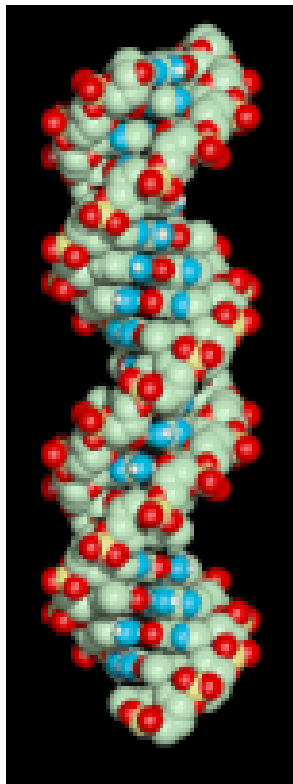




Yoder Doors Opened by DNA Studies



*A Special Report to the 2012
North Carolina Yoder Reunion*

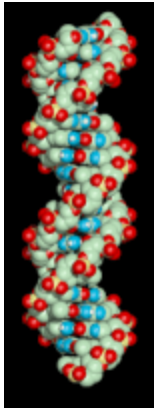
By Chris Yoder
Yoder Newsletter Oct. 2012
www.yodernewsletter.org
Established 1983

BACKGROUND

- How DNA Testing Works
- The Yoder results
 - The Primary Profile
 - The Amish Profile
 - Most Recent Common Ancestor 100 marker Profile
 - Surprises and Discoveries



Yoder DNA Project Background



- “Y Chromosome” DNA is handed down from father to son with little change
- “Markers” on the DNA give it a unique “fingerprint”
- People with matching markers have a common male ancestor
- The degree of match gives a probability of closer ancestral links
- We are Partnered with “Family Tree DNA”
 - **They Are Working With National Geographic Society**

Basic Vocabulary

DNA (deoxyribonucleic acid)

- the structure of heredity; material in our cells that contains the genetic information about an individual.

Genome - The entire complement of genetic material in a chromosome set. The genome in the humans is made of 46 chromosomes, with a total of 3 billion bases pairs.

Chromosomes - Structure found in the nucleus of a cell, which contain the genes. Humans have 23 pairs of chromosomes, 22 pairs of autosomes and two sex chromosomes.

Gene - The basic unit of inheritance: a sub-unit of DNA in a particular position on a particular chromosome that contains the genetic code to make a particular protein, or part of a protein.

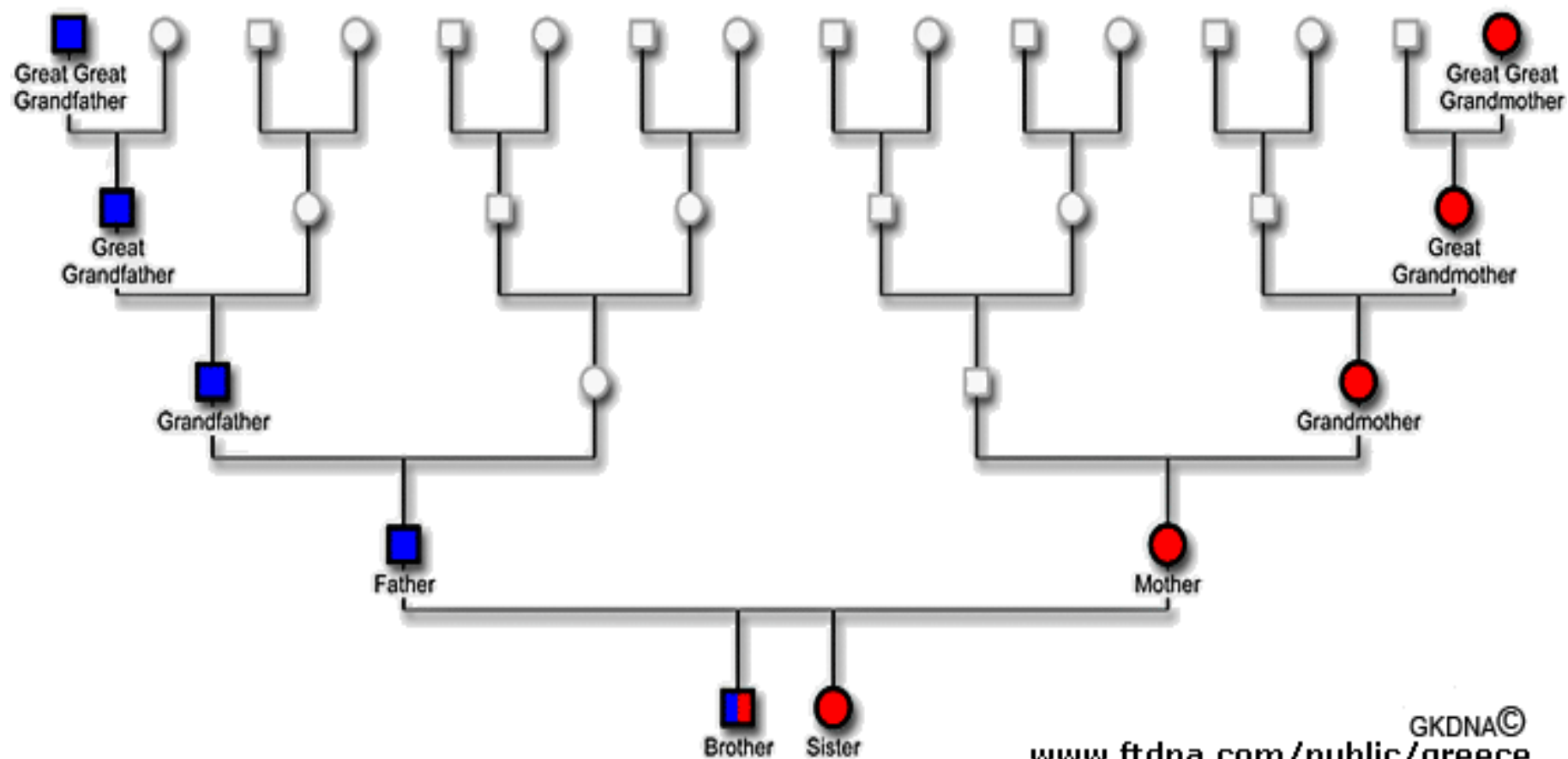
Base - Adenine (A), cytosine (C), guanine, (G) or thymine (T) are the four bases in the DNA.

