DNA for Native American Genealogy 10 Steps to Find Your Native American Ancestor Syllabus

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DNA for Native American Genealogy



10 Steps to Find Your Native American Ancestor

Using...

- Autosomal DNA
- Ethnicity
- Y DNA
- Mitochondrial DNA



Si Wa Wata Wa, Zuni, 1900-1910, photography by Edward Curtis (18681952, Library of Congress

Before DNA testing, gather pertinent information from family members:

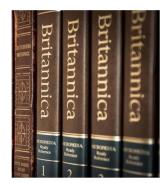
- Oral history
- Which parental side
- Which ancestral line
- Documentation

DNA compliments other sources, or sometimes stands alone.



Genetic Research Plan

- 1. Ethnicity Estimates by Many Names
- 2. Painted Ethnicity Segments
- 3. Using Painted Segments at DNAPainter
- 4. Shared Ethnicity with Matches
- 5. Download Match & Segment Spreadsheet
- 6. Y-DNA
- 7. Mitochondrial DNA
- 8. Create a Plan
- 9. Find Autosomal Candidates
- 10. Find Y-DNA and Mitochondrial Candidates





Here are ten ways to discover your Native American ancestor(s).

- 1. Ethnicity everybody is interested in ethnicity, but it's only an estimate. Let's explore what it really means and how ethnicity works at <u>23andMe</u>, <u>Ancestry</u>, <u>FamilyTreeDNA</u> and <u>MyHeritage</u>.
- 2. Painted Ethnicity Segments How can I use my painted ethnicity segments at <u>FamilyTreeDNA</u> and <u>23andMe</u> to identify my ancestors who contributed that ethnicity?
- 3. Painting DNA Segments at DNAPainter How do I do this, and why? DNAPainter has even developed a way to estimate ethnicity segments at Ancestry based on the Ancestry image.
- 4. Shared Ethnicity Viewing matches with common ethnicity and avoiding pitfalls.
- 5. Downloading Match and Segment File Spreadsheets How do I do this, and how does it help me identify my ancestors?

Download File Types

Vendor	Raw DNA File for Upload	Match File	Segment File	Ethnicity Segment Painting File
FamilyTreeDNA	Yes	Yes	Yes	Yes
MyHeritage	Yes	No	No	No
23andMe	Yes	No	No	Yes
Ancestry	Yes	No	No	No

- Match file and segment file information is used to identify all people who match on a particular segment
- · Very powerful when combined with Native ethnicity segments
- · FamilyTreeDNA provides all four files
- Ancestry does not facilitate segment information or downloads other than the raw DNA data file
- MyHeritage does not provide chromosome painting, so no download file, and no match or segment file – do provide individual match segment information
- 23andMe provides no match or segment information or files

https://dna-explained.com/2021/03/31/how-to-download-your-dna-matching-segment-data-and-why-you-should/

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6. <u>Y-DNA</u> – Direct paternal test for men. Unquestionable answer to whether your direct paternal ancestor was Native on their father's side. How can you tell? Native American Y-DNA haplogroups are subsets of haplogroups Q and C.



Where Can I Find My Haplogroup?

- Y-DNA STR testing at FamilyTreeDNA predicted
 - Base level includes matching
- Big Y-700 testing at FamilyTreeDNA most precise
 - Gold standard, two types of matching plus detailed Discover
- FamilyFinder mid-level SNP confirmed haplogroup
 - No Y matching
- Autosomal Transfer haplogroup generation mid to high level
 - No Y matching All files are not created equal
- 23andMe, LivingDNA
 - Mid to high level, no matching
- Males only Females locate a male to test as a proxy (see my article)

