

PRESIDENT'S MESSAGE

Dear Members:

I sat on my parents' front porch recently, listening as my uncles told stories of the WPA era, playing baseball and the music of their youth. It seems that many of our best family memories are recalled through the shared stories of childhood. I know I have found it enlightening to get to know friends and family through the events and stories they recall, and through the voices of others telling their version of common experiences. I remember hours sitting with my father going through old family photos. "Who is this? How are they related?" And then the stories would come: about the place, the event, the people. I hope that this summer you too will take the time to reminisce over family artifacts and stories, and keep the Dunham heritage alive!

Many of you are aware that Gratia's husband Ken Mahoney has been ill. He passed away May 22nd after losing his eight year battle with lymphoma. We extend our condolences to Gratia and her family, and will keep them in our thoughts and prayers.

Trudy Dunham, President

EDITOR'S CORNER

The July issue of the Dunham-Singletary Family Connections newsletter contains three articles. The first is a most interesting article submitted by Eric Stoltz about his ancestor, Seth ⁸ Dunham, who went off to the gold fields of California. Seth was a descendant of Deacon John Dunham and his family line follows.

John ¹ and Abigail (Ballou) Dunham Joseph ² and Mercy (Morton) Dunham Eleazer ³ and Bathsheba (Whiston)

Dunham

Israel ⁴ and Joanna (Rickard) Dunham Cornelius ⁵ and Patience (Barrows)

Dunham

James ⁶ and Elizabeth (Robbins) Dunham James ⁷ and Besty (Gilpatrick) Dunham Seth ⁸ Dunham, b. 4 May 1826, (the subject of the article)

Sam Dunnam has sent in an article updating the progress that Barak Obama has made in his quest for the Presidency of the United States.

The third article is an update on the Deep Ancestry results of the National Geographic Genome Project, with comments about the Dunham haplogroups.

Gratia D. Mahony, Editor

He Saw the Elephant

Seth Dunham (1826–1909)

by Eric Stoltz, 2008

A farmer, hearing that a circus was in town, loaded his wagon with vegetables to sell there. He was excited; more than anything, he wanted to see an actual elephant. He got in town just in time to see the circus parade, led by an elephant. The farmer was thrilled, but his horses were terrified. Bolting, they overturned the wagon and ruined all the vegetables. "I don't give a hang," the farmer said, "for I have seen the elephant."

This was a well-known story in the 19th Century. "To see the elephant" came to mean the culmination of long-held desires, to see what few have seen, to experience the adventure of the unknown in exotic places, to risk all and be content even if all was lost in the adventure of a life made more colorful, more vibrant and more exhilarating for launching into the deep.

To forty-niners and those following, no expression characterized the California Gold Rush better than "seeing the elephant." Those bitten by the gold bug said they were "going to see the elephant." Those who returned claimed they had seen the "elephant's tracks" or the "elephant's tail." The elephant itself became a symbol of the Gold Rush, adorning miners' stationery, books and posters.

The 1850 U.S. Census shows Seth Dunham, age 24, living with his family in Orland, Hancock County, Maine, when the census taker visited them there on August 25. ¹ He had been born in Orland on May 4, 1826, only six years after Maine was admitted as the 28th state. ² His father James, born in Orland about 1788, is listed as a farmer, as were most others in the area. James married Elizabeth "Betsy" Gilpatrick on March 25, 1814. ³ She was born in Orland on May 27, 1795 and died about 1860. ⁴ They apparently lived a relatively uneventful life, but Seth must already have been adventurous and anxious to see the world, for his occupation is listed as sailor. Shortly after the visit of the census recorder, he was off to see the elephant.

^{1 1850} U.S. Census, Orland, Hancock, Maine, p. 403

² Town Vital Records of Orland, Hancock County, L. Donna Hoffman and Judy Sanborn, indexers, privately published, 2006, p. 14

³ ibid., p. 14

⁴ ibid., p. 14



Location of Hancock County in Maine

By April 9, 1851 (the 1850 census was late and a disaster in California, requiring a "re-do" in 1852), that same census found him in Tuolomne County, California with a new occupation: miner. ⁵ Where the census taker recorded page after page of farmers in Orland, the Tuolomne census taker filled the occupation column with a single word: miner, miner, miner. Seth was living on his own, far from his family. The page of the census where he is listed with all those miners shows the kind of people he was meeting, hailing from not only from Tennessee, Pennsylvania, New York, Massachusetts, Rhode Island, Louisiana (and a few fellow Maine men), but also men from places young Seth could have only imagined: Mexico, Norway, Scotland, Sweden, England, Ireland, The Isle of Man and India. And this was just one page.

