

GEDmatch Basics: by Kitty Munson Cooper

[GEDmatch](#) is a free 3rd party site of tools where you can upload your DNA test results and compare them with those from people who have tested at other companies. Plus there are many analysis tools, some available nowhere else. Also there are GEDCOM comparisons available, including yours to your DNA matches.

My slides for this presentation slides.com/kittycooper/beginners-guide-to-gedmatch-2024

1. Create a User and Upload a DNA raw data file, aka a “kit”

This video from Andrew Lee of Family History Fanatics (FHF), shows you how to create a user id and upload your DNA kit to GEDmatch

<https://www.youtube.com/watch?v=id7JJ1NoTNk&feature=youtu.be>

Or read this blog post of mine which also has links to my other GEDmatch posts

<https://blog.kittycooper.com/2019/02/genesis-basics-gedmatch-reinvented-part-1/>

Many find this introduction to DNA and GEDmatch useful:

<https://smithplanet.com/stuff/gedmatch.htm>

2. Once Logged in, your Dashboard Page is not Intuitive

The tools are in the right hand column and the resources you have uploaded are listed on the left. You can upload more than one DNA kit and multiple GEDCOMs. There is a help section on the top right.

This post is a useful explanation of the home page, as is my basics post above.

<https://segmentology.org/2018/05/01/first-time-at-gedmatch/>

3. Try out the Different Ancestry Composition Calculators

These are called Admixture at GEDmatch. See the slides from my admix presentation to learn how to use those: <https://slides.com/kittycooper/gedmatch>

5. Upload a pedigree only family tree

It is good to upload a family tree of about 10-12 generations of just ancestors. A new feature is the import of 8 generations of your FamilySearch tree. To export a partial GEDCOM from your family tree elsewhere see the advice here:

https://www.wikitree.com/wiki/Help:Splitting_a_GEDCOM

Also if you have your family tree at WIKItree (a free online collaborative tree), you can add your DNA kit number to your profile there, then your one to many listing will link to that tree. See

<https://blog.kittycooper.com/2015/01/organizing-dna-results-with-your-genealogy-wikitree-com/>

and <https://blog.kittycooper.com/2017/05/be-sure-to-set-your-profile-to-public-tree-at-wikitree/>

6. Make Some Tag Groups

My recommendation is to use the same colors you used for your dots at Ancestry or in your Leeds Chart. I suggest making one group for each great grandparent line and groups for each locality for as yet unknown matches. Try this blog post:

<http://blog.kittycooper.com/2017/03/gedmatch-tag-groups-plus-new-one-to-many/>

And more advanced: <https://blog.kittycooper.com/2017/04/using-gedmatch-tag-groups/>

7. The Main Tool to Find Matches at GEDmatch is the one-to-many comparisons

There are two different one-to-many functions in the free tools. The one marked limited version (less functions than Tier 1) has the most functionality, with the ability to sort by column, display tag groups, X comparisons, and haplogroup information. It also has a new column with the word Match in blue; clicking on that will take you to the function kits that match one or both of you. The other, the original version, has fewer columns and will tell you in English the kit source. Both versions will highlight a low number of shared SNPs for comparisons in pink or red when there are too few for a confident comparison.

This post explains the column headings for the original view

<https://blog.kittycooper.com/2019/02/genesis-basics-gedmatch-reinvented-part-1/>

While this old post explains the column headings for the “limited” but fuller version

<http://blog.kittycooper.com/2016/06/gedmatch-tools-2016/>

8. When you find a good new match, look to see who else they match

Note that the definition of a good match varies by population group (any endogamy?) but a good start for third cousins or better would be to share > 90 total cMs with more than one segment and at least one segment > 20 cM

GEDmatch has a relationship calculator or use this 3rd party online calculator which uses user data as well as math to see the possible relationships for a specific cM amount

<https://dnainter.com/tools/sharedcmv4>

or this one which includes number of segments so may be more accurate:

Here is more about why large segments matter:

<https://blog.kittycooper.com/2015/08/size-matters-for-matching-dna-segments/>

Compare your kit and theirs with the **People who match both, or 1 of 2 kits** tool to see who else they match at GEDmatch. The match button will take you to that function.

If you have set up tag groups, you can also click on a match's kit number from the one-to-many to see their own one-to-many match list, with tag groups on, to see which groups of your known relatives they match to.

If the match has a GEDCOM, you can look at it for common names and locations or better yet use the compare 2 GEDCOMs tool to compare your GEDCOM to theirs. More about using GEDCOMs at GEDmatch here:

<https://blog.kittycooper.com/2015/04/using-the-gedcom-capabilites-at-gedmatch-com/>

If you have tier 1 (a paid account), **there is a tool to find the common ancestors with your DNA matches** who have uploaded GEDCOMs, see

<https://blog.kittycooper.com/2020/07/tool-to-find-common-ancestors-at-gedmatch/>

9. Do a One-to-One Comparison with Your Match to see the segments

Here is an explanation of what a segment is:

<https://segmentology.org/2015/05/07/what-is-a-segment/>

Here an old but still useful post of mine about using segment data for genealogists:

<https://blog.kittycooper.com/2015/03/using-your-dna-test-results-the-basics-for-genealogists/>

GEDmatch is one of the few sites to show you FIRs (Fully Identical Regions) see

<https://blog.kittycooper.com/2019/10/why-dont-we-share-more-dna-with-a-sibling/>

Also do an X comparison which is a separate comparison from the one-to-one. More about X matches here: <https://blog.kittycooper.com/2014/01/what-does-shared-x-dna-really-mean/>

10. There are many tools for working with Segment Data, some quite advanced, most are Tier 1 (paid membership)

Be sure to run the ***Are Your Parents Related Tool*** in case they are, which can complicate your genealogy! Warning a small amount of relatedness is often found in endogamous groups like Polynesians or Ashkenazim. GEDmatch is the only site which offers this:

<https://blog.kittycooper.com/2018/07/when-the-dna-says-your-parents-are-related/>

The rest of the tools for analyzing segment data are part of the paid membership

Most importantly you can make a combined kit when you have tested at multiple companies:

<https://blog.kittycooper.com/2019/04/make-a-combined-dna-kit-for-yourself/>

One of my favorite tools is the segment search tool, which is what I use to start a master spreadsheet for someone tested at just Ancestry. Also I sometimes use to try and chase down a single segment match (often a fool's errand):

<https://blog.kittycooper.com/2016/09/taking-it-to-the-next-level-dna-spreadsheets/>

Then there is automated triangulation, explained in this old post

<https://blog.kittycooper.com/2014/10/new-utilities-at-gedmatch-tier-1-for-paid-members/>

and the new auto-kinship and clustering tools

<https://blog.kittycooper.com/2019/05/more-clustering-tools/>

and the many ways to do multi-kit analyses including my mapper

<https://blog.kittycooper.com/2018/08/new-compact-chromosome-browser-on-gedmatchs-genesis>