

The Värmland-Hedmark Cluster

About the VHC Newsletter

The VHC newsletter is published twice a year, in July and December. It provides updates on a genetic-genealogy project that carries the same name, “The Värmland-Hedmark Cluster” (or VHC for short). This project is run by a group of hobbyists who try to learn about the early history of their patrilineal ancestors in southern Värmland (Sweden) and in Hedmark (Norway). Among the questions that we ask are: What can be said about the ancestors’ whereabouts before they start to appear in the written records (so in the 1500s and earlier)? Where did the ancestors live before they arrived in Värmland and Hedmark? In technical terms, the project concerns the study of the following Y-chromosome haplogroup (and some of its surrounding branches):



R1b → M269 → U106 → Z18 → S11601 → Y112538 → Y130179.

The newsletter is written by Johan N.M. Lagerlöf (email address in the page footer). This issue and all the previous ones are downloadable at www.johanlagerlof.com/gengen. Thoughts and opinions about the content of the newsletters are very welcome. A good forum for discussion is the weblog called “The VHC Blog,” available at www.johanlagerlof.com/the-vhc-blog.

The newsletter is written in \LaTeX . The layout is borrowed from www.overleaf.com, which cites howtotex.com (a now discontinued website), September 2011, as its source.

Copyright © 2022 by Johan N.M. Lagerlöf.

 [En svensk sammanfattning av det viktigaste i nyhetsbrevet finns på sista sidan.](#)

Contents

1	The Cover Picture: Catharina Maria Roos af Hjelmsäter	4
2	Our VHC Haplotree	6
3	Is the Number of STR Testers Declining?	8
4	Miscellaneous Notes	10

The Värmland-Hedmark Cluster and a Neighboring Branch (Dec. 2022)

Confidence intervals for age estimates

The age estimates in the tree are from YFull (YTree v10.08.00). Unless otherwise indicated, all years shown are A.D. Below are confidence intervals at the 95% level:

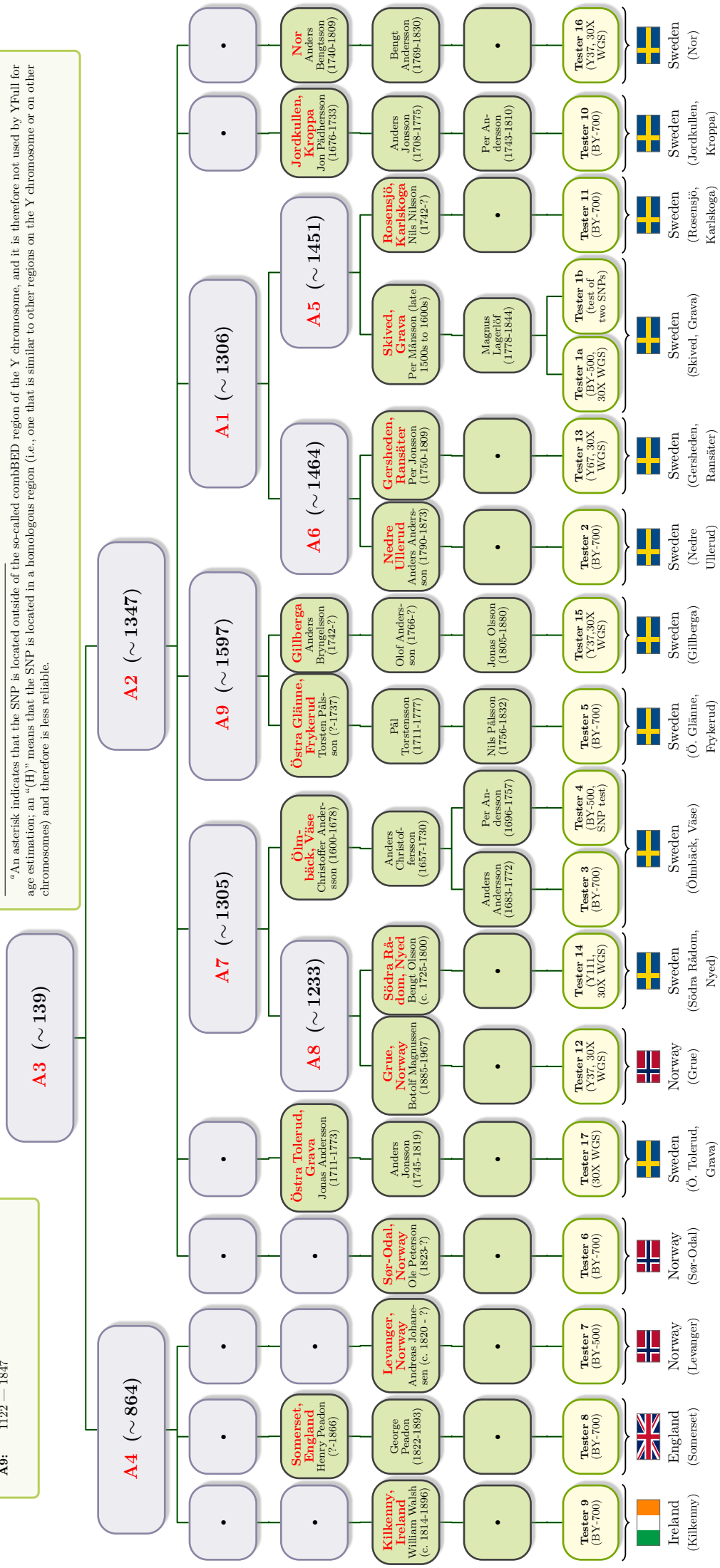
	95% CI
A1:	922 – 1622
A2:	1172 – 1522
A3:	478 B.C. – 672
A4:	322 – 1272
A5:	922 – 1747
A6:	922 – 1767
A7:	1172 – 1522
A8:	1172 – 1522
A9:	1122 – 1847