Marker - A physical location on the chromosome. Family Tree DNA aka - loci offers 3 levels of testing: 12-marker, 25-marker and 37-marker, and 67 markers.

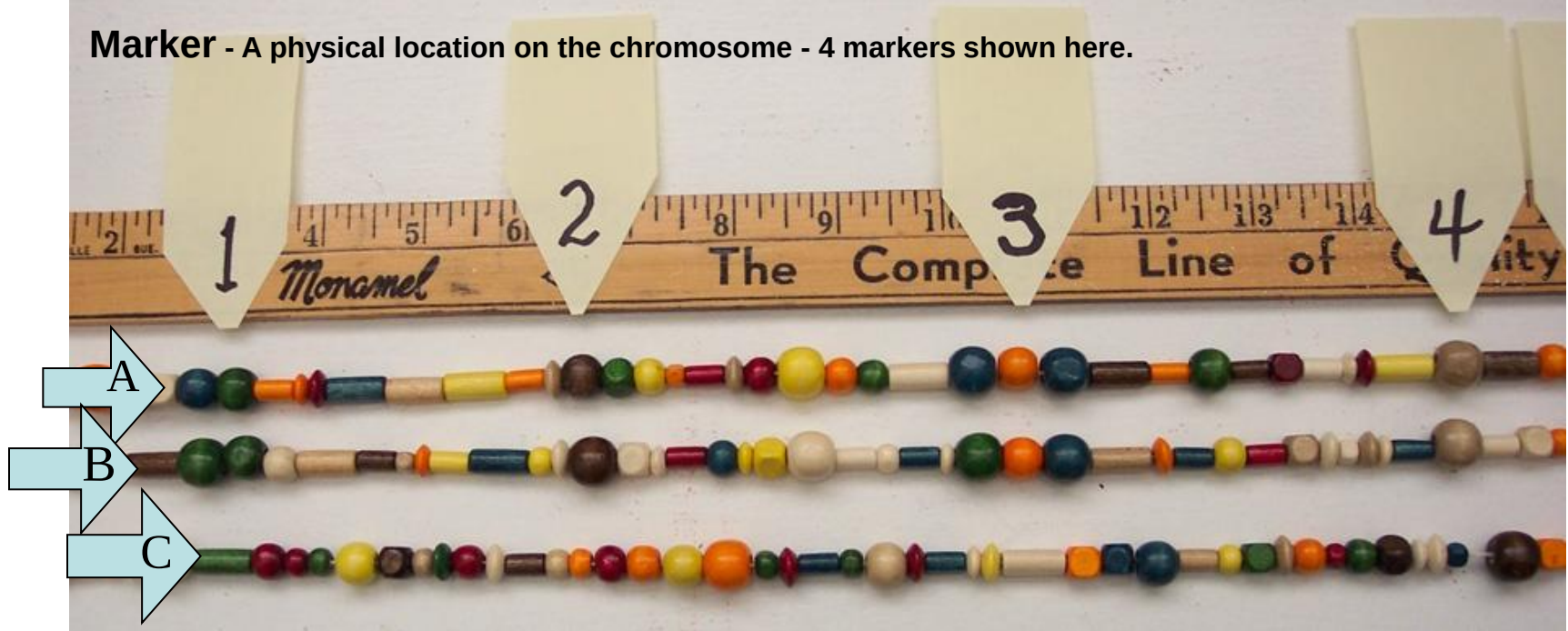
Haplogroup - If we look at the world population as a huge genealogical tree, the Haplogroups are the original branches of this tree, which characterized the early human migrations. Therefore, Haplogroups are normally associated with geographical regions.

Y-DNA comes through our fathers

mtDNA comes through our mothers



Marker - A physical location on the chromosome - 4 markers shown here.



