

# Sherbondy / Carpenter – Family Tree Y-DNA

Analysis of Results and Matches

As of July 2023

This version of the analysis is anonymous for maintaining privacy of the DNA subjects. For those male Sherbondys and Carpenters who are tested, their identity will be shared with others who match.

On a high level, when comparing the male, paternal (Y-DNA) of two individuals, the higher the number of markers tested (111 vs 67, etc.) and the lower number of mutations (steps), then the more likely those two individuals are related. Y-DNA is passed down from father to son with no changes, except for occasional mutations every few generations. Matches have been found of four Carpenter and Sherbondy DNA subjects.

This analysis at this point in time (July 2023) concludes that the Sherbondy family is **most certainly related** to the **Carpenter family** within genealogical times (back to the late 1500's). The analysis of the Y-DNA results are explained below at the marker levels 111 and 67. Following that is a table that explains the possible relationships at each of the marker levels.

## Y-DNA 111

- Sherbondy #1
- Carpenter #1 (vs Sherbondy #1) 4 steps Genetically matched, related within European time.
- Sherbondy #2 (vs Sherbondy #1) 4 steps Genetically and genealogically matched
- Carpenter # 2 (vs Sherbondy # 1) 5 steps Genetically matched, related within European time.
- Sherbondy # 1 and Sherbondy # 2 are 5<sup>th</sup> cousins, 2 times removed. Their common ancestor (John Sherbondy) is 9 generations back for #1 and 7 generations back for #2.
- When comparing Sherbondy #1 and Carpenter #1, we have only a 4 step difference on the 111-level test. That means that all four of these subjects are most certainly related within established surname lineages in Western Europe.

## Y-DNA 67

- Sherbondy # 2
- Sherbondy # 1                      2 steps
- Carpenter # 2                      3 steps "related"

## Expected Relationships with Y-DNA STR Matches

The expected relationship between two individuals with matching Y-chromosome DNA (Y-DNA) is dependent on both the number of markers you have tested and the genetic distance. The chart below shows the interpretation of your relationship at each testing level (Y-DNA12, Y-DNA37, etc.) for relevant genetic distances.

For example, if you and your match have both tested at the Y-DNA37 level and are a 36/37 match, this is a genetic distance of one. You are then considered tightly related.

|                              | Y-DNA12 | Y-DNA25 | Y-DNA37 | Y-DNA67 | Y-DNA111   | Interpretation  |
|------------------------------|---------|---------|---------|---------|------------|---|
| <b>Very Tightly Related</b>  | N/A     | N/A     | 0       | 0       | 0          | Your exact match means your relatedness is extremely close. Few people achieve this close level of a match. All confidence levels are well within the time frame that surnames were adopted in Western Europe.  |
| <b>Tightly Related</b>       | N/A     | N/A     | 1       | 1-2     | 1-2        | Few people achieve this close level of a match. All confidence levels are well within the time frame that surnames were adopted in Western Europe.  |
| <b>Related</b>               | 0       | 0-1     | 2-3     | 3-4     | <b>3-5</b> | Your degree of matching is within the range of most well-established surname lineages in Western Europe. If you have tested with the Y-DNA12 or Y-DNA25 test, you should consider upgrading to additional STR markers. Doing so will improve your time to common ancestor calculations.   |
| <b>Probably Related</b>      | 1       | 2       | 4       | 5-6     | <b>6-7</b> | Without additional evidence, it is unlikely that you share a common ancestor in recent genealogical times (one to six generations). You may have a connection in more distant genealogical times (less than 15 generations). If you have traditional genealogy records that indicate a relationship, then by testing additional individuals you will either prove or disprove the connection. |
| <b>Only Possibly Related</b> | 2       | 3       | 5       | 7       | 8-10       | It is unlikely that you share a common ancestor in genealogical times (one to 15 generations). Should you have traditional genealogy records that indicate a relationship, then by testing additional individuals you will either prove or disprove the connection. A careful review of your genealogical records is also recommended.  |
| <b>Not Related</b>           | 3       | 4       | 6       | >7      | >10        | You are not related on your Y-chromosome lineage within recent or distant genealogical times (one to 15 generations).   |