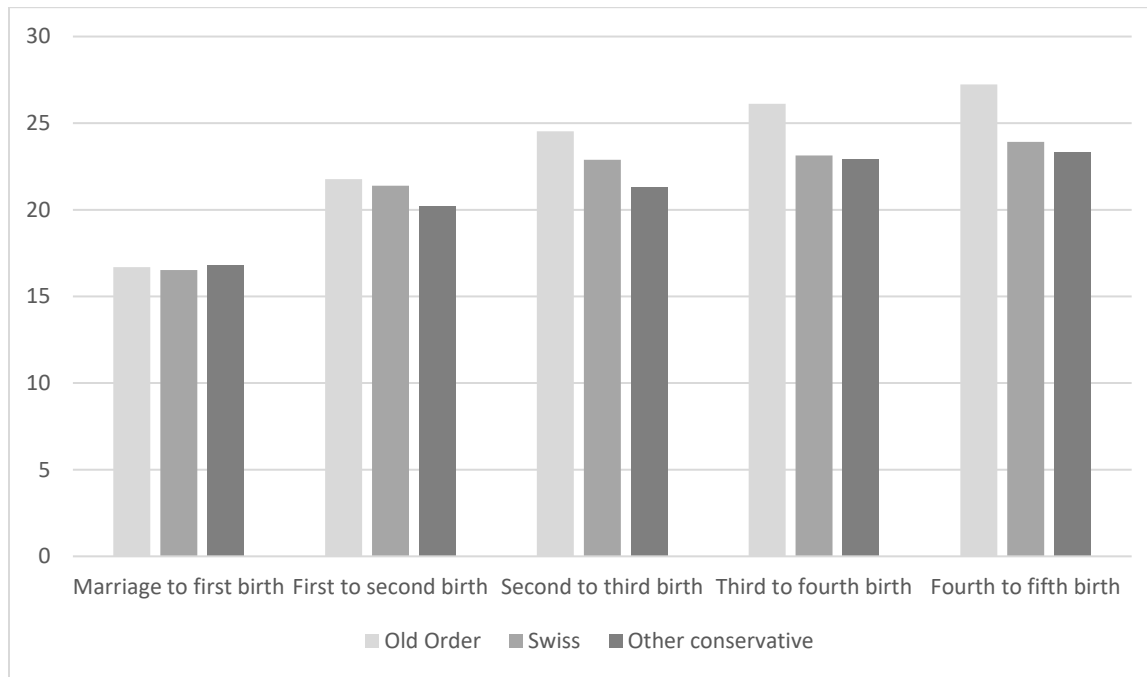
<sup>a</sup> Other conservative includes settlements known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber.

**Family**

A table displaying birth intervals for the Amish in Michigan by type of settlement can be found in Appendix B. Figure 5 shows in graphic form the average interval (in months) for the first five births. After the fifth birth, there is limited variation in birth intervals. However, through the first five births, the average interval increases incrementally for women in Old Order, Swiss, and other conservative settlements. Both Figure 5 and Appendix B show how much the Amish remain a high fertility group (Kraybill et al., 2013). Over 80% of firstborn children were born within two years of the marriage (Appendix B). Slightly over half were born before a couple celebrated their first anniversary.<sup>12</sup> Birth intervals are slightly longer for women in Old Order settlements, and shorter in both Swiss and other conservative communities.

**Figure 5**

*Intervals in Average Number of Months for the First Five Children Born, by Type of Settlement*



**Completed Fertility**

Completed fertility is the number of children to which a woman gives birth during her childbearing years, which are often defined as age 18 through 45 or 50 (Bogue, 1969). Table 6 shows the number

<sup>12</sup> The percentage of childless couples appears to be very close to what Hostetler (1993) reported in a previous analysis of the Greater Lancaster County, the Greater Holmes County, and the Elkhart-LaGrange settlements, which was 4.4%. For Old Order Amish married couples in Michigan, adjusting for those married in 2016 or earlier—that is, married at least three years before publication of the directory—3.62% were childless. Among married couples from Swiss communities, the percentage was 5.10%, and for married couples from other conservative settlements, it was 4.68%. The percentages of babies born within seven months of the marriage are as follows: Old Order—4.11%; Swiss—8.14%, and other conservative—1.92%.



of children for women 45 years and older living in Michigan's Old Order, Swiss, and other conservative settlements. Only a small percentage were childless or had only one or two children. For women in Old Order settlements, the highest percentages were for those who gave birth to either six children or 10 children. In Swiss settlements, 22.50% of women gave birth to 13 or more children, and in other conservative settlements, the two highest percentages are for those who bore 10 children and those who bore 13 or more. As Table 6 also demonstrates, completed fertility was high for women in all three types of settlements, but with a noticeable difference between those living in Old Order versus Swiss and other conservative settlements. For all three groups, completed fertility was lower for women born from 1969 through 1973 when compared to women born in 1948 or earlier. However, the difference between those born before 1948 and those born from 1969 to 1973 was very small for women from other conservative settlements. For women from other conservative settlements, completed fertility was slightly lower for those born between 1949 and 1953, then increased for each succeeding cohort until 1969–1973. Clearly, even with modest declines in completed fertility for women from Old Order and Swiss settlements in Michigan, the number of babies born to Amish women remains quite high.

**Table 6***Number of Children for Women 45 Years of Age and Over by Type of Settlement and by Birth Cohort*

Number of children	Old Order		Swiss		Other conservative <sup>a</sup>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
0	7	1.63	0	0.00	4	1.79
1	7	1.63	3	1.88	3	1.35
2	6	1.40	2	1.25	3	1.35
3	21	4.88	3	1.88	6	2.69
4	27	6.28	8	5.00	10	4.48
5	33	7.67	10	6.25	12	5.38
6	54	12.56	17	10.63	13	5.83
7	40	9.30	12	7.50	13	5.83
8	46	10.70	8	5.00	16	7.17
9	48	11.16	13	8.13	22	9.87
10	56	13.02	17	10.63	37	16.59
11	32	7.44	16	10.00	26	11.66
12	19	4.42	15	9.38	22	9.87
13 or more	34	7.91	36	22.50	36	16.14
Total	430	100.00	160	100.00	223	100.00

Birth cohort by birth year	Average number of children					
	Old Order <sup>b</sup>		Swiss		Other conservative <sup>a</sup>	
	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>
≤1948	68	9.34	29	11.03	34	8.77
1949–1953	48	8.52	19	9.34	23	8.65
1954–1958	51	7.12	16	9.38	41	9.00
1959–1963	65	7.23	21	8.86	29	9.76
1964–1968	91	7.79	22	8.82	44	10.05
1969–1973	100	7.53	53	9.21	52	8.74
Average	7.88		9.47		9.18	

<sup>a</sup> Other conservative includes settlements known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber. <sup>b</sup> In seven Old Order cases, the birth date of the mother was entered incorrectly in the directory. All seven cases were removed from the birth cohort analysis, with an adjusted *N* of 423.