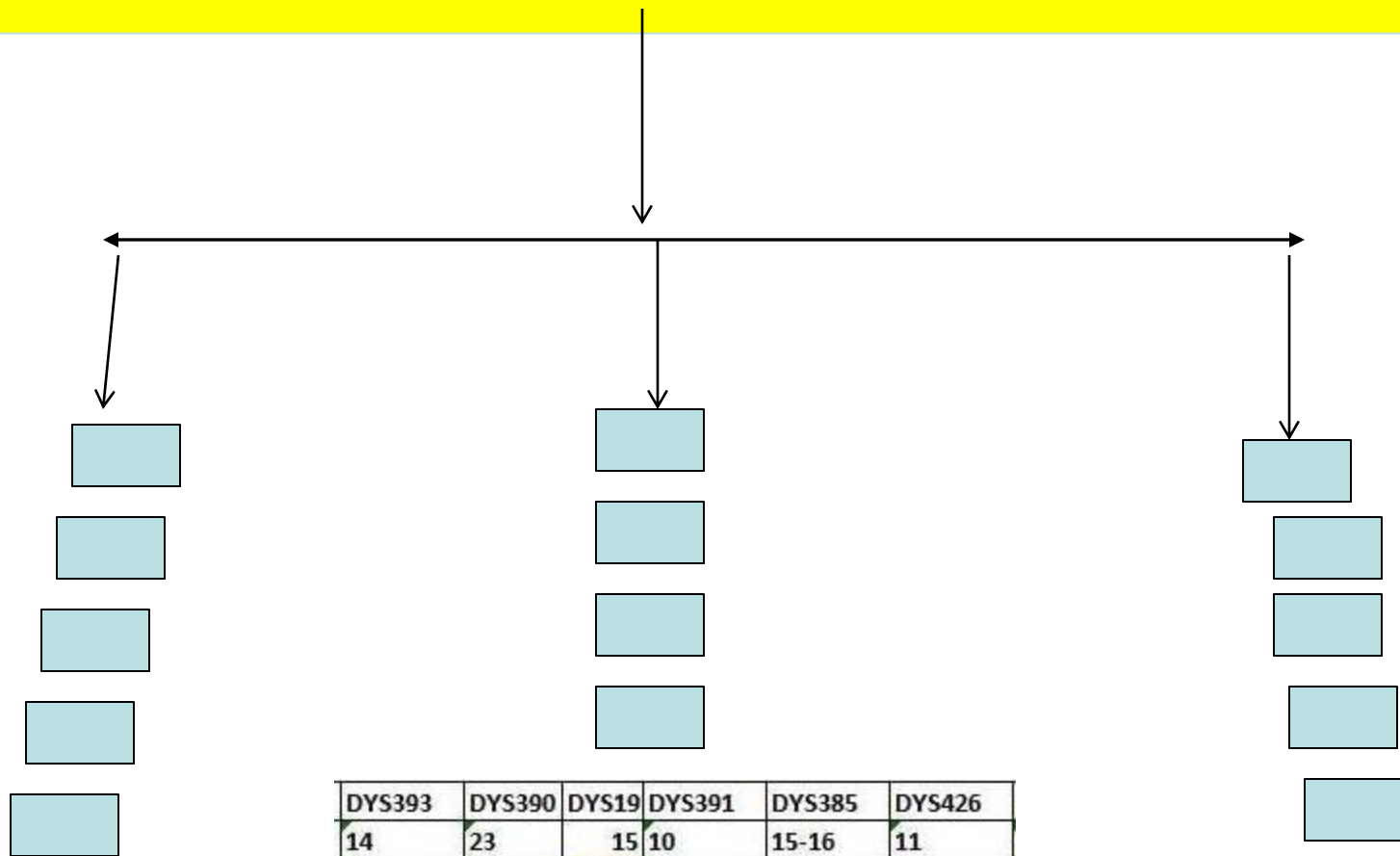
3 DNA samples:

--- A matches B, 4/4

--- A and B do not match C

marker - the value associated with a marker is often called an allele

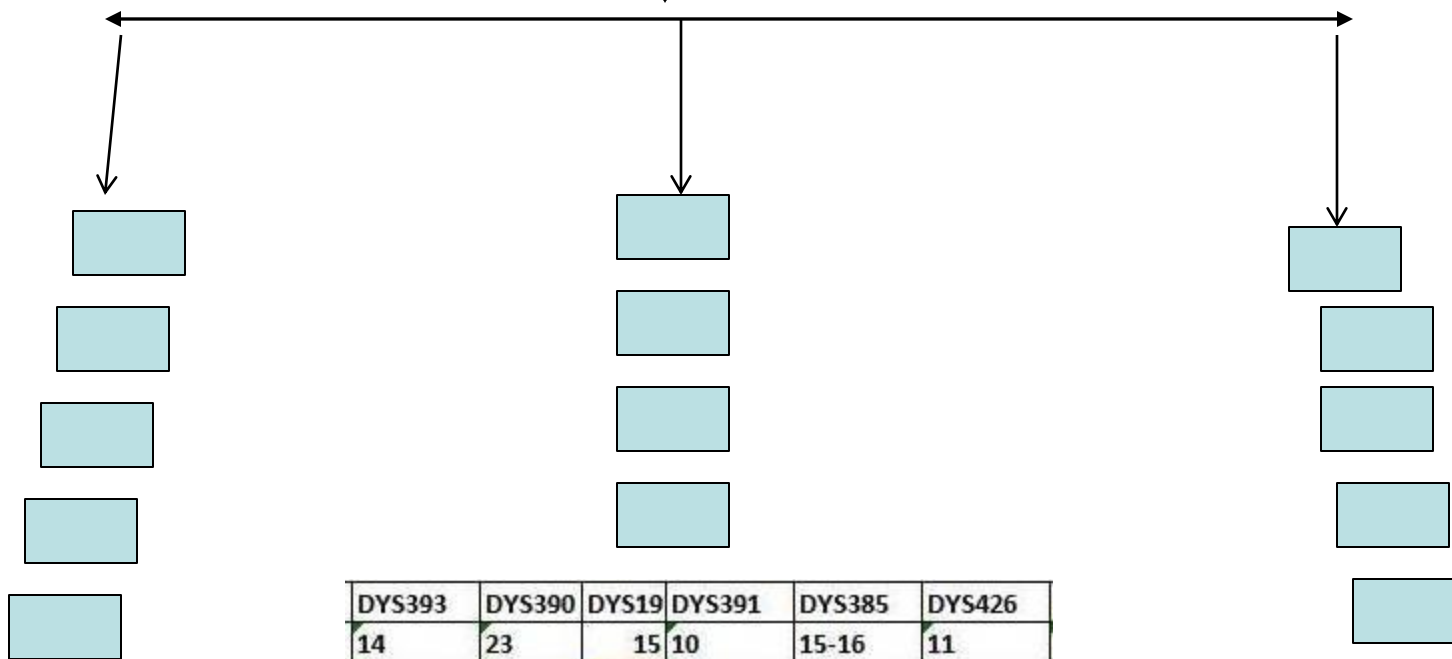
COMMON MALE ANCESTOR



14	23	16	10	15-16	11
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COMMON MALE ANCESTOR

DYS393	DYS390	DYS19	DYS391	DYS385	DYS426
14	23	15	10	15-16	11



DYS393	DYS390	DYS19	DYS391	DYS385	DYS426
14	23	15	10	15-16	11

14	23	16	10	15-16	11
----	----	----	----	-------	----

DYS393	DYS390	DYS19	DYS391	DYS385	DYS426
14	23	15	10	15-16	11

Contents of the Kit



Plus:

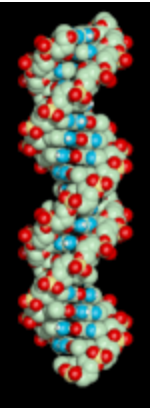
- Instructions
- Consent form
- Mailer



Yoder DNA Project

Summary

- **95 Tests completed**
- **YNL paid for many**



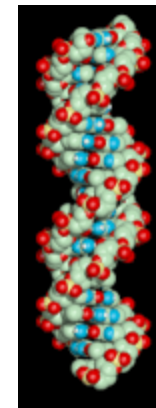
HAPLOGROUP “I2a2a-M223”



Chiaroni 2009

Haplogroup I2 is a Y-chromosome haplogroup. Until 2008, it was known as Haplogroup I1b. Haplogroup I2 might have originated in Southeastern Europe some 15,000 - 17,000 years ago.

I2a2a-M223 (Former I2b1 in the Y2010 tree) Occurs at a moderate frequency among populations of Northwest Europe, with a peak frequency in the region of Lower Saxony in central Germany; offshoots appear in Romania, Moldova and Russia (especially around Vladimir, Ryazan, Nizhny Novgorod, and the Republic of Mordovia)



- | Kit #- or progenitor | Haplo | 393 | 390 | 19 | 391 | 385a | 385b | 426 | 388 | 439 | 389-1 | 392 | 389-2 |
|----------------------|-------|-----|-----|----|-----|------|------|-----|-----|-----|-------|-----|-------|
| Common Ancestor | I | 14 | 23 | 15 | 10 | 15 | 16 | 11 | 13 | 11 | 12 | 12 | 30 |

458	459a	459b	455	454	447	437	448	449	464a	464b	464c	464d
15	8	10	11	11	24	14	20	27	11	14	14	15

[illegible]

