

Incorporate DNA into Your German Research

Apply DNA analysis in a German context

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Researching your German ancestors today means combining documentary and DNA evidence. There are great resources for researching your German ancestor's paper trail. There are equally fantastic methods for doing DNA research. Today we will try and combine these two types of research to break down your German brick walls. Since this is a German research group, I will focus more on the DNA side, since most people here will be more well versed in German documentary research. Just as German documentary research is unique, using DNA with Germans requires the same attention to context.

What I'm presenting today is my own working model. My understanding of how to think about my own match list has changed over time as I apply what I know to real cases. My "model" comes from my dad having mostly mid-19th century German ancestors (7 great grandparents or their parents born in German lands: Lower Saxony, Westphalia, Hesse, Baden, Saxony, Pomerania, Bavaria, Switzerland) plus my mom having two great grandparents from the Netherlands. My dad and mom each are 1/16 "Pennsylvania German," or American colonial-era German. I've had several clients with similar ancestors, plus one client who was born in Germany. This experience has allowed me to form hypotheses for how different era (1700's, 1800's, 1900's) German immigrants will require different strategies. The fact that my mom's 5 mid-19th century Irish great grandparents and Irish clients contrast with my dad's ancestors has also given me some perspective of how to think about using DNA.

1. **Documentary Research:** To answer a genealogical question:
 - A. Start with a limited, well formed question.
 - B. Write down what you already know & how. (Make a timeline).
 - C. Form a hypothesis.
 - D. Make a research plan.
 - Make a locality guide ([Locality Research in a DNA Research Project – Family Locket](#)) and a research plan.
 - First question: Which German wave? Each wave has particular strategies.
 1. 1600's-1700's (Pennsylvania Dutch or Colonial German).
 - *FamilySearch* wiki: [Pennsylvania Colonial Records • FamilySearch](#)
 - Michael D. Lacopo is a fantastic expert on Pennsylvania Germans.
 - Nine part blog series on Pennsylvania Germans: [Part 1: Pennsylvania Germans: The History Behind Their Focus on Land and Community](#)
 2. 1800's (largest wave). [Part 1: Tracing Your 19th Century German Ancestors- Which Germans? – Family Locket.](#)

- *FamilySearch* wiki: [Germany Genealogy • FamilySearch](#)
 - *FamilySearch* German Webinars in the Learning Center: [Learning Center • FamilySearch](#); Try especially Fritz Juengling, Baerbel Johnson.
 - *Legacy family Tree Webinars*: Try especially Teresa Steinkamp-McMillin, Nancy E. Loe, Andrea Bentschneider.
3. 1900's
- Research shifts even more to Germany.
 - Privacy laws are a challenge, but direct descendants can get 20th century records.
- E. Gather evidence. Record your searches.
- F. Write up your results.
- G. [Doing a Genealogy Research Project from Start to Finish – Family Locket](#)

2. DNA Analysis (Karen Stanbary, Diahan Southard, Paul Woodbury, Nicole Dyer)


- A. Start with a well researched tree (do you have documentary evidence between each generation?).
1. Karen Stanbary: [Ruling Out instead of Ruling In: DNA and the GPS in Action](#)
 2. Robin Wirthlin: [Research Like a Pro with DNA - Overview of the Process](#)

B. Maximize your DNA testers (oldest relative on every line, and as many lines as possible for greatest coverage) [Find More Ancestors with Autosomal DNA by Increasing Coverage – Family Locket](#)


C. Understand your match list? locations, surnames, ethnicities?

C. Frame your match list (estimate what can you expect):


1. How close is the target ancestor to the tester?
2. How many matches can you expect:
 - Does your target ancestor come from a population that takes tests?,
 - Large families?,
 - Endogamy?
 - Ethnicity? (marginally helpful with Germans, not discussing here)
3. Resources for further study:
 - Diahan Southard: [What to do with your DNA Test Results in 2022 | Part 1](#)
 - “Dealing with Endogamy” *Legacy Family Tree Webinars*, Paul Woodbury.
 - Alec Ferretti handout: [Alec Ferretti - Strategies for Analyzing Endogamous DNA - Jewish Genealogical Society of Greater Boston](#)


- Diahan Southard:
 Problems with Shared cMs: Multiple Relationships, Endogamy a...
- [Using DNA for Clues with Colonial Ancestors: Quality vs Quantity – Family Locket](#)


D. Sort your match list by great or 2nd great grandparent lines (Leeds method).

- “Quickly Organize Your DNA Matches with the Leeds Method,” Dana Leeds:( The Leeds Method with Ancestry Matches - a Demo).


- “How to Organize Your DNA Matches with the Leeds Method,” Diahan Southard: [Organizing DNA Matches | Leeds Method - Your DNA Guide - Diahan Southard](#)

- Diahan Southard: ( What to do with your DNA Test Results in 2022 | Part 2)

- “Identify key matches: Mystery DNA Matches? Simple Steps to identifying Them?” Diahan Southard:
 Mystery DNA Matches? Simple Steps to Identifying Them | RootsTech 2...

- Diahan Southard:  What to do with your DNA Test Results 2022 | Part 3

E. Build matches’ trees.

-  What to do with your DNA Test Results 2022 | Part 3 (especially last ⅓).
- [Are You Doing Everything to Identify Your Matches? - The Genetic Genealogist](#)
- pay particular attention to the locations (birth, marriage, death locations) in your unknown matches’ trees.
- also note recurring surnames.