### Sex Ratio

The sex ratio—the proportion of males to females as expressed by the number of males per 100 females—for most human populations around the world shows that there are more male babies born than female babies, a demographic constant since the first statistical studies were undertaken as early as the mid-seventeenth century (Nixon, 2013). Table 7 shows this constant for Amish births in Michigan. Although the sex ratio varies somewhat by birth order, overall it is nearly identical across the three types of settlements. A typical sex ratio for almost any human population is 1.06; that is, about 106 males are born for every 100 females (Bogue, 1969, p. 166). The sex

ratio at birth for the United States is slightly lower at about 1.05 (World Bank, n.d.-b). The sex ratio may be higher for the Amish, but there is no obvious explanation why. As well, a study of the Greater Lancaster County Amish community conducted over 60 years ago by Smith (1960) found a sex ratio of 1.05. The fact that the average sex ratio is nearly the same for the three types of Amish settlements in Michigan and higher than both the national average and the earlier study by Smith may suggest that something other than genetics and family genealogies is involved. This is one area where more research should be undertaken.

**Table 7**

*Sex of Child by Type of Settlement and Birth Order*

Birth order	Number of males			Number of females			Sex ratio (females/males)		
	Old Order	Swiss	Other conservative <sup>a</sup>	Old Order	Swiss	Other conservative <sup>a</sup>	Old Order	Swiss	Other conservative <sup>a</sup>
1st	562	256	367	508	224	326	1.11	1.14	1.13
2nd	523	214	353	467	178	286	1.12	1.20	1.23
3rd	476	212	299	399	183	283	1.19	1.16	1.06
4th	404	176	265	360	172	252	1.12	1.02	1.05
5th	340	144	231	315	158	207	1.08	0.91	1.12
6th	308	134	197	239	130	183	1.29	1.03	1.08
7th	234	125	176	202	102	160	1.16	1.23	1.10
8th	176	103	145	167	82	135	1.05	1.26	1.07
9th	126	87	123	131	63	102	0.96	1.38	1.21
10th	96	68	97	90	54	75	1.07	1.26	1.29
11th	57	49	51	53	45	62	1.08	1.09	0.82
12th	30	35	33	33	34	42	0.91	1.03	0.79
13th and more	37	62	46	43	60	35	0.86	1.03	1.31
Total	3,369	1,665	2,383	3,007	1,485	2,148	1.12	1.12	1.11

<sup>a</sup> Other conservative includes settlements known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber.

### Age-Sex Composition

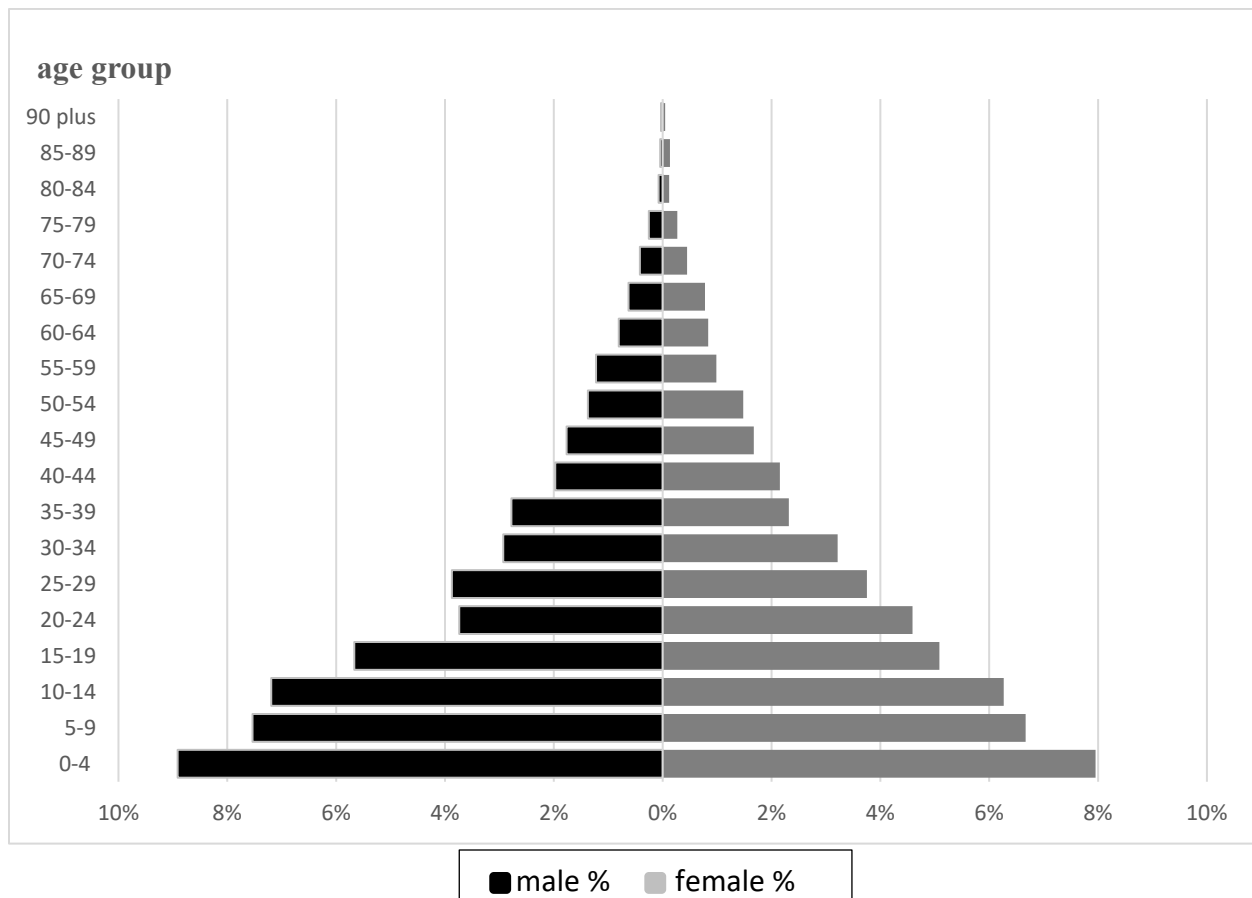
Appendix C contains a table showing the age and sex distribution of the Amish populations living in Old Order, Swiss, and other conservative settlements in Michigan. It is from these data that three age-sex pyramids of the population were built (Figures 6, 7, and 8). A population pyramid is a way to graphically display the life cycle of a human population. To quote Bogue (1969, p. 151), “Various physiological and social forces exert their effect on the cohort of each age group.” In other words, by illustrating the percentage of males and females in fixed age groups, much can be learned about the past, present, and future of any human group.

