

Expanded Family Timeline

This report begins with the 17-column family timeline report. As is, this report can answer many questions and highlight patterns and errors easily. It is most easily understood when it is limited to the progenitor and his or her children. Including spouses adds helpful information, but also adds a little confusion to the patterns. Adding grandchildren adds a little more confusion, but these are all first cousins, and frequently have close interactions. These are just a few of the analyses this 17-column family timeline can perform.

- What was going on in the family when each child was born, married, or died?
- What military events were going on in the family? How many cousins enlisted? Did any of the family serve in the same unit? Who was the first to enlist? Who was the last?
- Are all family members represented in all possible censuses? Who is missing?
- Who was the first child born in a given generation? Who was the last one to die?
- Did the family migrate to a new location? How many of the extended family moved with them?
- Are there events that don't make sense in the context of other family members' events?
- Is the data entry consistent throughout this family? For example, are any place names misspelled? Inconsistencies jump out in this report.

It is already a large report, but there are additions that can make this report even more informative. This is the report whose example pages began the presentation, and these are some of the analyses I expect it to perform.

- Sometimes I want to see a person's age. Is he or she too young or too old for this event? What family member lived the longest? What member of the generation lived the longest? I need to add a way to calculate everyone's age at each event.
- I like to use this report to determine migration patterns. When that is my object, I extend the report for several generations, usually at least five. Without knowing the generation to which each person belongs, patterns aren't always clear. I want to add something that shows the generation number.
- When extending this report to five or more generations, it can be helpful to identify lines of descent from the second generation, i.e., the progenitor's children. What can I add to do that? (This is not illustrated in this report. I usually create flags format the report conditionally based on those flag values.)
- I want to isolate any group of siblings and look at their events. To do that, I need to include their parents in this report, but that information is only available in a list of people report.
- I'd like to include the spouses in this report, but I don't want to see them all the time. I want a way to exclude them when desired.

Open the example report, "family_timeline_rollinsD.xlsx". It opens with six columns hidden, Columns G through L. You need to "unhide" those columns. If you don't know how to do this, one method is explained in the report, "soldiers_cemeteryD_basics.pdf".

In addition to the main report tab, there are two additional tabs, "generations" and "vitals". The "generations" tab is a report similar to that explained in "dic_generations_rollins_basics.pdf" (Folder Five). It is a bare-bones descendant indented chart, saved as a text file and imported into Excel. This report has generation numbers that can be copied into the main report via the VLOOKUP function (described in the report, "soldiers_cemeteryD_basics.pdf"). That way, I can always filter or sort by generation. This will also allow me to exclude spouses when necessary. Spouses will not have a generation number, so filtering out blank generation numbers filters out spouses.

Parents are included in a list of people report, but not in a list of witnesses report. Therefore, I need to run a list of people report for all the witnesses in my initial focus group. Parents' names can be copied into the original report via the VLOOKUP function. If I include each person's date of birth, in a manner that can be used for calculations, I can use that information to calculate each person's age at any event. The Witness ID number must be included in all three reports, or there won't be a unique value for VLOOKUP to use to connect the reports. This report is copied into the "vitals" tab worksheet.

Calculating Ages

The method I use to calculate ages is a kluge and it's not perfect, but it does work in all the spreadsheet programs I've used. The main problem with my method is it's off by one day if the number of months between the first and last dates is less than six; e.g., the person's life span is 8 April 1779 – 10 October 1872. April to October is six months, so my kluge calculation matches other methods. Assume the person's life span is 8 May 1779 – 10 October 1872. May to October is only five months, and my kluge calculation adds an extra day to the calculation. There is nothing built into my kluge calculation to handle calendar changes, but that's a problem with some other calculation methods, too.

My kluge method (1) assumes a day zero; (2) calculates the total days between day zero and any date; (3) calculates the difference in total days between two dates; and (4) returns the age in years, months, and days using the DATEDIF function. The calculation for "days1", the number of days since day zero when a person was born, is made in the list of people worksheet, the "vitals" tab. It requires the date of birth output in three columns (Columns C-E) and the calculation formula appears in Column F. Unlike the TMG exports in the list of events and list of witnesses report, TMG exports the three-column date format as numbers in the list of people report, not text.

- days1 (Column F): =SUM((C2*365.25)+(D2*30.4375)+(E2))

My filter for the list of events selects first any Principal1 whose Temporary flag value equals that created in my initial list of people report. (I do change this value often enough that I routinely use the [?] for flag values and input the correct value when a report is run.) If a military event tag involves a real person, that person is Principal1. I have a variety of military event tags. Those that might include data on enlistment and military units are the four in this filter. You might need to filter for only one military event tag.

This report is intended only as a list of military information for use by other reports. Therefore, sorting and filtering, analyzing, and manipulating this report is unnecessary. Not all the output columns shown below are essential, but some of them are included to highlight any inconsistent data entries. Essential columns are: (1) Prin1 ID (the unique value that connects this report to the list of people report); (2) Prin2 Last, Given (the name of the military unit pseudo-person); (3) Date (because I want that information in the original report). The sort output is important, but will be explained in the section titled "VLOOKUP" (below).

All other calculations and functions are used in the main report, the "family_timeline01" tab, and the age calculations use the hidden columns, Columns G through L.