Vendor	Test	Туре	Predicted or Confirmed	Level	Matching	Options
FamilyTreeDNA	12-111 STRs	STR	Predicted	Distant	Yes	Upgrade to Big Y-700
FamilyTreeDNA	Prior SNP (Obsolete)	SNP	Confirmed	Level purchased	Yes at STR	Upgrade to Big Y-700
FamilyTreeDNA	Big Y-500 (Obsolete)	NGS	Confirmed	Close in time	Yes, STR & Big Y	Upgrade to Big Y-700
FamilyTreeDNA	Big Y-700	NGS	Confirmed	Most refined	Yes, STR & Big Y	Evergreen
FamilyTreeDNA	Family Finder	Autosomal chip	Confirmed	Midrange	Just autosomal	Upgrade to STR or Big Y-700 test
At 23andMe	Autosomal	Upload to FTDNA	Confirmed	Midrange – varies by chip	Just autosomal	Upgrade to STR or Big Y-700 test
At LivingDNA	Autosomal	No upload	Confirmed	Midrange to distant	Autosomal LivingDNA	Test at FamilyTreeDNA
Vendor Uploads to FamilyTreeDNA	Autosomal + unlock	SNP	Confirmed	Midrange to distant	Just autosomal	Upgrade to STR or Big Y-700 test

- 7. <u>Mitochondrial DNA</u> Direct maternal test for everyone. Unquestionable answer to whether your direct matrilineal ancestor was Native on their mother's side. How can you tell? Native American haplogroups are subgroups of haplogroups A, B, C, D and X.
- 8. Create a Plan 8 steps for creating a research plan, including how to find DNA testing candidates.
- 9. Ancestor DNA Pedigree Chart How to create yours.
- 10. Find Test Candidates or maybe someone from your line has already tested.



#11 – Find Testing Candidates

- 1. Ask relatives to test autosomal, ethnicity, haplogroups of ancestors
- 2. FamilyTreeDNA match downloads haplogroups, earliest known ancestors
- 3. Autosomal surname matches at all vendors
- 4. Check relatives' haplogroups at 23andMe and FamilyTreeDNA
- 5. Shared ethnicity matches if you have Native Ethnicity at that vendor
- 6. WikiTree ancestors' Y-DNA and mtDNA
- 7. FamilySearch & Relatives at RootsTech
- 8. ThruLines at Ancestry
- 9. Theories of Family Relativity at MyHeritage
- 10. Social Media especially family surname pages or groups
- 11. Genealogy databases that we all know and love



Always confirm genealogy!!!

Resources

In addition to the presentation, I've compiled a list of educational resources:

Native American: Is She or Isn't She?

Ancestral DNA Percentages – How Much of Them is in You?

Chromosomes and Genealogy

Making Sense of Ethnicity Updates

Concepts: Calculating Ethnicity Percentages

Concepts - Identical by...Descent, State, Population and Chance

Ethnicity is Just an Estimate - Yes, Really!

DNA Results: First Glances at Ethnicity and Matching

Don't Like Your Ethnicity? Wait 5 Minutes

New AncestryDNA Chromosome Painter Segments

More Losses at 23andMe Including No Ethnicity Update for V2, V3 or V4 Chip Customers

<u>DNA File upload Download and Transfer Instructions To and From DNA Testing</u>
<u>Companies</u>

Introducing Genetic Groups at MyHeritage



Native American	Minority	Ancestors	Identified	Using	DNAPainter	Plus	Ethnicity
Segments				_			-

DNAPainter Instructions and Resources

<u>Triangulation Resources in One Place</u>

How to Download Your DNA Matching Segment Data and Why You Should

Leave No Stone Unturned, No Ancestor Behind – 10 Easy Steps to Capture DNA Clues

FamilyTreeDNA Public Y-DNA Haplotree

Native American Mitochondrial Haplogroups

The Million Mito Project

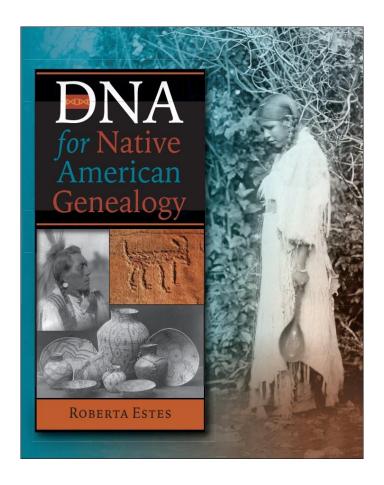
Join the Million Mito Project

Million Mito Project Team Introduction and Progress Update

Book

I have written a companion book that accompanies this article.

DNA for Native American Genealogy. You can read about it here.



Websites

The website <u>www.nativeheritageproject.com</u> contains several articles documenting early Native American people in records, primarily in the eastern part of the country, plus Indian Territory.

Be sure to subscribe to www.dnaexplain.com – it's free!