Because of the speed with which he arrived in the gold fields and his previous occupation, we may assume he sailed to California, either all the way around the southern tip of South America or to Panama, traveling over the malarial swamps of the isthmus by foot and catching another ship on the Pacific to San Francisco.



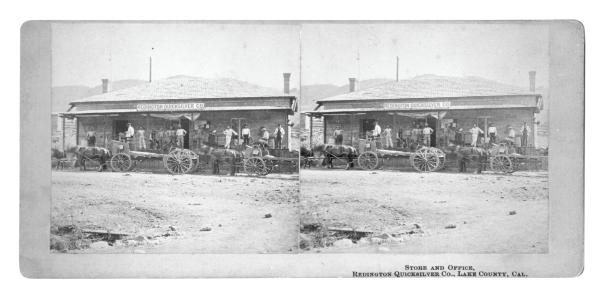
Napa City and Churches, 1860-1870, The Lawrence & Houseworth Albums, 1860–1870 California Views, Society of California Pioneers Photography Collection, The Bancroft Library, Online Archive of California, California Library, Online Archive of California, California Digital Library, University of California

There is no further record of Seth until the 1860 census. On June 25 of that year the census shows him rooming with L. D. Jones, also a miner, in Clear Lake, Napa County. One year later, on May 20, 1861, this area became part of newly formed Lake County. But Seth and his roommate would soon cause another shift in California's county lines.

It's common knowledge that few individuals became rich mining gold in California, but many did quite well by selling things to miners or providing services to the mining industry. Around this time, the discovery of silver in

^{5 1850} U.S. Census, Township no. 5, Tuolomne County, California

^{6 1860} U.S. Census, Clear Lake Township, Napa County, California, p. 23



Stereoscopic photograph of the office of the Redington Quicksilver Mine circa 1870, courtesy of Dean Enderlin

Napa County began attracting prospectors to the area. The silver did not turn out to be a big deal, but while prospecting north of Berryessa Valley in December of 1861, Seth and L. D. stumbled upon a lode of quicksilver, or mercury, in the form of cinnabar. Quicksilver was a toxic but important element used in some methods of gold mining.

The History of Napa and Lake Counties, California quotes the following account from Robert T. Montgomery:

In 1860 ⁷ a company of twelve was formed in Napa City for the purpose of prospecting for mines and minerals, and two old prospectors, Seth Dunham and L. D. Jones, were sent out to examine Napa and adjacent counties. What might be found was a small matter of doubt, but the company informally organized concluded to pay a small assessment of \$250 per month each, in order to find what might be the resources of the land. The prospectors were wont to bring in, about once a month, the results of their labors. The prevalent idea then was that silver abounded in the mountains of the county, and accordingly all eyes were directed to the discovery of that one metal. The company individually, and the prospectors as well, were well-nigh equally ignorant of mineralogy, and the "specimens" brought in ranged from iron pyrites to bituminous shale, all of

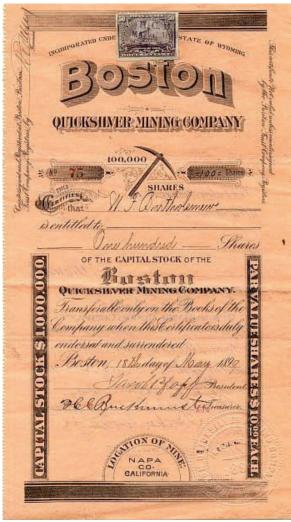
⁷ John Sealey Livermore, manager of the Redington Mine, recalls the year as 1861 in *Western Mining in the Twentieth Century Oral History Series, Prospector, Geologist, Public Resource Advocate: Carlin Mine Discovery, 1961, Navada Gold Rush, 1970s*, a project of the Regional Oral History Office, The Bancroft Library, University of California, Berkeley, interviews conducted in 1992, 1997 and 1999 by Eleanor Swent and in 1997 by Maurice Fuerstenau, p. 5. Herafter referred to as *Swent*.

which were supposed to contain silver. Every newspaper office and hotel bar were replete with these samples of the wealth and value of the mineral resources of the county, all of which, economically considered, were only inferior specimens of macadamizing stone—glistening, but valueless. At last Messrs. Jones and Dunham, in their perambulations among the hills, struck a new road, then recently built between Berryessa Valley and Lower Lake, and, on ascending a hill at the head of Sulphur Canyon, just above the Elk Horn Ranch, where the soil and rock had been removed to permit the passage of teams, discovered, on the upper side of the road, at the turning point, that the rocky point, partly removed by the road-makers, was of a peculiar color and texture. Fragments broken off were very heavy and of a liver color. They were brought to town, and by the experts of those times pronounced cinnabar. And such they proved. ⁸

The mine resulting from this find was first known by the name of the company the investors formed, XLCR, which in addition to sounding like the Latin word *excelsior* (excellent), also represented the names of the principal investors: Knox, Livemore,

An advertisement announcing the offering of shares in the X.L.C.R. Mining Company. From the Napa county Reporter newspaper, June 22, 1861.