SNPs that define the branches

The Värmland-Hedmark cluster is a twig on the R1b branch of the human Y-chromosome haplotree: R1b → M269 → U106 → Z18 → S11601 → Y112538 → Y130179. For more information, see www.johannlagerlof.com/genen. The branches shown in the tree are defined by the SNPs listed below.^a

- ◇ A1: Y86344, Y107658*
- ◇ A2: Y100873*, Y128033, Y101814*, Y103246, Y130179, Y83455, Y125815*
- ◇ A3: Y112538
- ◇ A4: BY71612, Y159325, BY116275, BY146620, BY78202, BY99722, BY100142, BY102070
- ◇ A5: FT146431
- ◇ A6: BY12164
- ◇ A7: A25847*
- ◇ A8: A25843, A25844, A25845, Y126692(H)*
- ◇ A9: FTA19875*, FTA18226(H), A29538(H)*

^aAn asterisk indicates that the SNP is located outside of the so-called combBED region of the Y chromosome, and it is therefore not used by YFull for age estimation; an "(H)" means that the SNP is located in a homologous region (i.e., one that is similar to other regions on the Y chromosome or on other chromosomes) and therefore is less reliable.



Tester	YFull ID	Oldest known patrilineal ancestor	Type of test	# of private SNPs
1a	YF71553 (=YF10028)	Per Månsson (late 1500s to 1600s). Skived, Grava parish, Värmland	Big Y-500, DL 30X WGS	n.a.
1b	n.a.	Same as Tester 1a	3 SNPs at YSEQ	n.a.
2	YF65575 (=YF11441)	Anders Andersson (1790–1873), Ne- dre Ullerud parish, Värmland	Big Y-500, Big Y- 700	2
3	YF70514 (=YF13065)	Christoffer Andersson (1600–1678), Ölmbäck, Väse parish, Värmland	Big Y-500, Big Y- 700	n.a.
4	YF13845	Same as Tester 1a	Big Y-500, 2 SNPs at YSEQ	n.a.
5	YF83719 (=YF14610)	Torsten Pålsson (?–1737), Östra Glänne, Frykerud parish, Värmland	Big Y-500, Big Y- 700	2
6	YF072349 (=YF014751)	Ole Peterson (1823–?), Sør-Odal, Nor- way	Big Y-500, Big Y- 700	4
7	YF15653	Andreas Johannesen (c. 1820–?), Levanger, Norway	Big Y-500	4
8	YF70654	Henry Peadon (?–1866), Somerset, England	Big Y-700	11
9	YF85325 (=YF10028)	William Walsh (c. 1814–1896), Kilkenny Ireland	Big Y-700	7
10	YF64392	Jon Pädhersson (1676–1733), Jord- kullen, Kroppa parish, Värmland	Big Y-700	3
11	YF66826 (=YF11441)	Nils Nilsson (1742–?), Rosensjö, Karl- skoga parish, Värmland	Big Y-700	5
12	YF75623	Botolf Magnussen (1885–1967), Grue, Norway	DL 30X WGS	6
13	YF74441	Per Jonsson (1750–1809), Gersheden, Ransäter parish, Värmland	DL 30X WGS	4.86
14	YF80309	Bengt Olsson (c. 1725–1800), Södra Rådom, Nyed parish, Värmland	DL 30X WGS	4
15	YF87292	Anders Bryngelsson (1742–?), Gill- berga parish, Värmland	DL 30X WGS	3
16	YF93936	Anders Bengtsson (1740–1809), Nor- parish, Värmland	DL 30X WGS	1
17	not subm.	Jonas Andersson (1711–1773), Östra Tolerud, Grava parish, Värmland	DL 30X WGS	3
AC	n.a.	Same as Tester 3	n.a.	0
ML	n.a.	Same as Tester 1a	n.a.	1

Table 1: Information about the testers in the project. The last two rows of the table, showing AC and ML, are “artificial testers” that play a role in the age estimations when I compute these myself; however, AC and ML do not matter for YFull’s age estimations. AC is short for Anders Christoffersson (1657-1730), the youngest common patrilineal ancestor of Testers 3 and 4. In the age estimations (when I do them myself), we can let AC replace Testers 3 and 4, as we (thanks to the latter two testers’ test results) can infer which SNPs AC was positive and negative for. ML is short for Magnus Lagerlöf (1778-1844) and replaces in a similar way Testers 1a and 1b in the age estimations (when I do the estimations myself). The indicated number of private SNPs in the last column is the count according to YFull and it refers to the combBED region (although for Tester 17, this piece of information comes from YSEQ). The reason why Tester 13’s SNP count is not an integer is, I believe, that YFull uses a particular weight when it is unsure about whether to include a SNP or not. I use this number for the time being, and I hope to be able to investigate this issue more carefully some time in the future.

HELLO AND welcome to a new issue of the VHC newsletter. As you see, the layout is revamped. The new design is an attempt to make the publication look at least slightly more professional, although the ambition is still modest. The predecessor to the newsletter was a group email that I, around 2018, occasionally sent out to project members. By instead putting that material in an electronic newsletter, which could also be uploaded to my website, I wanted to make the process more convenient for myself and others. The objective of the newsletter is the same now as it has been from the beginning: to provide project members with updates about new developments in our project and to encourage prospective new testers to try out ambitious Y-DNA testing.