For full stratification see: www.yodernewsletter.org

First Major Discovery

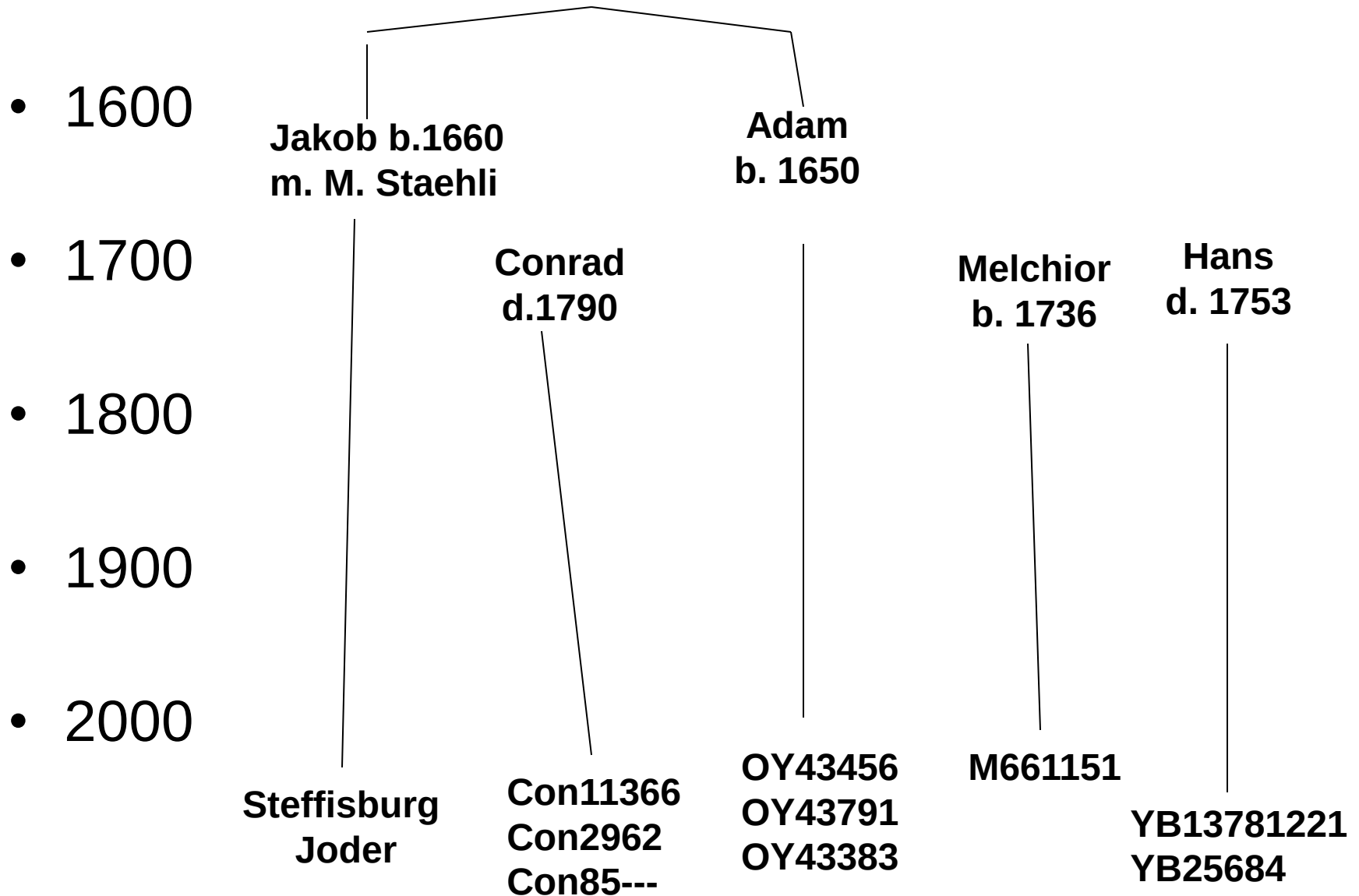
An “Amish Profile”

	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389I	DYS392	DYS389II
Non-Amish	14	23	15	10	15-16	11	13	11	12	12	30
Amish	14	23	16	10	15-16	11	13	11	12	12	30