⁸ Author not credited, *History of Napa and Lake Counties, California*, Slocum, Bowen & Co., Publishers, San Francisco, 1881, pp. 163–164



Stock Certificate for the Boston Quicksilver Mining Company, Napa County, California

Charles) Osborn, and Redington. By June a claim was staked, and presumably Seth and L.D. were paid some relatively small amount. ⁹

At first called the XLCR Mine, it was later called the Redington Mine, the Knoxville Mine and the Boston Mine. It became wildly profitable, and led to further explorations in the area, resulting in an entire quicksilver mining district, with the best-known mine being at New Almaden. Knoxville, modestly named by one of the investors for himself, quickly grew from nothing into a town of 500—300 of which were employed by the mine—by 1880.¹⁰

At the time, Napa County was more about mines than wines. The influential politicians of Napa lusted after the taxes generated by the profitable Knoxville mining district that grew from Seth's discovery. In a *coup d'etat*, they wrested the Knoxville area from the new and less influential Lake County in March of 1873 in exchange for a one-time payment of \$3,500.

No doubt enthusiastic with his payout and optimistic for the future, Seth married Lavina Jesse Springston in Napa County on November 17, 1864 before a local

justice of the peace. ¹² He was 38 and she was 17, the daughter of William Springston, a farmer born about 1807 in Ohio, ¹³ and Nancy Todd, born about 1820 in

⁹ Swent, p. 5

¹⁰ Slocum, Bowen & Co., p. 164

¹¹ *An Act to define the Northern boundary line of Napa County, adjoining Lake and Yolo counties*, approved by the California State Legislature March 8, 1871

¹² Marriage License, Napa County Recorder-Clerk

^{13 1860} U.S. Census, Clear Lake Township, Napa County, California, page 21

Ohio. ¹⁴ The Springston family had moved about quite a bit; their children were born in Ohio, Pennsylvania and Indiana; the family finally arrived in California between 1850 and 1856. Lavina herself was born February 11, 1849 ¹⁵ and her parents seem confused by her peripatetic childhood; at various they gave her home state as Michigan, Ohio or Pennsylvania. ¹⁶ She was most likely born in Michigan.

By 1870 Seth and Lavina were settled in Lower Lake in Lake County with two children, Robert, born about 1866 and Ida, who was born about 1868 and does not appear to have survived childhood. ¹⁷ Seth was still working as a miner. He appears to be living on land he obtained on October 21, 1865 through the provisions of the Homestead Act of 1862. This would be the first of five land patents Seth would receive in Lake and Mendocino Counties through 1907. ¹⁸ Perhaps having land made Seth feel as though he could rely on his family's farming heritage back in Maine. He began to consider himself a farmer and made a go of it. ¹⁹ We don't know if he regretted giving up his life as a miner and prospector; he certainly seemed committed to farming. But Seth did not seem to be a good farmer, no matter how much land he homesteaded. And he appears to have run through any money he received for his quicksilver discovery. Even as Napa and Lake Counties finally settle the dispute over the lucrative

14 Little can be determined about the ancestry of Nancy Todd. There were other Todds living in the area at the time, but no connection to them can be made. It is tempting to imagine a relationship to another Todd in the area at the time: William Levi Todd. History remembers him as the creator of the Bear Flag in the revolt of the same name and as a cousin or nephew of Mary Todd, who would become the wife of Abraham Lincoln. See Warner, Barbara, "Deaths and Burials of Men Associated with the Bear Flag Revolt in California, June, 1846," *The Searcher*, Southern California Genealogical Society, October 1988. Similarly, little is known of the ancestry of William Springston.

15 Death Certificate, Mendocino County Recorder-Clerk

16 Ibid.

Claims Michigan: 1850 U.S. Census, Litchfield Township, Hillsdale County, Michigan

Claims Ohio: 1870 U.S. Census, Lower Lake, Lake County, California, p. 13

Claims Pennsylvania: 1880 U.S. Census, Middletown Precinct, Lake County, CA, p. 10

Claims Michigan: 1910 U.S. Census, Long Valley Township, Mendocino Co., CA, sheet 8