Age-sex pyramids constructed from other demographic studies of the Amish (Cross & McKusick, 1970; Hostetler, 1993; Donnermeyer, 2023) are structures that Hostetler (1993, p. 104)

describes as “strikingly different” from those of the general population of the U.S. Even though there are slight differences in the age-sex pyramids of the populations living in Old Order, Swiss, and other conservative settlements in Michigan, all three are very similar. Generally, any age group, either female or male, is larger than the next oldest age group, but smaller than the previous age group. In demography, this is known by the word “expansive,” a term meaning that younger age groups are larger; hence, forming the shape of a pyramid (Coyler et al., 2022).

**Figure 6**

*Age-Sex Composition of the Michigan Amish Living in Old Order Settlements*

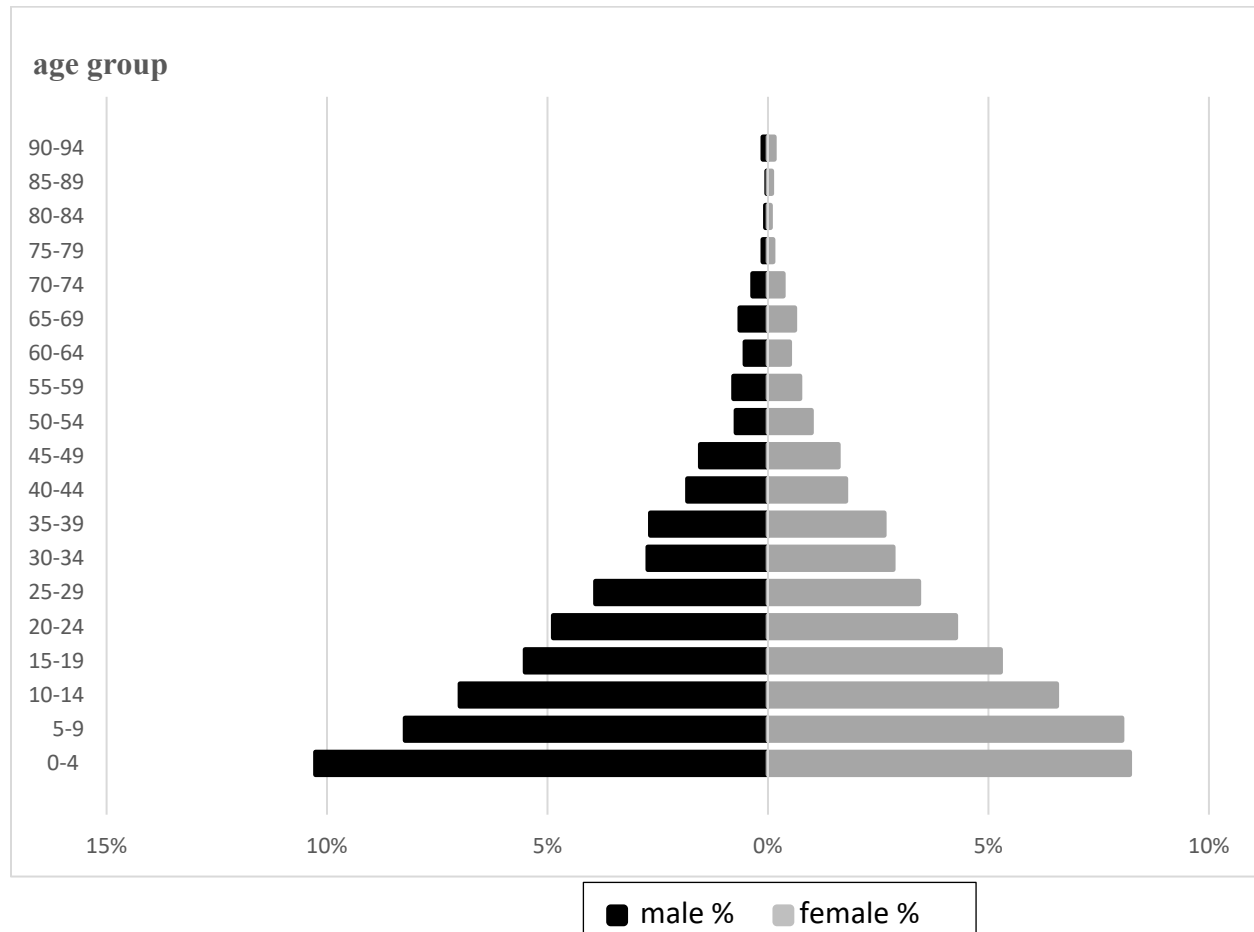


There is one interesting variation in the pyramid for Old Order families (Figure 6). Normally, the 20–24 age group is larger than the 25–29 age group. However, figure 6 shows slightly fewer males in the 20–24 age group than in the 25–29 age group. This is likely due to two factors, both related to marriage and how it affects migration. The first is that most males marry in the 20–24 age range (see Table 5), with some possibly moving to other settlements in both Michigan and beyond to start their families. The second is that married males in their late 20s may relocate to various Old Order settlements in Michigan soon after marriage from places outside the state. Perhaps one factor is more important than the other, which is a possible topic for future research in relation to both males and females. The question is, does later-age marriage (i.e., 25 years and older) for either

newlywed males or females show higher levels of in- vs. out-migration than earlier-age marriage (i.e., younger than 25 years) or is it vice versa?