^

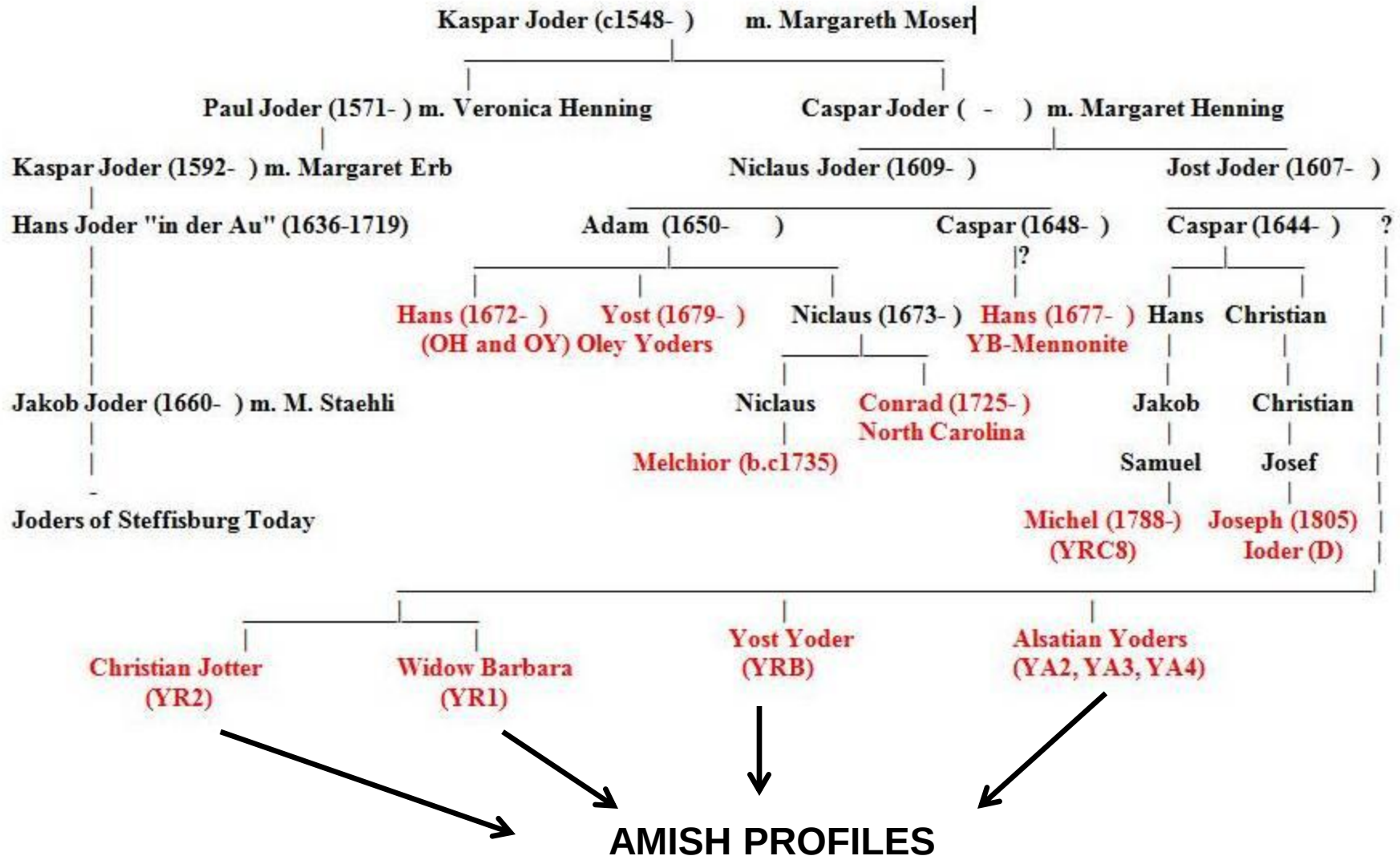


25 Marker – Exact Matches



Our Family Tree

WHAT WE KNOW NOW



100 marker profiles

A Hg	Subgroup	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389i	DYS392	DYS389ii	DYS458	DYS459	DYS455	DYS454
	MCRA	14	23	15	10	15-16	11	13	11	12	12	30	15	8-10	11	11
I2b1	18th Cen. Amish	14	23	16	10	15-16	11	13	11	12	12	30	15	8-10	11	11
I2b1	Conrad Yoder of NC	14	23	15	10	15-16	11	13	11	12	12	30	15	8-10	11	11
I2b1	Steffisburg Joders	14	23	15	10	15-16	11	13	11	12	12	30	15	8-10	11	11
I2b1	Hans of Great Swamp	14	23	15	10	15-16	11	13	11	12	12	30	15	8-10	11	11
I2b1	Oley Yoders	14	23	15	10	15-16	11	13	11	12	12	30	15	8-10	11	11
I2b1	Steffisbrg Zimmermans	14	23	15	10	15-16	11	13	11	13	12	30	15	8-9	11	11

DYS447	DYS437	DYS448	DYS449	DYS464	DYS460	Y-GATA-H	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438	DYS531	DYS578	DYF395S1
24	14	20	27	11-14-14-15	11	9	18-21	14	14	17	20	33-38	12	10	11	8	15-16
24	14	20	27	11-14-14-15	11	9	18-21	14	14	17	20	33-38	12	10	11	8	15-16
24	14	20	27	11-14-14-15	11	9	18-21	14	14	17	20	33-38	12	10	11	8	15-16
24	14	20	27	11-14-14-15	11	9	18-21	14	14	18	20	33-38	12	10	11	8	15-16
24	14	20	27	11-14-14-15	11	9	18-21	14	14	17	20	33-38	12	10	11	8	15-16
24	14	20	27	11-14-14-15	11	9	18-21	14	14	17	20	33-38	12	10	11	8	15-16
24	14	20	27	11-14-14-15	11	9	19-21	14	14	17	19	33-39	12	10	11	8	15-16

DYS590	DYS537	DYS641	DYS472	DYF406S1	DYS511	DYS425	DYS413	DYS557	DYS594	DYS436	DYS490	DYS534	DYS450	DYS444	DYS481	DYS520
8	11	10	8	10	9	12	21-22	15	11	12	12	13	9	12	27	20
8	11	10	8	10	9	12	21-22	15	11	12	12	13	9	12	26	20
8	11	10	8	10	9	12	21-22	16	11	12	12	13	9	12	27	20
8	11	10	8	10	9	12	21-22	15	11	12	12	13	9	12	27	20
8	11	10	8	10	9	12	21-22	15	11	12	12	13	9	12	28	20
8	11	10	8	10	9	12	21-22	15	11	12	12	13	9	12	27	20
8	11	10	8	10	9	12	21-22	15	11	12	12	13	9	12	27	20

100 marker profiles (Cntd)

DYS446	DYS617	DYS568	DYS487	DYS572	DYS640	DYS492	DYS565	DYS710	DYS485	DYS632	DYS495	DYS540	DYS714	DYS716	DYS717	DYS505
11	13	12	12	11	12	12	11	30	13	8	15	11	23 or 24	27	16	12
11	13	12	12	11	12	12	11	30	13	8	15	11	23	27	16	12
11	13	12	12	11	12	12	11	30	13	8	15	11	23	27	16	12
11	14	12	12	11	12	12	11	30	13	8	15	11	24	27	16	12
11	13	12	12	11	12	12	11	30	13	8	15	11	23	27	16	13
11	13	12	12	11	12	12	11	30	13	8	15	11	23	27	16	12
11	13	12	12	11	12	12	11	29	13	8	15	11	23	27	16	12