This issue of the newsletter starts out, in Section 1, with an explanation of who the elderly woman on the cover is and where I have found the photograph. Next, Section 2 reports on some developments in our branch of the haplotree, shown on page 2. Our branch has in the last three years or so grown considerably, which is thanks to the fact that we have been very active in upgrading low-level tests at Family Tree DNA (FTDNA) to more ambitious tests. This has allowed us to add the tests to the haplotree. However, it appears as if the number of new low-level testers at FTDNA that belong to the Värmland-Hedmark cluster is declining—indeed, in the last couple of years, the arrival of new tests has dried up completely. Section 3 of the newsletter discusses whether the number of testers at FTDNA, more generally, has dropped and, if so, what the implications for us are.

Finally, in Section 4 one can find some miscellaneous notes about topics that were left out of this issue (but which I should write about in the future), as well as a few reading tips. As usual, a brief Swedish summary of the content of the newsletter can be found on the newsletter's last page.

1 The Cover Picture: Catharina Maria Roos af Hjelmsäter

THE PHOTOGRAPH on the cover shows Catharina Maria Roos af Hjelmsäter (1786-1865), born in Millesvik parish, Värmland. She was a miniature painter (her Swedish Wikipedia entry can be found [here](#)) and married to Magnus Lagerlöf (1778-1844), a priest¹ in Nyed parish in Värmland. The couple were the parents of my great great grandfather. Thus, both Catharina Maria's husband and their four sons belonged to the Värmland-Hedmark cluster.

I recently, in the fall of 2022, found the photograph of Catharina Maria in the digital archive [Wermlandsbilder.se](#).² My understanding is that this photograph, and all the others in the archive, have been scanned by volunteers active in the organization [Wermlandsbilder.se](#) (many thanks to them for their great contribution!). The hard copy version of the photograph of Catharina Maria is located at Karlstads kommunarkiv, and it belongs to the collection "Major C.E. Nygrens porträttfotografier." Carl Emanuel Nygren (1874-1936) was, besides his profession as an officer, an amateur historian and author. His Swedish Wikipedia page is [here](#).³

Jon Räftegård at Karlstads kommunarkiv has kindly given me permission to publish the photograph in the newsletter. In an email correspondence, Jon told me that there is a text on the backside of the photograph that says, "Prostinnan Lagerlöf f. Roos af Hjelmsäter". That is, the text indicates that the woman in the picture is indeed Catharina Maria Roos af Hjelmsäter. There exists at least one painting of Catharina Maria (see the portrait on the left in [Figure 1](#) below), and although this is from when she was quite young, I personally think there is a clear resemblance. This fact, in conjunction with the claim that is made in the text on the backside of the photograph, suggest to me that it most likely is Catharina Maria in the photograph. I have asked around among members of my extended family, and so far there is only one person who says that he or she has seen the photograph before. This person is Jan Löfberg, who is a first cousin of my father's. Jan indeed recognized the photograph (and says that he has a copy kept somewhere). He also immediately recognized the photograph as showing Catharina Maria Roos af Hjelmsäter. For this reason, I believe the photograph has been known for a long time in the Lagerlöf family—although probably not widely known, and it might have been somewhat forgotten. Therefore, it was a very useful reminder for us in the family to find the photograph in the digital archive.

As Catharina Maria Roos af Hjelmsäter died in April 1865, the photograph can at the latest have been taken in the mid 1860s. But we do not know exactly when. Nor do we know *where* the photograph was

¹The Swedish, more specific, term is *kontraktsprest*.

²Link to the main page of the site [here](#); and a link to the page with this photograph [here](#).

³For an account of how C.E. Nygren's collection of portraits ended up at Karlstads kommunarkiv, see this web page: <https://karlstad.se/Uppleva-och-gora/Kultur/kommunarkiv/Kulturhistoria/kommunarkivet-berattar/en-samling-kops-in/>.



Figure 1: To the left is a portrait of Catharina Maria Roos af Hjelsmåter (1786-1865) as young, painted by her brother Leonard Henrik Roos af Hjelsmåter (1787-1827). To the right is a daguerreotype, taken in his old days, of Catharina Maria's husband Magnus Lagerlöf (1778-1844).

taken or how a copy ended up in the collection of C.E. Nygren. It would also be interesting to learn about the clothes and the hat that Catharina Maria wears in the photograph. If anyone who reads this has information about anything related to the photograph, please let me know.

Surprisingly, there also exists a photograph (a daguerreotype) of Catharina Maria's husband, the priest Magnus Lagerlöf—despite the fact that he died as early as in February 1844. This daguerreotype is shown to the right in Figure 1.⁴ According to Wikipedia (the entry “daguerreotype”; see [here](#)), the daguerreotype was invented by the Frenchman Louis Daguerre (1787-1851) and it was introduced worldwide in 1839. The da-

guerreotype of Magnus Lagerlöf must obviously have been taken soon after that (as he died only a few years later). Perhaps Magnus himself, or someone in his social network, was curious about this new technology. As far as I understand, the daguerreotype showing Magnus Lagerlöf must be one of the oldest ones that exists of a Swedish person. Yet, although a priest, Magnus cannot be said to have been a particularly important or well-known person.⁵

One possible reason why Magnus Lagerlöf took an interest in daguerreotypes (or knew people who did) could be that his wife Catharina Maria, as well as her brother and uncle, had been miniature painters (often doing portraits). Some mem-

bers of this profession were among the first ones to learn the new technology and to become portrait photographers.⁶ The Swedish photographer and author Pär Rittsel has written about the history of photography (and in particular Swedish aspects of this). Here is an excerpt of a text he has published online and which sheds some light on how Magnus Lagerlöf might have gotten the opportunity to have his photograph taken as early as the first half of the 1840s:⁷

While Benzelstierna toured the countryside with his rapidly aging technique, new daguerreotypists were appearing in larger towns and cities.