### Figure 7

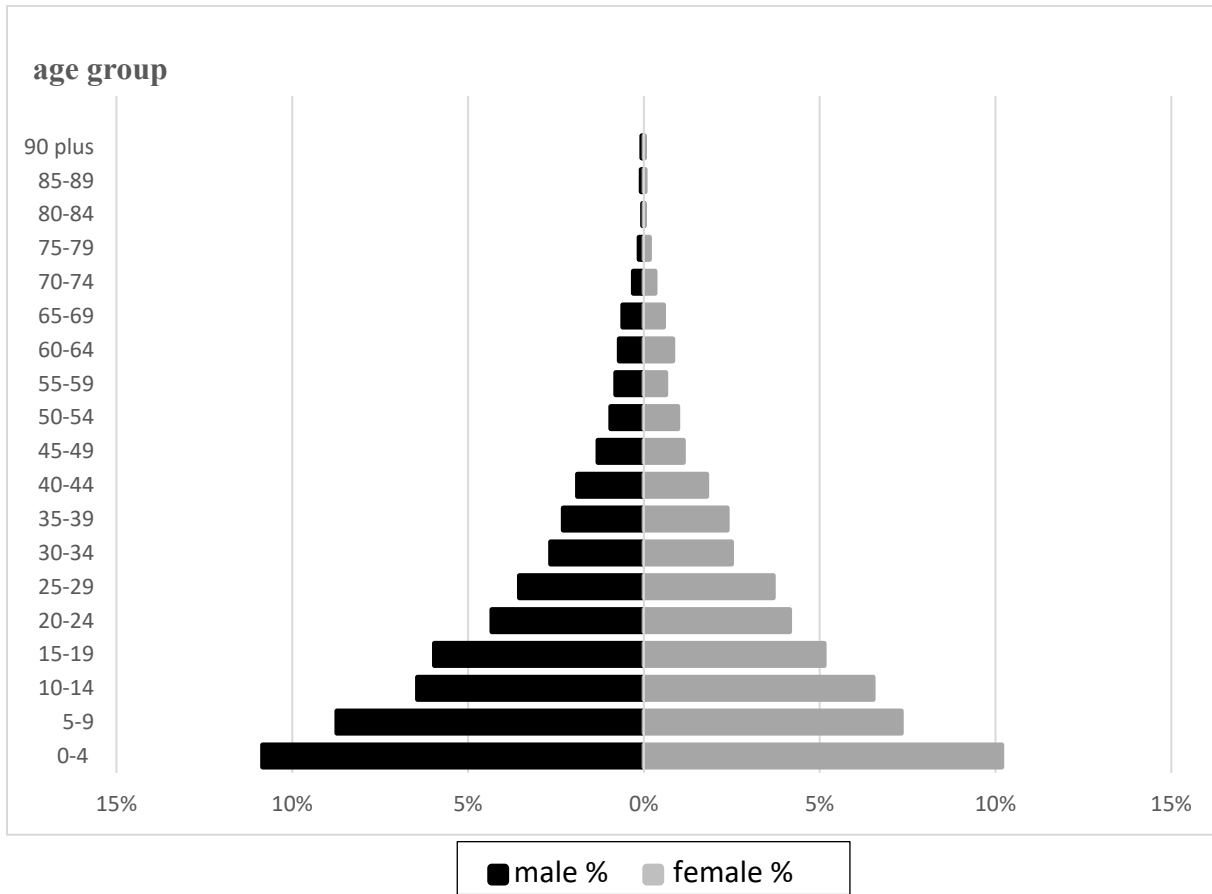
*Age-Sex Composition of the Michigan Amish Living in Swiss Settlements*



All three pyramids display the youthfulness of the Amish population and its continued high fertility. Regardless of the type of settlement, males and females age 0–9 make up between 15% and 20% of the population within their respective sex groups. Those in the 10–19 age range compose at least another 10% of the population. Slightly over 29% of the total Old Order population in Michigan are males 19 years old or younger. The female population 19 years or younger is nearly 26% of the total Old Order population. Combined, this is more than half of the total Old Order population. The Swiss population is even younger. Males in the 0–19 age range compose almost 31% of the total Swiss population. Females 19 years or younger represent slightly over 28% of the total Swiss population. Together, they are a majority of the total Swiss Amish population in Michigan. The various settlements of other conservative affiliations have the highest percentage of individuals in the 0–19 range: nearly 32% of the total population are males 19 years and younger, and slightly over 29% are females 19 years and younger. This is three-fifths of the total population of the other conservative settlements.

**Figure 8**

*Age-Sex Composition of the Michigan Amish Living in Other Conservative Settlements*



*Note.* Other conservative settlements include those known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber.

**Summary and Discussion**

Important to the demographic study of the Amish and other Plain Anabaptist communities is to go beyond the larger and the older settlements, which are often the ones from which smaller and newer communities are founded. There is an Amish presence in 32 U.S. states and four Canadian provinces (Young Center, 2023). How does this presence in new places affect Amish population dynamics, both now and in future times, if at all? As Donnermeyer and Cooksey (2010) observed, new settlements have been founded in hundreds of counties where the Amish had never gone before. Do the economic and social characteristics of these new places somehow influence family size and other demographic dynamics?

Michigan is a good place to begin an expanded analysis of the Amish because of its large number of settlements, including those established before the twenty-first century and those established over the previous 2-plus decades, as illustrated in Appendix A and Figures 1 and 2. Most of the Michigan communities are small, although Centreville, with 15 church districts, is now the twenty-third largest of the 600-plus Amish settlements (Young Center, 2023). As well,

Michigan has an amazing diversity of settlements by affiliation, including various groups considered to be less progressive than Old Order Amish, plus the Michigan Circle communities described by Burdge (2022).