DYS556	DYS549	DYS589	DYS522	DYS494	DYS533	DYS636	DYS575	DYS638	DYS462	DYS452	DYS445	Y-GATA-A	DYS463	DYS441	Y-GGAAT	DYS525
11	12	11	12	9	11	11	10	11	12	32	10	12	22	13	11	10
11	12	11	12	9	11	11	10	11	12	32	10	12	22	13	11	10
11	12	11	12	9	11	11	10	11	12	32	10	12	22	13	11	10
11	12	11	12	9	11	11	10	11	12	32	10	12	22	13	11	10
11	12	11	12	9	11	11	10	11	12	32	10	12	22	13	11	10
11	12	11	12	9	11	11	10	11	12	32	10	12	22	13	11	10
11	12	11	13	9	11	11	10	11	12	32	10	12	22	13	11	10

DYS712	DYS593	DYS650	DYS532	DYS715	DYS504	DYS513	DYS561	DYS552	DYS726	DYS635	DYS587	DYS643	DYS497	DYS510	DYS434	DYS461	DYS435
20	15	?	9	23	14	12	14 or 15	26	12	21	18	12	15	17	9	12	11
20	15	22	9	23	14	12	14	26	12	21	18	12	15	17	9	12	11
20	15	23	9	23	14	12	14	26	12	21	18	12	15	17	9	12	11
20	15	24	9	23	14	12	15	26	12	21	18	12	15	17	9	12	11
20	15	23	9	23	14	12	14	26	12	21	18	12	15	17	9	12	11
20	15	23	9	23	14	12	14	26	12	22	18	12	15	17	9	12	11
20	15	22	9	23	14	12	15	27	12	21	18	12	15	17	9	12	11

SURPRISES IN OLEY BRANCHES

OH1- John Yoder m1. Barbara _____ m2. Elizabeth ()
Keim (h2) d. 1779 (will made 3/8/1779 proved 10/20/1779)
+OH11- Hans (John) Jr. b. c1726

Profile:

11c	14	23	15	11	15	16	11	13	11	12	12	30
-----	----	----	----	----	----	----	----	----	----	----	----	----

+OH12- Daniel b. c1723 –had girls- Y-DNA profile not known

+OH13- Samuel b.

Profile:

R1b1	15	24	14	10	11	14	12	12	12	13	13	29
------	----	----	----	----	----	----	----	----	----	----	----	----

+OH14- Peter b.

Profile:

R1b1	13	23	14	10	11	15	12	13	12	13	13	29
------	----	----	----	----	----	----	----	----	----	----	----	----

OH15- Maria Johanna b.