⁴My second cousin Staffan Löfberg has kindly sent me the file with the scanned version of the picture. I believe the original of the daguerreotype belongs to Staffan's father, Jan Löfberg.

⁵Among people who do not have a family connection to Magnus Lagerlöf, he is probably only remembered for being a first cousin (on his mother's side) of the famous Swedish scholar, writer, and bishop Easias Tegnér (1782-1846). The two men were close, and a correspondence between them is preserved to this day. I write briefly about this (and quote from the correspondence) in No. 3 of the VHC newsletter. To the best of my knowledge, there exists no photograph of Tegnér. Given his celebrity status, Tegnér strikes me as a much more likely photo object than Magnus Lagerlöf, who also died almost three years earlier.

⁶This is, anyway, my layman understanding—one example would be Per Lindberg, mentioned in the quoted text below.

⁷The title of the text is “The Daguerreotype in Sweden” and it can be found here: <https://sites.google.com/site/prittsel/daguerre>.

J. A. Sevén started doing portraits in Stockholm in the summer of 1841, but was soon facing competition from photographers from abroad. Mostly from the well-established Joseph Wenninger from Vienna, who with his brother Heinrich visited Göteborg and Stockholm in 1843. By this time, the Frenchman A. Derville had established himself in Stockholm, where he was permitted to photograph the newly crowned king Oscar I in a couple of daguerreotypes. None of them exist in the Royal collections, but I have found a badly damaged plate, a portrait of king Oscar, in a provincial museum.

Among the Swedes who spread the daguerreotype process across the country we can note above all the portrait painter Per Lindberg, who had learnt his craft from Wenninger; Isac Cohen, and Isac Lewin, who was instructed by Derville.

All in all, these things mean that my relatives and I have access to photographs showing two of our direct ancestors five generations back in time (counting from my own generation). These two individuals were parents of my grandfather's grandfather. They were born in 1778 and 1786, and the photographs must have been taken in the first half of the 1840s and the first half of the 1860s, respectively. This is quite incredible, and it is probably very unusual outside of royal and noble families (and perhaps not so common even in such circles).

2 Our VHC Haplotree

THE MOST RECENT version of the VHC haplotree is shown on page 2. This time there are no new branches or testers in the tree (although later in this section I will discuss two new testers that have been placed further upstream in YFull's tree).

Tester 17's results have still not been sent to YFull. I hope they will be at some point, and when that happens there is a chance that Tester 17 (whose oldest known patrilineal ancestor is from Östra Tolerud in Grava parish, Värmland) will form a new branch with one of the other testers. There are still two testers in my STR match list at Family Tree DNA that might belong to the Värmland-Hedmark cluster and who have not yet upgraded their tests to a Big Y or a WGS test. These two testers represent the lineages labelled L4 (Ölme) and L5 (Växjö):

- **Lineage L4 (Ölme).** *Oldest known patrilineal ancestor: Erland Eriksson Falk (1863-1937), born in Ölme in south-eastern Värmland.* The person in this lineage who shows up in my match list has done a Y37 test. The genetic distance to me (Tester 1a) is 3 at the 37-markers level.
- **Lineage L5 (Växjö).** *Oldest known patrilineal ancestor: Peter Engström (1764-1855), born in Telestad, Växjö, Småland.* The person in this lineage who shows up in my match list has done a Y37 test at FTDNA and the genetic distance between him and me is only 1 at the 37-markers level.

I have the ambition of investigating whether these two lineages from Ölme and Växjö indeed belong to the Värmland-Hedmark cluster, but so far I have not had time to do that. It is, however, on my to-do list.

If anyone wants information about a particular tester's ID number at YFull (in order to, say, find that tester in the YFull tree), please consult Table 1. This table is similar to the one I published in the previous issue of the newsletter, but I have now polished it a little.

The age estimates shown in the tree on page 2 are this time taken from YFull. It is worth noting that also Family Tree DNA has recently started to publish age estimates for the branches in their Y-chromosome haplotree. This is great news. I hope that this development can help popularize advanced Y-DNA testing. However, most of the branches in the VHC tree do not exist in FTDNA's tree, which means that the company can offer age estimates only for a small subset of the branches that we are primarily interested in. Also, FTDNA has still not published a white paper or other proper documentation of their methodology. Still, it is a good development that we witness, and I hope to get back to a further discussion of FTDNA's age estimates in the future.