Yet, despite Michigan's diversity of settlements, the demographic dynamics are quite similar. For example, the two primary occupations are agriculture and carpentry, followed by sawmills, other nonfarm occupations, and traditional occupations associated with a horse-and-buggy lifestyle (Table 1). There are some differences by size of the community, as measured by number of church districts, but they do not form a linear pattern. Both smaller settlements with only one or two church districts and settlements with seven or more church districts have a lower percentage of men involved in agricultural pursuits, while settlements the size of three, four, or five church districts are more agriculture-based. In addition, regardless of size, Old Order settlements are less likely to be connected to agriculture than either Swiss or other conservative settlements (Table 2). Hence, men's occupations reflect the biggest differences, comparatively, between various Amish settlements in Michigan, due, at least in part, to the economic possibilities in the areas of Michigan where they are located (Carson, 1998). Will these differences prove to be the historical context for understanding various other social and cultural differences at some future time?

Analysis of the age and occupational status of ordained men shows only minor differences across the three types of settlements. For example, the average age at ordination for all three types of leadership positions (bishop, minister, deacon) was 36.5 years. Old Order men were ordained at an average age slightly older (about 1.5 years) than men from Swiss settlements, with the average age of men from other conservative settlements in between. Altogether, ordained men were more likely to be involved in agriculture when compared to other men from settlements of the same kind, which is a pattern shown in most other Amish settlements (Kraybill et al., 2013).

Among Michigan Amish, men are slightly older than women across all three types of settlements (Table 4). This too is reflective of other Amish settlements, both large and small, and old and new (Kraybill et al., 2013). Age of marriage is 19–23 years, with fewer than one in four brides or grooms outside of this age range. Likewise, there is little variation in the preferred day of marriage (Table 5). Some difference does exist in month of marriage, but it is clear that none of the settlements in Michigan follow the post-harvest pattern that is such a prominent contemporary feature of the Greater Lancaster County settlement (Donnermeyer, 2023).

Starting a family soon follows marriage (Appendix B and Figure 5). The average time from marriage to the birth of the first child is less than 17 months for couples living in Old Order, Swiss, and other conservative settlements in Michigan. The spacing of children from the first to the second birth—and successively up through the fifth birth—gradually increases (Appendix B). For couples who have more than five children, spacing remains about the same, which was in a range from about 21.94 months to 28.47 months.

Completed fertility (Table 6) shows that the Amish continue to be a high fertility group. It is not unusual for women older than 45 years of age to have borne 10 or more children, regardless of whether they live in Old Order, Swiss, or other conservative settlements. Women in Swiss settlements had the highest completed fertility, followed closely by women from other

conservative settlements. Old Order women were noticeably below both Swiss and other conservative women, with a completed fertility of 7.88. Even though there are hints of a decline in all three groups, the changes are not large, and it will take many decades before they begin to approximate the rates for the U.S. and other industrialized societies. All three groups show much higher completed fertility than the average U.S. population. For example, the World Bank (n.d.-a) placed completed fertility in 2021 at 1.7 births for U.S. women 45 years of age and older.

The sex ratio was higher among the Amish in settlements in Michigan than the ratio of 106 males to 100 females typical for most societies around the world (Table 7). By settlement type, the ratios are slightly higher for those in Swiss settlements. By birth order, the ratios vary in a more random manner, making it difficult to discern any clear pattern. Additional demographic research will be necessary to determine if there is any trend over time in the sex ratio among the Amish, either generally or for specific groups such as the Swiss Amish.

Based on the population composition by age and sex (Appendix C), an age-sex pyramid was constructed for each of the three types of settlements (Figures 6, 7, and 8). All three show an age-sex structure typical of high fertility societies. As well, there were relatively small differences among the shapes of the pyramids for the three types of settlements. Simply put, even though there is variety in the *Ordnungs* (church disciplines) by type of settlement in Michigan, their demographic profiles are mostly the same. Prior research of religion's effect on fertility, such as Heaton's (1986) examination of Mormons and Troyer's (2022b) analysis of varying fertilities among Amish groups in the Greater Holmes County settlement, indicates there can be links between fertility differences and various Amish clusters (Stoltzfus, 2022). This shows up in the lower completed fertility of women from Old Order settlements in Michigan.

It appears from the population data derived from the 2019 Michigan directory that Yoder's (2022) "chain of migration" holds true. The demographic dynamics of Amish communities in Michigan are not much different from the demographic dynamics of larger Amish communities, such as the Greater Lancaster County (Donnermeyer, 2023), the Greater Holmes County (Beachy, 2021; Troyer, 2021, 2022a), the Greater Geauga County (Greksa, 2021), and the Elkhart-LaGrange County (Meyers, 2022) settlements. Will these patterns diverge or remain the same over the next several decades as settlements continue to spread across Canada and the United States? Will greater geographic diversity promote more demographic diversity, which, in turn, could be a source of change and greater variation in Amish social, cultural, and religious practices?

Amish settlement directories are a prime source for answering these and other questions about social change in a faith group that today is one of the fastest growing in North America (Donnermeyer, 2021). The state of Michigan will play a key role in answering this question because future editions of the directory will likely be published on a regular basis. Therefore, for the Amish in Michigan and for settlements in many other localities, one of the next advances in Amish demographic scholarship should be longitudinal analyses of population data.