1. DNA Analysis with German Ancestors

A. How are (pre-1800) colonial Germans different?

- Very similar to other colonial groups: larger families, lots of American descendants, usually not at a lot of endogamy but watch out for multiple relationships.

B. How are 19th century Germans different? General principles- remember everyone’s match list is unique:

- smaller families
- very few take DNA tests, on the good side fewer matches means you have an easier time studying each one.
- not endogamous (history of Germany- a cross roads/ “ethnic Germans” will commonly have many other “ethnicities” besides “German” such as U.K.,

French, Slavic, Baltic, Jewish, Scandinavian see Figure 4.3A: [Ethnicity Estimate 2020 White Paper 1. Introduction](#) / plus Figure 2.2 also from [Ethnicity Estimate 2020 White Paper 1. Introduction](#), shows how variable Germans are, i.e. the most spread out of the scatter plot.

- excellent written records
- [Part 6: Tracing Your 19th Century German Ancestors: Using DNA – Family Locket](#)

C. How are 20th century Germans different?

- smaller families
- Very important to target test willing relatives in Germany because there will be even fewer matches than the 19th century Germans.

2. Weave back and forth between documentary and DNA evidence.

[Strategies to Meet Standards with DNA Evidence – Compelling SLIG Course – Family Locket](#)

3. Burkhard Schlag (1830-1876) example:

A. Documentary

1. Marriage record stated where Burkhard was from: Züntersbach, Schlüchtern, Hesse.
2. Lots of circumstantial evidence for possible Schlag relatives (strange family document, burial plot, newspaper articles).
3. Hypothesis: these possible Schlag relatives were Burkhard's nephews (hypothesized family tree), and their father (Burkhard's brother) was John Schlag who married Elizabeth Zarbel (stated on death certificate of one nephew).
4. Research in Züntersbach church records (Archion.de).
 - i. No records for Burkhard Schlag (records started after Burkhard's birthday stated in U.S. records).
 - ii. Lots for the nephews, their parents, aunts, uncles, and grandparents.

B. DNA

1. 1C and 2C1R matches on the paternal side (Burkhard Schlag was a paternal ancestor) used to find unknown matches on the Schlag ancestral line.
2. Some of these unknown matches whose family trees could be built, were found to be descendants of one of the nephews.

6. Christina Hittel (1770-1820) example: One documentary clue that listed David Ketner mother, Christina's, maiden name as Hittel. Many many Hittel families in Pennsylvania at the time of Christina's birth. If using just documentary research it would take a lot of effort to research each Hittel family. I used DNA to hone in on the best Hittel's to start with.

a. Documentary

1. good documentary evidence up through 2nd great grandmother (Ann Ketner), and 3rd great grandfather (David Ketner).

2. but so far one transcribed will that mentions David's mother's maiden name plus a many trees with no sources.
 3. actually a lot of documentary evidence I have not searched for yet: 9 part blogpost series, link to Part 1: [Part 1: Pennsylvania Germans: The History Behind Their Focus on Land and Community](#)
- b. DNA with colonial American ancestors generally have more matches!
1. Larger family sizes due to most colonial Americans being farmers.
 2. More "American." Distant cousins will almost always be Americans, and Americans take DNA tests.
 - More matches usually means DNA may result in good clues to more distant ancestors ([Cousin statistics - ISOGG Wiki](#) and Graham Coop (population geneticists UC Davis blog: [genetic genealogy | gcbias](#)).
3. Test & upload at as many companies as possible because you never know where a key match may test, but less crucial to be at MyHeritage than with ancestral lines with later German immigrants.
4. Endogamy also not usually a problem, though watch out for multiple relationships in rural farming communities.
 5. Like documentary evidence, the Hittel example had good DNA evidence for 2nd great grandmother (Ann Ketner), and 3rd great grandfather (David Ketner).
 6. Taking the known matches to David Ketner's siblings, I closely examined their unknown matches (found by using "shared matches" tool with the known descendants of David Ketner's sibling) by building unknown matches trees. I found a group that could be traced back to Nicholas Hittel born about 1772. I plugged Nicholas' father into my tree as an hypothesis, and found even more matches to different Hittel siblings with ThruLines. Remember ThruLines can be incorrect for many reasons, and always needs to be considered a hypothesis until all evidence has been considered.
 - [How to Evaluate an AncestryDNA Thrulines Hypothesis – Family Locket](#)
 - [Ancestry's ThruLines Dissected: How to Use and Not Get Bit by the 'Gators | DNAeXplained – Genetic Genealogy](#)

Was this proof that Christina and Nicholas were siblings? **No, absolutely not** proof, but this does constitute a good clue as to which Hittels I should start my documentary research with.

[-Part 9: Pennsylvania Germans: DNA – Family Locket](#)

7. Takeaways:

1. Start with a good paper trail.

2. Organize your matches into at least great grandparent lines.
3. Everyone's match is different. Germans from different eras will differ from each other, and other ethnic groups. How is your match list similar or different from the examples I showed and why?
4. Identify key known matches to find key unknown matches.
5. Build unknown matches' trees, paying attention to **locations**, and surnames. Are there any locations or surnames that reoccur?
6. Go back to the paper trail.
7. DNA can provide amazing clues, you never know what treasures you may uncover!