There is a very interesting change, involving two new testers, a little bit upstream in the YFull tree and nearby the Värmland-Hedmark cluster. In Figure 2, I show a screenshot of the relevant part of YFull's tree (this is the so-called live version of their tree, from Dec. 24, 2022). As you can see from that figure, the two new testers (who have ID numbers YF109352 and YF111571) have split the block of SNPs that previously defined ancestor A3 in our tree (cf. also the tree on page 2). Ancestor A3 used to be defined by the SNPs Y112538 and Y129064, but the two new testers are positive only for the latter one. On the other hand, the two new testers are both positive for 18 other SNPs (according to YFull's SNP count—FTDNA uses other cri-



Figure 2: A screenshot of YFull's version (the live version of YTree v10.07.00) of the Värmland-Hedmark cluster, including a couple of additional upstream branches. In particular, this tree includes the new testers YF109352 and YF111571 (shown at the top). Those two testers are not included in the tree on page 2, as that tree does not reach that far in the upstream direction.

teria for selecting credible SNPs and may therefore come up with another number). As a consequence, the two testers have formed a branch on their own. Their youngest common patrilineal ancestor (which is represented by the green rectangle R-Y363683 in Figure 2) is, in tree jargon, a brother of A3. In real life, R-Y363683 and A3 might have been n^{th} cousins m times removed, with n probably being fairly small and m probably being fairly large (as only one SNP occurred

on the branch between the common ancestor and A3, while as many as 18 SNPs occurred on the branch between the common ancestor and R-Y363683).

As can be seen in the screenshot of YFull's tree, the two new testers have oldest known patrilineal ancestors from the USA (Kentucky) and England, respectively. This is an indication that this branch might be more likely to originate from the British Isles than from Scandinavia. I hope

to get back to a discussion of where, for example, ancestor A3 and the common patrilineal ancestor of R-Y363683 and A3 lived—if it was on the British Isles or in Scandinavia (or even some other place), in light of this new piece of information.

I have not yet been in contact with any one of the testers, but I will try to send them a message as soon as possible.

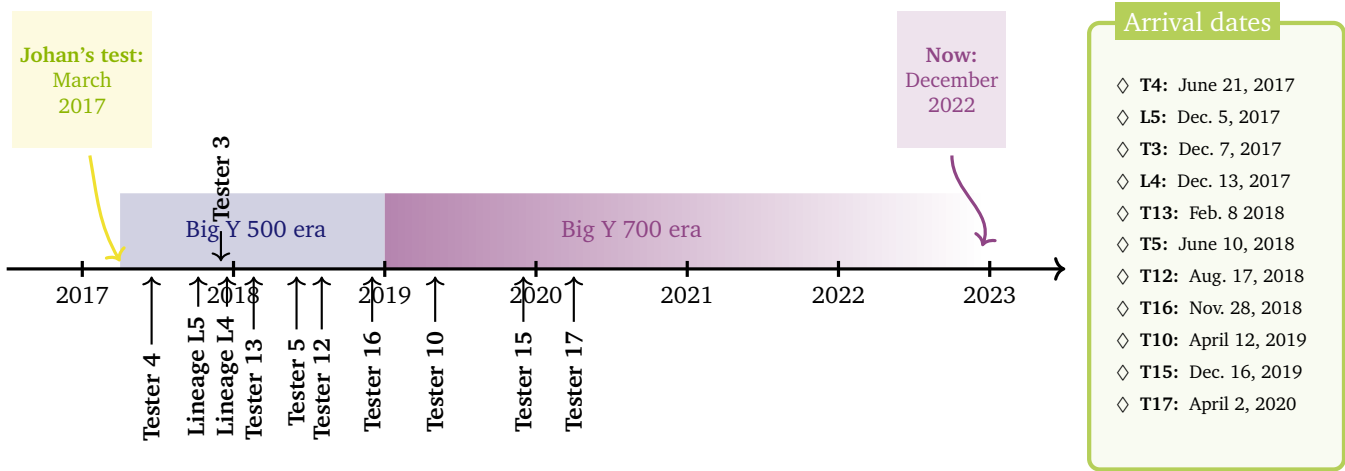


Figure 3: The arrival dates of Johan’s STR matches at the 37-marker level, satisfying the requirement that the reported oldest known patrilineal ancestor of the match is from Värmland or Hedmark. The figure shows that the number of new such matches has dropped, and almost three years have passed since the most recent such match showed up.

3 Is the Number of STR Testers Declining?

OUR BRANCH in the haplotype has in the last three years or so grown considerably. This is due to the fact that we have upgraded several (I think eight) low-level tests at Family Tree DNA to more ambitious tests—often whole genome sequencing (WGS) tests. By “low-level tests” I here mean so-called STR tests—so, for example, the test Y37 sold by FTDNA. The price of this test has at sales often been \$99, and at the Black Friday sale this year one could purchase it for \$79.

The individuals whose STR tests we have upgraded have been recruited among testers that:

- (i) match myself (i.e., Tester 1a) or others who we know belong to the Värmland-Hedmark cluster, at least at the 37-marker level; and
- (ii) have an earliest known patrilineal ancestor from Värmland or Hedmark.

However, the number of new low-level testers at Family Tree DNA that

satisfy both (i) and (ii) has dropped dramatically in recent years. This is shown in Figure 3, which indicates the arrival dates of tests that meet the two criteria. My Y111 results were ready in March 2017 (111 markers was my starting level). In my first matching list, I had perhaps two matches that satisfy (i) and (ii), and these are not included here. Instead I focus on the timing of matches that satisfy the criteria and which arrived *after* I received my results.

As Figure 3 shows, the first new match satisfying the criteria came after about three months, in June 2017. I then had to wait for about six months, until December 2017, but then three new matches arrived in quick succession and within a couple of weeks. In 2018, again four new matches were added to my list (in February, June, August, and November). 2019 saw two new matches (in April and December). In 2020, a single new match arrived (in April). That is indeed the most recent match that satisfy the two criteria—not a single new such match has been added to my list for now almost three years.

What has happened? Is this development just a fluke, or does the slowdown reflect a general decline in the number of STR testers (if not globally, so at least in geographical regions where VHC testers are likely to live—so in Sweden and, to some extent, in Norway and North America)?