## References

- Beachy, B. (2021). How to avoid “unenlightened sorrow”: A statistical analysis of Plain remarriage. *Journal of Plain Anabaptist Communities*, 2(1), 96–112. <https://doi.org/10.18061/jpac.v2i1.8292>
- Bogue, D. J. (1969). *Principles of demography*. John Wiley & Sons, Inc.
- Burdge, E., Jr. (2022). The Michigan Amish fellowship: A case study for defining an Amish affiliation. *Journal of Plain Anabaptist Communities*, 3(1), 1–12. <https://doi.org/10.18061/jpac.v3i1.9130>
- Carson, W. E. (1998). *Social change and rational choice: A contemporary interpretation of the Amish*. [Unpublished doctoral dissertation]. The Ohio State University. [https://etd.ohiolink.edu/acprod/odb\\_etd/ws/send\\_file/send?accession=osu1487951214940881&disposition=inline](https://etd.ohiolink.edu/acprod/odb_etd/ws/send_file/send?accession=osu1487951214940881&disposition=inline)
- Coyler, C. J., Stein, R. E., Corcoran, K. E., & MacKay, A. (2022). Amish population pyramids: Demographic patterns across affiliations in the Holmes County, Ohio, settlement. *Journal of Plain Anabaptist Communities*, 2(2), 30–53. <https://doi.org/10.18061/jpac.v3i1.9148>
- Cross, H. E., & McKusick, V. A. (1970). Amish demography. *Social Biology*, 17(2), 83–101. <https://doi.org/10.1080/19485565.1970.9987850>
- Donnermeyer, J. F. (2021). How do I count thee? Various angles for examining the doubling times of the Amish. *Journal of Plain Anabaptist Communities*, 1(2), 104–125. <https://doi.org/10.18061/jpac.v1i2.7990>
- Donnermeyer, J. F. (2023). A demographic profile of the Greater Lancaster County, Pennsylvania, Amish. *Journal of Plain Anabaptist Communities*, 3(2), 1–34. <https://doi.org/10.18061/jpac.v3i2.9154>
- Donnermeyer, J. F., & Cooksey, E. (2010). On the recent growth of new Amish settlements. *Mennonite Quarterly Review*, 84(2), 181–206.
- Greksa, L. (2021). Population growth and fertility patterns in an Old Order Amish settlement: A 21-year follow-up study. *Journal of Plain Anabaptist Communities*, 1(2), 82–94. <https://doi.org/10.18061/jpac.v1i2.7953>
- Heaton, T. (1986). How does religion influence fertility? The case of Mormons. *Journal for the Scientific Study of Religion*, 25(2), 24–58. <https://doi.org/10.2307/1385480>
- Hostetler, J. A. (1980). The Old Order Amish on the Great Plains: A study in cultural vulnerability. In F. C. Luebke (Ed.), *Ethnicity on the Great Plains* (pp. 92–108). University of Nebraska Press.
- Hostetler, J. A. (1993). *Amish society* (4th ed.). Johns Hopkins University Press. <https://doi.org/10.56021/9780801844416>
- Huntington, G. E. (2001). *Amish in Michigan*. Michigan State University Press.
- Kraybill, D. B., Johnson-Weiner, K. M., & Nolt, S. M. (2013). *The Amish*. Johns Hopkins University Press. <https://doi.org/10.56021/9781421409146>
- Liepins, R. (2000). New energies for an old idea: Reworking approaches to “community” in contemporary rural studies. *Journal of Rural Studies*, 16(1), 23–35. [https://doi.org/10.1016/S0743-0167\(99\)00042-X](https://doi.org/10.1016/S0743-0167(99)00042-X)

- Luthy, D. (2009). *Amish settlements across America: 2008*. Pathway Publishers.
- Luthy, D. (2021). *The Amish in America: Settlements that failed, 1840–2019*. Pathway Publishers.
- Meyers, T. J. (2022). A demographic profile of the Elkhart-LaGrange Old Order Amish settlement. *Journal of Plain Anabaptist Communities*, 3(1), 65–82.  
<https://doi.org/10.18061/jpac.v3i1.9157>
- Miller, D., comp. (2019). *Michigan Amish directory 2019*. Abana Books.
- Nixon, N. N. (2013). *Maternal age at birth delivery, birth order, and secondary sex ratio in the Old Order Amish of Lancaster County* [Unpublished master's thesis]. University of Massachusetts Amherst.  
<https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=2189&context=theses>
- Raber, A., & Raber, M. (2023). *The new American almanac* (53rd ed.). Aden and Mary Raber.
- Rubenstein, B. A., & Ziewacz, L. E. (2014). *Michigan: A history of the Great Lakes state* (5th ed.). Wiley Blackwell.
- Smith, E. L. (1960). *Studies in Amish demography*. Research Council, Eastern Mennonite College.
- Stoltzfus, J., comp. (2022). *Amish & Mennonite settlements of America: A guide to North America's horse and buggy groups and a directory of Die Botschaft scribes*. Masthof Press.
- Troyer, H. (2021). Change and continuity in Amish wedding dates in the Holmes County, Ohio, settlement. *Journal of Plain Anabaptist Communities*, 1(2), 95–103.  
<https://doi.org/10.18061/jpac.v1i2.7948>
- Troyer, H. (2022a). Twinning characteristics of the Amish groups of Holmes County, Ohio. *Journal of Plain Anabaptist Communities*, 2(2), 85–96.  
<https://doi.org/10.18061/jpac.v2i2.8764>
- Troyer, H. (2022b). Varying fertilities of the Amish groups of Holmes County, Ohio. *Journal of Plain Anabaptist Communities*, 3(2), 54–64. <https://doi.org/10.18061/jpac.v3i1.9207>
- U.S. Census Bureau. (2021, August 25). *Michigan's population topped 10 million in 2020*.  
<https://www.census.gov/library/stories/state-by-state/michigan-population-change-between-census-decade.html>
- World Bank (n.d.-a). *Fertility rate, total (births per woman)—United States*. Retrieved June 4, 2022, from <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=US>
- World Bank (n.d.-b). *Sex ratio at birth (male births per female births)*. Retrieved October 8, 2023, from <https://genderdata.worldbank.org/indicators/sp-pop-brth-mf/>
- Yoder, M. (2022). A sturdy sapling in the trans-Appalachian west: The origins and development of the Holmes County Amish community, 1809–1846. *Journal of Plain Anabaptist Communities*, 2(2), 1–25. <https://doi.org/10.18061/jpac.v2i2.8728>
- Young Center for Anabaptist and Pietist Studies. (2023). *Amish population in the United States, by state, county, and settlement, 2023*. Amish Studies.  
[https://groups.etown.edu/amishstudies/files/2023/11/Amish-Pop-2023\\_by-state-and-county\\_updated2.pdf](https://groups.etown.edu/amishstudies/files/2023/11/Amish-Pop-2023_by-state-and-county_updated2.pdf)