Unmatched folks Identified

OH146- Jacob Yoder (c1792-1863) of Lewisburg

OH135- Likely Abraham Yoder (1768-) family

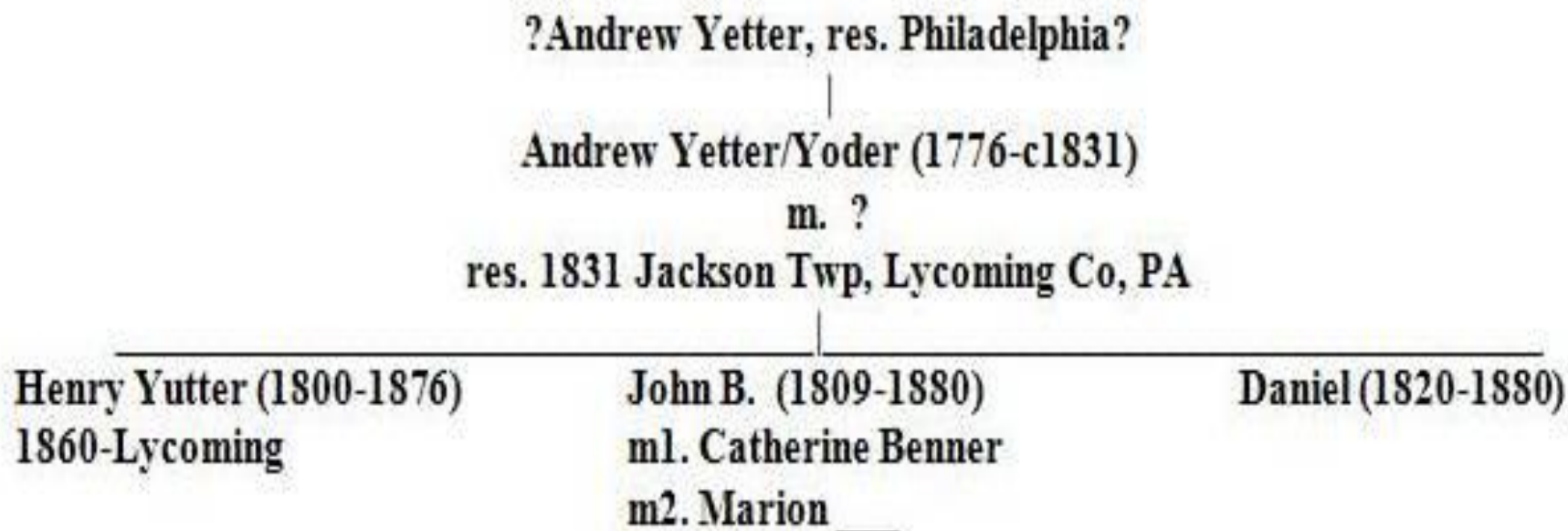
Surprises

- **Yetter/Yater/Yeater Match to each other, but NOT to Steffisburg Joders**
 - **Ludwig Yeater of (1749-1829)
Of Mifflin Co, PA**
 - **Samuel Yetter (c1760-4/8/1830)
of Columbia Co., Pa.**
 - **Henry Yeater/Yater (1765-)
of Garrard Co, KY)**

**Supports the belief that these were the sons of
Johannes Jeutter of Stuttgart, GY**

Surprises

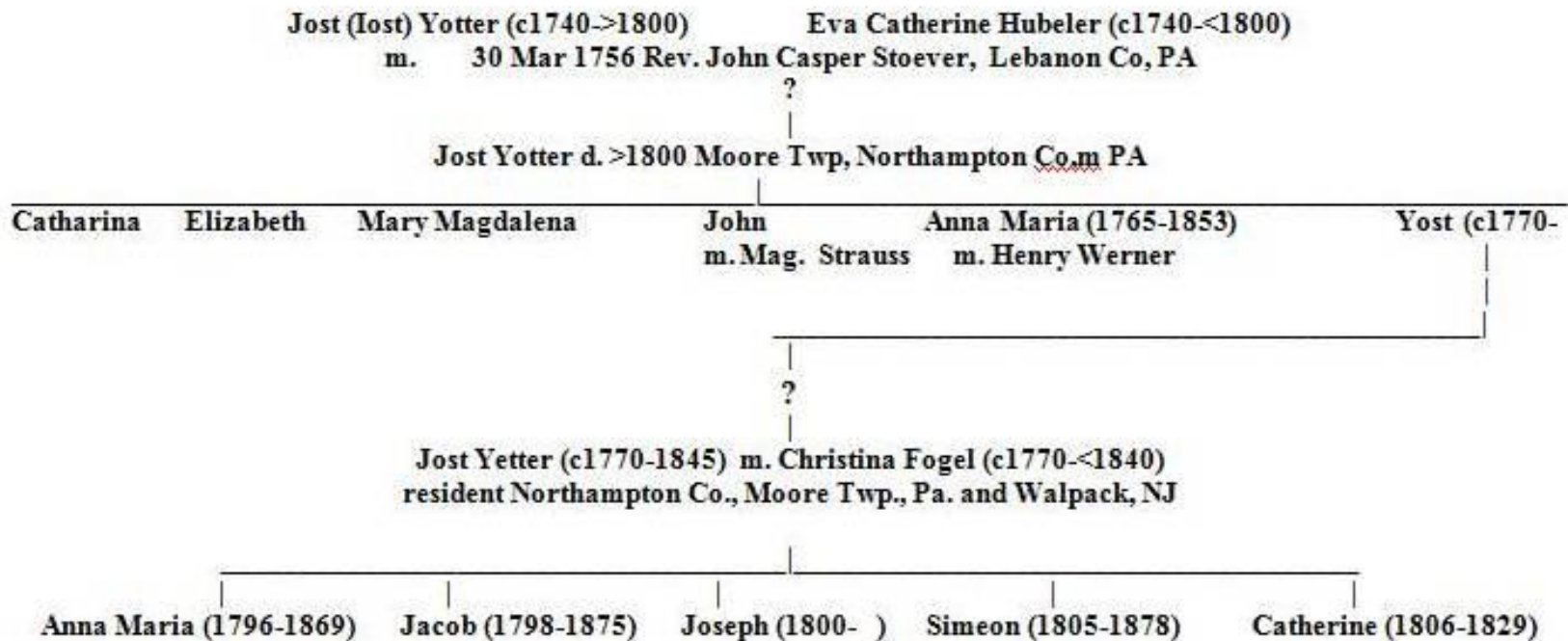
- Andrew Yetter/Yoder of Lycoming Co



Matches to the Steffisburg Joder Profile

Surprises

Yettters of New Jersey



MATCHES TO AMISH PROFILE!

Surprises

- **German “Jorde” families found in Anabaptist Communities**
- **Became Yordy, Yorty, and Yotty when immigrated to the US**
- **1st immigrants Peter and Ulrich Yorde to Lancaster Co., Pa in 18th Century**
- **Peter Yorde desc. matches 23 of 25 markers “99 % likelihood of common ancestor”.19th century Yorty to Illinois also matches.**



**Mayor Sam Yorty,
“1st Yoder to run
for President”**

Surprises

**Steffisburg “Zimmerman” line
(Carpenter) is CLOSE to the
Steffisburg Joder profile.**

CONCLUSION

**DNA Testing has
proved a useful tool in
mapping the Yoder
ancestry**



- Thanks North Carolina Yoders!!!!