In order to try to answer those questions, I have studied the distribution of arrival dates for all my matches at the 12-marker level from April 2017 until November 2022. The number of matches at that level is, for me and for most testers, much larger than the one for the 37-marker (and higher) level.⁸ Therefore, the distribution of arrival dates for those matches should hopefully give us a reasonably good picture of the overall number of STR testers at FTDNA over time; in particular, this measure should be much less sensitive to random fluctuation. I thus exported the list of all my matches at the 12-marker level (as a CSV file). Then I imported this file into the statistics software R, where I did all the analysis.

Figure 4 shows a histogram with, on the horizontal axis, the arrival

⁸On December 27, 2022, I had 20 matches at the 37-marker level and 9542 matches at the 12-marker level.

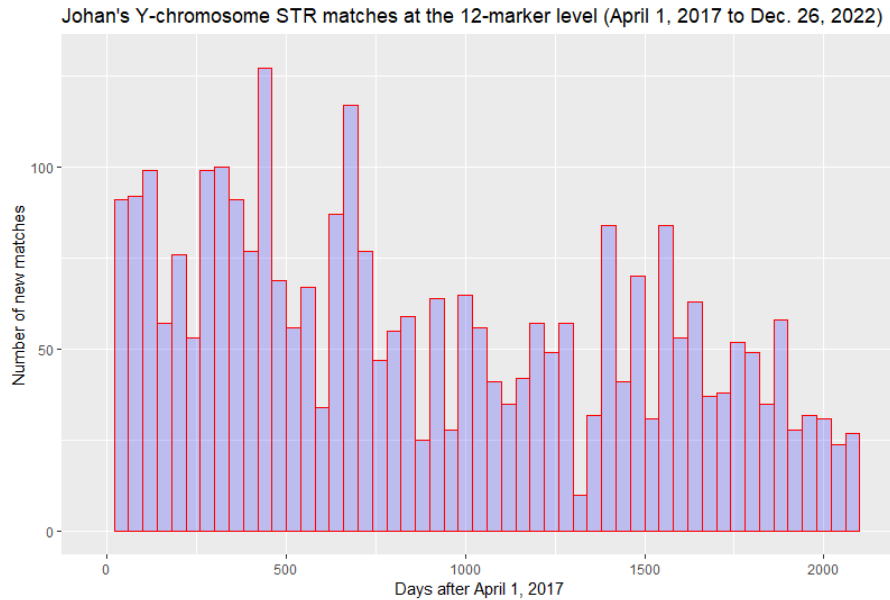


Figure 4: The number of new STR matches for Johan’s test at the 12-marker level, from April 1, 2017, until December 26, 2022. The horizontal axis shows the number of days passed after April 1, 2017. Visual inspection suggests that the number of new matches has dropped, although not all the way down to zero.

dates of the matches measured as the number of days passed after April 1, 2017.⁹ I have not bothered to compute a trend line or to carry out any statistical tests. Still, eyeballing the histogram tells us that there is, also at this level, a clear drop in the number of newly arrived matches in the most recent period, compared to the period relatively soon after the date when my test results came back. However, there is still, also towards the end of the period that we study, a steady and strictly positive stream of new testers—at least in that sense, the drop in matches here is much less dramatic than in Figure 3.

One possible conclusion from this simple analysis might be that it is probably not *only* a fluke that my number of new matches at the 37-marker level (and higher) has dropped so dramatically. The decline appears to be at least partly a reflection of a more global drop in the

number of people that purchase STR tests at Family Tree DNA. If so, that is of course very unfortunate, and it means that we might have to expect a slower growth of the VHC tree in the near future, compared to what we have become used to. We should also think about new strategies that we can use to find likely new members of the Värmland-Hedmark cluster (I have some ideas about that). However, I also note that the number of testers at the 12-marker level has not dropped to zero; rather, it might have halved (or thereabout). Thus, the complete disappearance of any new matches that satisfy (i) and (ii), in the last almost three years, should at least partly be due to bad luck.

Yet there is another kind of check we can do, namely to look at the distribution of matches at the 12-marker level for a tester that belongs to a completely different hap-

logroup. I have access to couple of Big Y tests of individuals that belong to different parts of the I1-Z2893 branch of the haplotree. One of these tests—which is my maternal uncle’s test—has a reasonably large number of matches at the 12-marker level (namely, 2208), and the exact haplogroup is: I1 → Z2893 → Z59 → Z2039 → Z382 → Y2170 → PH1178 → Y7231. Figure 5 shows a histogram for my uncle’s test that is an analogue to Figure 4; that is, it shows, on the horizontal axis, the arrival dates of the matches measured as the number of days passed after April 1, 2017.¹⁰ Again eyeballing the histogram, it is clear that there is no apparent downward (or other) trend. The data for this test appear to be consistent with a fairly constant rate of new STR testers at the 12-marker level. However, the time period studied in this histogram is much shorter than the one in Figure 4. From day

⁹I am aware that it would be somewhat easier to read that axis if it showed months and years instead of only the number of days passed. However, for technical reasons (and lack of time and patience on my part), I can unfortunately not do that this time.

¹⁰The horizontal axis starts at 860, which corresponds to one day after the day my uncle’s results were ready (in August 2019). This is to avoid the initial spike made up of all the matches he had at the outset (and who therefore are individuals who ordered their tests before my uncle did his test).