## Appendix A

### Timeline of Michigan Amish Communities

#### Settlements Founded During the 19th and 20th Centuries

1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	present time
1895.....														1935 (White Cloud)
1897.1900 (Newberry)														
	1900.....													1954 (Mio)
		1905.....												1922 (Spruce)
			1908.....											1942 (West Branch)
				1909.....										1930 (Hope)
		<b>1910.....</b>												<b>Centreville</b>
			1911.1913 (Coleman)											
				1912.circa 1914 (Au Gres)										
					1940...1950 (Homer)									
						1945.circa 1950 (Jerome)								
							<b>1956.....</b>							<b>Camden</b>
								<b>1960.....</b>						<b>California Township</b>
									<b>1970.....</b>					<b>Mio</b>
										1971.....				circa 2021 (Bronson)
											<b>1973.....</b>			<b>Six Lakes/Greenville</b>
												1975.....		1989 (Homer)
													<b>1977.....</b>	<b>Quincy</b>
													<b>1977.....</b>	<b>Charlotte</b>
														1977.1981 (Albion)
														1978.....2007 (Hale)
														<b>1979.....Beaverton/Gladwin</b>
														<b>1979.....Reading</b>
														<b>1980.....Gladwin/North Gladwin</b>
														<b>1981.....Clare</b>
														1981.....2011 (Ludington)
														1981.....2014 (Rosebush)
														<b>1982.....Stanwood/Morley</b>
														<b>1983.....Blanchard</b>
														1983...1992 (Reed City)
														<b>1987.....Marlette</b>
														1987.....2004 (Elsie/Ovid)
														<b>1989.....Homer</b>
														<b>1989.....Evert</b>
														<b>1990.....Fremont</b>
														1991.....2008 (Coral)
														<b>1993.....Cass City</b>
														1993.....2006 (Vestaburg)
														<b>1993.....Manton</b>
														<b>1994.....Newaygo</b>
														<b>1995.....Marion</b>
														<b>1995.....Ossineke</b>
														<b>1997.....Osseo</b>
														<b>1998.....Bloomingdale</b>

**Settlements Founded During the 21st Century**

	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	present time		
2000.....																									McBain	
2002.....																										LeRoy
2003.....																										<i>2023 (Hersey)</i>
2004.....																										Coldwater/Kinderhook
2006.....																										Hastings
2006.....																										Hale/ Whittemore
2007.....																										Vestaburg
2008.....																										Engadine
2008.....																										<i>2011 (Coral)</i>
2010.....																										North Adams
2011.....																										<i>2021 (Coral)</i>
2012.....																										Hawks
2012.....																										Tustin
2012.....																										Reed City
2014.....																										Harrison
2014 (circa).....																										Clare/Farwell
2015.....																										Morenci
2015.....																										Sault St. Marie
2015.....																										Athens
2016.....																										Rodney
2016.....																										Lawrence/Hartford
2017.....																										Brutus
2017.....																										East Jordan
2018.....																										Bear Lake
2018.....																										<i>2023 (Millington)</i>
2019.....																										White Cloud
2019.....																										Leslie
2019.....																										Cornell
2020.....																										Sterling
2022.....																										Albion
2022.....																										Millersburg
2023.....																										Hanover

Note. Extinct settlements are shown in italics.

## Appendix B

### Birth Intervals by Birth Order and Type of Settlement

Birth order	Number of months						<i>M</i>
	<12	12–17	18–23	24–29	30–35	≥36	
<b>1st child</b>							
Old Order ( <i>n</i> = 1,072)	533 49.72%	325 30.32%	81 7.56%	59 5.50%	25 2.33%	49 4.57%	16.69
Swiss ( <i>n</i> = 483)	270 55.90%	113 23.40%	37 7.66%	21 4.35%	9 1.86%	33 6.83%	16.52
Other conservative <sup>a</sup> ( <i>n</i> = 693)	340 49.06%	211 30.45%	59 8.51%	24 3.46%	16 2.31%	43 6.20%	16.80
<b>2nd child</b>							
Old Order ( <i>n</i> = 980)	58 5.92%	347 35.41%	312 31.84%	147 15.00%	63 6.43%	53 5.41%	21.77
Swiss ( <i>n</i> = 440)	36 8.18%	196 44.55%	113 25.68%	37 8.41%	18 4.09%	40 9.09%	21.39
Other conservative <sup>a</sup> ( <i>n</i> = 629)	30 4.77%	245 38.95%	241 38.31%	56 8.90%	27 4.29%	30 4.77%	20.20
<b>3rd child</b>							
Old Order ( <i>n</i> = 865)	25 2.89%	247 28.55%	274 31.68%	161 18.61%	64 7.40%	94 10.87%	24.53
Swiss ( <i>n</i> = 386)	17 4.40%	141 36.53%	118 30.57%	47 12.18%	23 5.96%	40 10.36%	22.89
Other conservative <sup>a</sup> ( <i>n</i> = 578)	16 2.77%	206 35.64%	211 36.51%	90 15.57%	28 4.84%	27 4.67%	21.28
<b>4th child</b>							
Old Order ( <i>n</i> = 748)	7 0.94%	151 20.19%	254 33.96%	153 20.45%	90 12.03%	93 12.43%	26.12
Swiss ( <i>n</i> = 343)	8 2.33%	127 37.03%	104 30.32%	44 12.83%	21 6.12%	39 11.37%	23.14
Other conservative <sup>a</sup> ( <i>n</i> = 512)	8 1.56%	139 27.15%	196 38.28%	107 20.90%	29 5.66%	33 6.45%	22.92
<b>5th child</b>							
Old Order ( <i>n</i> = 608)	12 1.97%	110 18.09%	156 25.66%	140 20.45%	84 13.82%	106 17.43%	27.24
Swiss ( <i>n</i> = 302)	5 1.66%	89 29.47%	124 41.06%	32 10.60%	19 6.29%	33 10.93%	23.92
Other conservative <sup>a</sup> ( <i>n</i> = 440)	8 1.82%	101 29.95%	184 41.82%	88 20.00%	32 7.27%	27 6.14%	23.33