- Columns G through I form the familiar three-column YYYY MM DD TMG output. Because this is a list of witnesses report, these columns were converted from text format to number format.
- Column J calculates the total days from day zero to the event date (days2).
=SUM((G2*365.25)+(H2*30.4375)+(I2))
- Column K imports the days1 calculation from the "vitals" worksheet via a VLOOKUP function.
=VLOOKUP(C2,vitals!B:F,5,FALSE)
- Column L calculates the difference in these two day totals. =SUM(J2-K2)

- Column M expresses this difference in years, months, and days. This uses Excel's DATEDIF function. I do have a formula that does the same thing, just in case I use a spreadsheet program that doesn't recognize DATEDIF, but it's long and complicated – and I'm glad I don't need to use it.
=DATEDIF(0,L2,"y")&" y's "&DATEDIF(0,L2,"ym")&" m's "&DATEDIF(0,L2,"md")&" d's"
- Hiding Columns G-L makes this report easier to read, and the columns can still be used for sorting. If you want to filter on one of them, you will need to unhide it.

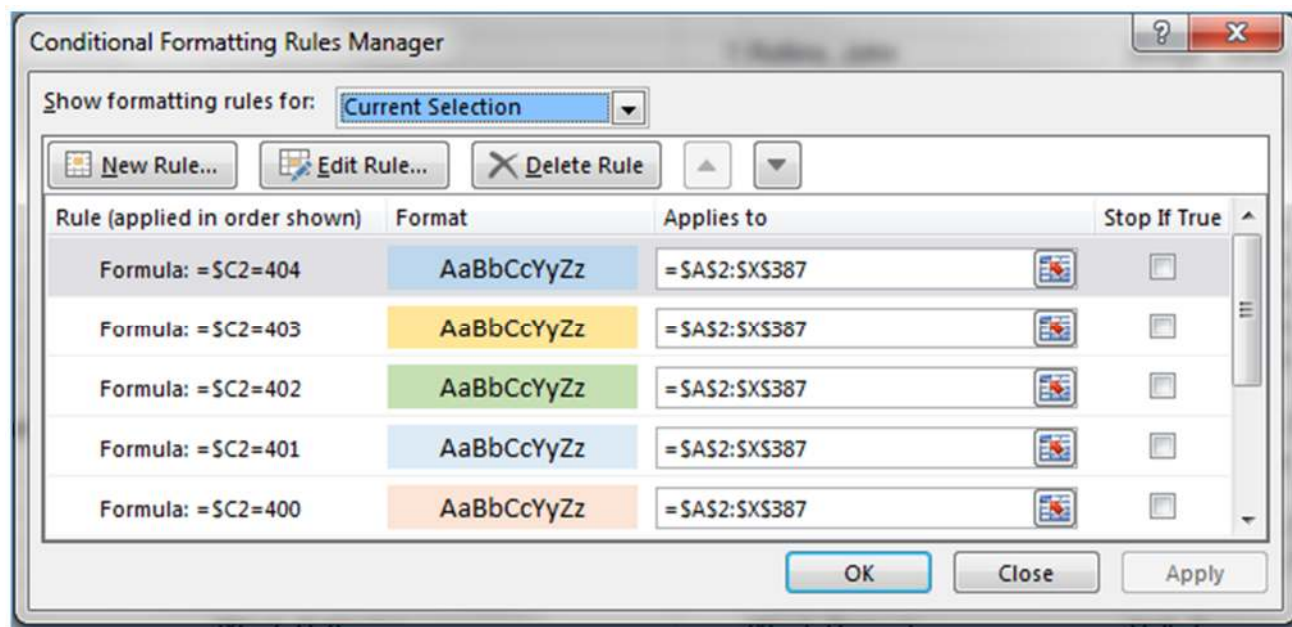
Adding Generation Numbers and Parents

The VLOOKUP function can be used to copy automatically information from one worksheet into another. The function is explained in more detail in the report, “soldiers_cemeteryD_basics.pdf”.

- Column V copies the generation numbers from the “generations” tab worksheet. The IFERROR function is added to leave the cell blank if there is no generation number corresponding to PRIN1 in the main report. =IFERROR(VLOOKUP(C3,generations!D:G,4,FALSE),””)
- Column W copies the father’s name from the “vitals” tab worksheet. =IFERROR(VLOOKUP(C3,vitals!B:G,6,FALSE),””)
- Column X copies the mother’s name from the “vitals” tab worksheet. =IFERROR(VLOOKUP(C3,vitals!B:I,8,FALSE),””)

Conditional Formatting

Applying special formatting to a cell or row if the contents meet specified criteria is a very effective spreadsheet feature. One sequence to access this feature is: Select the body of the table > from the **Home** tab > **Conditional Formatting** > **New Rule** > “Use a formula to determine which cells to format” > enter the formula that describes the conditions to be met > set the format.



In this report, all events relating to the children of William Henry Peck and Emily Augusta Rollins are color-coded based on each child's ID number. This highlighting makes those children's lives stand out.

This is a powerful report, but it's also large and potentially unwieldy. It will perform all the analyses I listed, and many more. With large, many-columned reports like this one, using Excel's **Advanced Filter** may be helpful. With the standard filter, a single column might have OR criteria, but if one or more additional columns are filtered, the two create an AND filter. Rows must match the filter criteria in all columns. Excel's advanced filter allows OR criteria among all columns. This feature can be accessed on the **Data** tab in the "Sort & Filter" area.