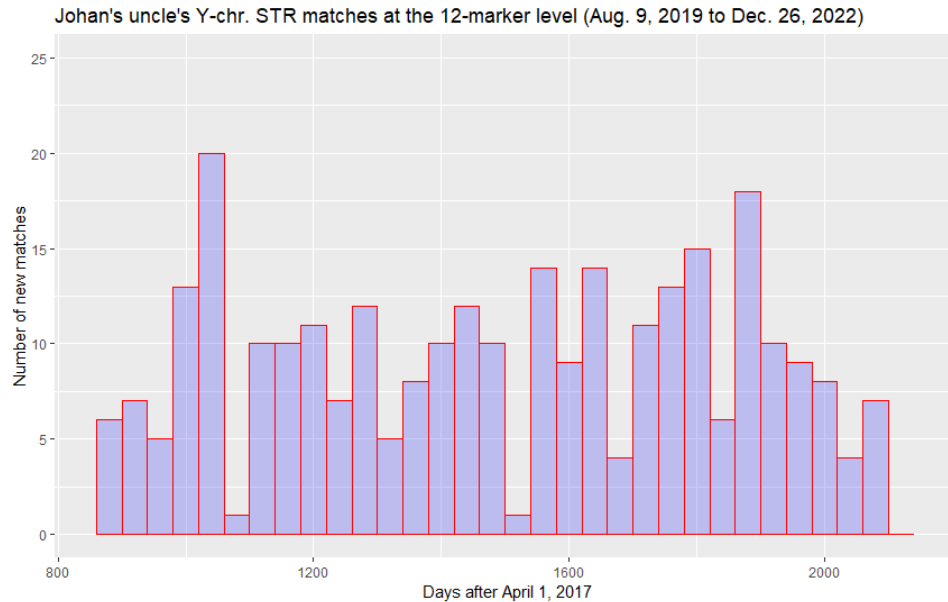


Figure 5: The number of new STR matches for Johan’s uncle’s test at the 12-marker level, from August 9, 2019, until December 26, 2022. The horizontal axis shows the number of days passed after April 1, 2017. Visual inspection suggests that the number of new matches has *not* dropped, but remained fairly constant. Note, however, that the period studied here is much shorter than the one in Figure 4, and for the time period with overlap the rate of new matches appears to be the same in the two figurers (i.e., more or less constant).

860, the rate of new matches appears to be pretty constant also in Figure 4.

Thus, the pattern in Figure 5 is consistent with that in Figure 4—although making this comparison was not a very useful exercise, as the overlap in time is so short. One could go on and look for better data sets to compare with, but due to time constraints I will refrain from that on this occasion.

I tentatively conclude that there appears to be a drop in the global number of STR testers when one

compares the most recent two or three years with the period at around 2017 and 2018. Yet the drop in the global number of new STR testers (if there is one) is not as dramatic as the one for my Y37 matches with patrilineal ancestors from Värmland or Hedmark (as described in Figure 3). Indeed, it still is a mystery to me why the number of new such matches for my test has dropped to zero for the last almost three years.

Bad luck might be at least one component in this development, and

let us hope that our fortunes soon turn around and that we get a few more good matches. I will also continue thinking about alternative strategies that we could use to recruit testers that are likely to belong to the Värmland-Hedmark cluster. Furthermore, in the future I might use more of my time on researching the ancestors of our *existing* VHC members (i.e., tracing their paper trails in the archives), as opposed to mostly carrying out tests that can lead us to *new* members.

4 Miscellaneous Notes

I WILL ROUND this issue of the newsletter off with a few notes about topics that were not discussed this time, but which I would like to include in some future issue. I will also list some reading tips.

- Two of the three testers beneath the ancestor A4 in the tree shown on page 2 are said to have Norman names (Peadon and Walsh),

a fact that was discussed in No. 4 of the newsletter. I would like to learn more about the origins of these names. I would also like to look into which historical Norman individuals, if any, have had their DNA tested (I believe that at least some attempts at doing such tests have been made).

- In the two previous issues of the newsletter, I have discussed our at-

tempts to identify the unknown patrilineal great grandfather of Tester 15 (the Gillberga branch). During 2022, and in particular in the last four or five months, we have taken big steps forward with these endeavors. I will give an account of what we have learned in some future issue (and hopefully, at some suitable point in time, also in a separate essay).

• I have recently read some books that are relevant for our project, including texts that I am happy to recommend to others. Johannes Krause and Thomas Trappe have written a book about the history of humanity (Krause and Trappe, 2021). Krause is a researcher while Trappe is a journalist (and has done most of the writing, as I understand it). The book was originally published in German in 2019; I read the English translation, which came out last year. The Swedish journalist and writer Karin Bojs published a new book this year (Bojs, 2022), which is on a similar theme. To my knowledge, this book is so far only published in Swedish. However, one of her earlier books was translated into a large number of languages, so maybe this will also soon be translated at least into English.¹¹

Both Krause and Trappe (2021) and Bojs (2022) discuss, among many other things, ancient DNA–

that is, sequencing of DNA from human remains (or from remains of Neanderthals or Denisovans) that sometimes are many thousand years old. Two books that are more focused on that topic are the ones by Svante Pääbo (2014) and David Reich (2018). Reich’s book, “Who We Are and How We Got Here: Ancient DNA and the New Science of the Human Past” is my absolute favorite, but also the one by Pääbo is a great read. The two authors’ quite different personalities come across clearly in their writing, with Pääbo sometimes being very personal and blunt, and Reich being in comparison more formal (still, his book is great). Incidentally, Pääbo was awarded this year’s Nobel prize in medicine.