Birth order	Number of months						M
	<12	12-17	18-23	24-29	30-35	≥36	
<b>6th child</b>							
Old Order ( <i>n</i> = 537)	9 1.68%	81 15.08%	167 31.20%	134 24.95%	62 11.55%	84 15.64%	27.66
Swiss ( <i>n</i> = 263)	3 1.14%	80 30.42%	87 33.08%	54 20.53%	13 4.94%	26 9.89%	23.57
Other conservative <sup>a</sup> ( <i>n</i> = 377)	4 1.07%	63 16.71%	156 41.42%	99 26.26%	26 6.90%	29 7.69%	20.65
<b>7th child</b>							
Old Order ( <i>n</i> = 428)	5 1.17%	54 12.62%	135 31.54%	125 29.21%	47 10.98%	62 14.49%	25.70
Swiss ( <i>n</i> = 235)	1 0.43%	60 25.53%	92 39.15%	39 16.60%	9 3.83%	34 14.47%	24.69
Other conservative <sup>a</sup> ( <i>n</i> = 332)	4 1.20%	60 18.07%	129 38.86%	80 24.10%	23 6.93%	36 10.84%	24.85
<b>8th child</b>							
Old Order ( <i>n</i> = 340)	2 0.59%	47 13.82%	100 29.41%	89 26.18%	45 13.24%	57 16.76%	27.97
Swiss ( <i>n</i> = 177)	4 2.26%	51 28.81%	61 34.46%	33 18.64%	9 5.01%	19 10.73%	23.86
Other conservative <sup>a</sup> ( <i>n</i> = 277)	4 1.44%	41 14.80%	106 38.27%	63 22.74%	36 13.00%	27 9.75%	25.47
<b>9th child</b>							
Old Order ( <i>n</i> = 243)	5 2.06%	34 13.99%	74 30.45%	60 24.69%	23 9.47%	47 19.34%	28.47
Swiss ( <i>n</i> = 149)	2 1.34%	48 32.21%	43 28.86%	32 21.48%	14 9.40%	10 6.71%	23.11
Other conservative <sup>a</sup> ( <i>n</i> = 219)	4 1.83%	28 12.79%	75 34.25%	64 29.22%	25 11.41%	23 10.50%	25.51
<b>10th child</b>							
Old Order ( <i>n</i> = 183)	4 2.19%	26 14.21%	44 24.04%	50 27.32%	27 14.75%	32 17.49%	27.95
Swiss ( <i>n</i> = 124)	5 4.03%	51 41.13%	32 25.81%	24 19.35%	4 3.23%	8 6.45%	21.94
Other conservative <sup>a</sup> ( <i>n</i> = 166)	2 1.20%	32 19.28%	35 21.08%	65 39.16%	14 8.43%	18 10.84%	26.29
<b>11th child</b>							
Old Order ( <i>n</i> = 127)	1 0.79%	15 11.81%	36 28.35%	52 40.94%	10 7.87%	13 10.24%	26.41
Swiss ( <i>n</i> = 94)	2 2.13%	35 37.23%	24 25.53%	17 18.09%	6 6.38%	10 10.64%	26.06
Other conservative <sup>a</sup> ( <i>n</i> = 111)	1 0.90%	17 15.32%	39 35.14%	26 23.42%	10 9.01%	18 16.22%	26.41

Birth order	Number of months						<i>M</i>
	<12	12–17	18–23	24–29	30–35	≥36	
12th child							
Old Order ( <i>n</i> = 63)	3 4.76%	13 20.63%	17 26.98%	16 25.40%	8 12.70%	6 9.56%	24.43
Swiss ( <i>n</i> = 71)	1 1.41%	15 21.13%	29 40.85%	15 21.13%	6 8.45%	5 7.04%	24.62
Other conservative <sup>a</sup> ( <i>n</i> = 72)	2 2.78%	10 13.89%	29 40.28%	21 29.17%	2 2.78%	8 11.11%	25.30
13th child and subsequent children							
Old Order ( <i>n</i> = 75)	2 2.67%	13 17.33%	21 28.00%	18 24.00%	10 13.33%	11 14.67%	26.19
Swiss ( <i>n</i> = 152)	8 5.26%	34 22.37%	71 46.71%	18 11.84%	11 7.24%	10 6.58%	22.22
Other conservative <sup>a</sup> ( <i>n</i> = 79)	2 2.53%	10 12.66%	30 37.97%	20 25.32%	4 5.06%	13 16.46%	26.15

<sup>a</sup> Other conservative includes settlements known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber.

**Appendix C****Distribution of the Amish in Michigan by Age and Sex**

Age group	Type of settlement					
	Old Order		Swiss		Other conservative <sup>a</sup>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
0–4 years						
Males	596	8.91	354	10.26	539	10.85
Females	532	7.95	283	8.20	506	10.18
5–9 years						
Males	504	7.54	284	8.23	434	8.73
Females	446	6.67	277	8.03	364	7.33
10–14 years						
Males	481	7.19	241	6.99	320	6.44
Females	419	6.26	226	6.55	324	6.52
15–19 years						
Males	379	5.67	190	5.51	296	5.96
Females	340	5.08	182	5.28	255	5.13
20–24 years						
Males	250	3.74	168	4.87	215	4.33
Females	307	4.59	147	4.26	206	4.15
25–29 years						
Males	259	3.87	135	3.91	176	3.54
Females	251	3.75	118	3.42	183	3.68
30–34 years						
Males	196	2.93	94	2.72	132	2.66
Females	215	3.21	98	2.84	124	2.50
35–39 years						
Males	186	2.78	92	2.67	114	2.29
Females	155	2.32	91	2.64	118	2.37
40–44 years						
Males	132	1.97	63	1.83	94	1.89
Females	144	2.15	61	1.77	89	1.79
45–49 years						
Males	118	1.76	53	1.54	65	1.31
Females	112	1.67	55	1.59	56	1.13
50–54 years						
Males	92	1.38	25	0.72	47	0.95
Females	99	1.48	34	0.99	48	0.97
55–59 years						
Males	82	1.23	27	0.78	40	0.80
Females	66	0.99	25	0.72	31	0.62



Age group	Type of settlement					
	Old Order		Swiss		Other conservative <sup>a</sup>	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
60–64 years						
Males	54	0.81	18	0.52	35	0.70
Females	56	0.84	17	0.49	41	0.83
65–69 years						
Males	42	0.63	22	0.64	30	0.60
Females	52	0.78	21	0.61	28	0.56
70–74 years						
Males	28	0.42	12	0.35	15	0.30
Females	30	0.45	12	0.35	16	0.32
75–79 years						
Males	17	0.25	4	0.12	7	0.14
Females	18	0.27	4	0.12	8	0.16
80–84 years						
Males	5	0.07	2	0.06	2	0.04
Females	8	0.12	2	0.06	1	0.02
85–89 years						
Males	3	0.04	1	0.03	4	0.08
Females	9	0.13	3	0.09	2	0.04
90+ years						
Males	2	0.03	4	0.12	3	0.06
Females	3	0.04	5	0.14	1	0.02
Total	6,688		3,450		4,969	

<sup>a</sup> Other conservative includes settlements known as Ashland, Buchanan, Dover, Kenton, Troyer, and Swartzentruber.