• I have this year finished the creation of a family tree that shows all the male branches of my Lagerlöf family, from the 1500s until my father’s generation. A printed version of the tree, spread out on the living

room floor, can be seen in Figure 6. An electronic version of the tree (although with the names of living people deleted) is available online on my homepage; see [here](#).

References

Bojs, Karin. 2022. *Europas mödrar: De senaste 43000 åren.*: Bonnier.

Krause, Johannes, and Thomas Trappe. 2021. *A Short History of Humanity: A New History of Old Europe.*: W.H. Allen.

Manco, Jean. 2013. *Ancestral Journeys: The Peopling of Europe from the First Venturers to the Vikings.*: Thames & Hudson.

Pääbo, Svante. 2014. *Neanderthal Man: In Search of Lost Genomes.*: Basic Books, New Yourk.

Reich, David. 2018. *Who We Are and How We Got Here: Ancient DNA and the New Science of the Human Past.*: Oxford University Press.



Figure 6: A printed version of the Lagerlöf family tree, which is also available online as a pdf file.

¹¹The slightly older book by Jane Manco (2013) should also be mentioned together with the ones by Krause and Trappe and by Bojs, although I have not read it myself yet (and the book might be somewhat out of date). It is on my reading list, though.



Svensk sammanfattning

Värmland-Hedmark-klustret (förkortat VHC) är benämningen på en – vad det verkar – väldigt stor släkt som levde i Värmland och Hedmark under medeltiden och kanske även längre tillbaka i tiden. Idag är det många människor, inte minst i Värmland, som härstammar från denna släkt på sitt raka fäderne – och ännu fler, förstås, längs andra linjer. En av Värmland-Hedmark-klustrets många grenar leder till exempel till den värmländska släkten Lagerlöf (som författaren till de här raderna råkar tillhöra).

Dessa saker har vi upptäckt med hjälp av DNA-test av nu levande personer. Framförallt har vi varit behjälpta av test av Y-kromosomen, som bara män har och som ärvs från far till son. Arbetet är i full gång med att samla mer kunskap om Värmland-Hedmark-klustret. Det här nyhetsbrevet utkommer i juli och december varje år, och det rapporterar och diskuterar vad som har hänt inom projektet sedan sist.

Exempel på frågor som vi försöker förstå: Hur stor var den här släkten? Var i Värmland och Hedmark fanns den? Hur långt tillbaka i tiden har medlemmar i släkten funnits i Värmland och/eller Hedmark? Varifrån kom släktmedlemmarna när de anlände dit? Kan resultaten hjälpa oss att förstå frågor kring social mobilitet?

- ✓ Fotografiet på omslaget till nyhetsbrevet föreställer Catharina Maria Roos af Hjelmsäter (1786-1865), som var gift Lagerlöf och därmed hustru eller mor till flera personer som tillhörde Värmland-Hedmark-klustret. Jag fann fotografiet i höstas på sidan Wermlandsbilder.se. Papperskopian som bilden har skannats från finns i Karlstads kommunarkiv. Det finns även ett fotografi (en dagerrotyp) som föreställer Catharina Marias man, Magnus Lagerlöf (1778-1844) – se sidan 5 i nyhetsbrevet. Denna dagerrotyp måste vara tagen under första halvan av 1840-talet och därför – förmodar jag utan att veta säkert – en av de allra äldsta som finns bevarade av en svensk person.
- ✓ Vi har inga nya grenar eller testpersoner i VHC-trädet den här gången, men trädet visas ändå på sidan 2. Lite längre uppströms i i YFulls haploträd (se sidan 7), på en gren som inte finns med i trädet på sidan 2, finns dock två nya testare. Dessa testpersoners yngsta gemensamma patrilinejära ana är i “träddermer” ett syskon till A3 i trädet på sidan 2. De två testpersonernas äldsta kända patrilinejära anor uppges i YFulls träd vara USA respektive England.
- ✓ De senaste två eller tre åren har VHC-trädet vuxit avsevärt och vi har fått åtskilliga nya grenar. Detta har varit möjligt genom att vi, för personer som ser ut att tillhöra Värmland-Hedmark-klustret, har uppgraderat deras “låg-nivåtest” till ett helgenomtest. Dessa testpersoner har vi alltså kunna rekrytera bland personer som på egen hand har gjort ett så kallat STR-test hos Family Tree DNA och dessutom dyker upp på min matchningslista. Problemet är dock att antalet nya matchningar har avtagit, och under de senaste snart tre åren har det inte dykt upp en enda ny matchning på en rimligt hög markör-nivå (37 eller fler markörer). I detta nummer av nyhetsbrevet försöker jag förstå skälen till denna nedgång, bland annat genom att undersöka om antalet matchningar på nivån med bara 12 markörer också har gått ned under samma period. Undersökningen visar att nedgången, i viss mån, går att se även på 12-markörsnivån. Detta kan tolkas som att det helt enkelt är färre personer som testat sig nu jämfört med perioden kring 2017 och 2018. Men mina data är begränsade, så jag känner mig inte säker på att det är så. Och även om antalet testpersoner har gått ned, så kan det inte förklara den totala frånvaron av nya matchningar (på den relevanta nivån) sedan april 2020. Kanske att detta är en slump, även om det verkar orimligt att det uteslutande skulle vara det. Gåtan kvarstår alltså i viss mån. Vi får hoppas att några nya matchningar ändå dyker upp vad det lider, och vi får fundera på nya sätt att hitta lämpliga testpersoner (jag har några idéer). Frånvaron av nya matchningar att uppgradera ger mig också en anledning att lägga mer tid på utforskandet av våra befintliga grenar.