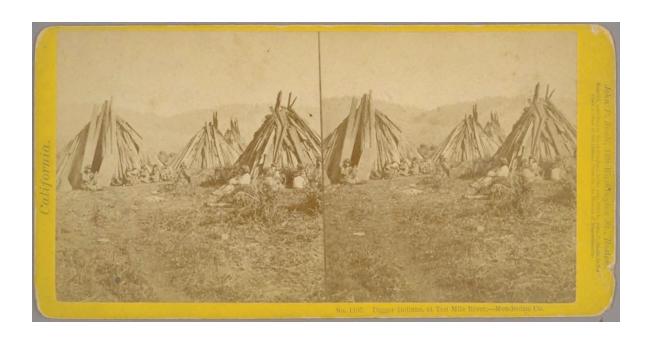
Claims Michigan: 1920 U.S. Census, Santa Rosa Township, Sonoma County, California, District 153, sheet 14 Claims Michigan: 1930 U.S. Census, Willits Township, Mendocino County, California, District 23–9, sheet

14A

17 See 1880 Census as cited in number 16.

18 Bureau of Land Management, General Land Office Records, Accession/Serial Numbers 0698–384, CACAA 016701, CACAA 015109, CACAA 031003, CACAA 014799

19 McKenney's District Directory, 1878-79 for Yolo, Solano, Napa, Lake, Marin and Sonoma Counties lists Seth as a farmer. Presumably he had given up mining as a primary job since he was listed as such in both 1860 and 1870 Census. He is listed in 1878 as residing in Middletown, a farmer with 160 acres.



Digger Indians at Ten Mile River, Mendocino County, Stereoscopic photograph by John P. Soule c. 1870, Stereographs of the West from the Bancroft Library Pictorial Collection, Online Archive of California, California Digital Library, University of California

tax base of the Knoxville Mining District, he experiences financial difficulties. In 1875 he faces the humiliation of having a public notice of delinquent property taxes published in the small town. ²⁰ And there were more children. Sumner was born May 24, 1871; Ella "Minnie" on May 24, 1878; Daisy May on October 27, 1882 and Oscar Waldow on August 17, 1885. ²¹ Still he persisted in farming; the 1800 and 1900 censuses show him as living on a farm with an occupation as a farmer, first in Middletown, Lake County and then in Long Valley, Mendocino County.

Even as recently as Seth's time, Lake and Mendocino counties were sparsely populated. Photographs of the area from this time period show towns that look like Western movie sets, and indeed there were Native Americans living in traditional bark housing in Mendocino County during Seth's life. Seth lived the life of a true Western pioneer.

²⁰ Delinquent tax notice of the County of Lake, State of California, for the Fiscal Year 1874–75, Lakeport, Lake County, California, January 1875: DUNHAM, Seth, Cobb Mountain; personal property value-\$35; possessory claim to unsurveyed land on south slope of Cobb Mountain, on old road leading from Cobb Valley to Loconoma, adjoining the lands of Springston; 160 acres.

²¹ All birth dates: California Death Index, 1940–1997, State of California Department of Health Services, Center for Health Statistics and U.S. Censuses for 1880 and 1900, as cited in number 16

Seth died of pneumonia in Ukiah, Mendocino County, on December 12, 1909 at Mendocino State Hospital at the age of 82. ²² He was buried in Laytonville, Mendocino County. ²³



Laytonville, Mendocino County, 1910, Jesse Brown Cook Snapshots Documenting San Francisco History and Law Enforcement, Volume 3, Online Archive of California, California Digital Library, University of California

After Seth's death Lavina lived with her daughter Daisy May, her husband William Walker and their seven children in Santa Rosa, Sonoma County. William worked as a day laborer and Daisy May as a nurse. ²⁴ By 1930 Lavina, Daisy May, William and the two youngest children had moved back to Ukiah. Caring for Lavina must not have been easy for the Walkers; Daisy May was no longer working and the family was supported

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²² Death Certificate, Mendocino County Clerk-Recorder. Seth's birth date is wrong on the death certificate; the person who reported the data—not a family member—mistakenly gave Lavina's birthday as Seth's. The hospital as place of death is from a mortuary card in the archives of the Heid-Paage Research Library in Ukiah, California.

²³ The death certificate states his body was released to Eversole Mortuary in Ukiah; the cemetery is unknown.

^{24 1920} U.S. Census as cited in number 16

by William and their 18-year-old son Kenneth taking on odd jobs to meet the \$5 rent of the house at 52 Main Street. ²⁵



Town of Willits, Mendocino County, 1910, Jesse Brown Cook Snapshots Documenting San Francisco History and Law Enforcement, Volume 3, Online Archive of California, California Digital Library, University of California

Lavina died of pneumonia on October 12, 1931 in Willits, Mendocino County at the age of 82 and was buried in the Odd Fellows Cemetery there. ²⁶ Her son Sumner was probably with her when she died, as he provided the information for the death certificate. He gave her birth state as Michigan but did not know the names of her parents.

We never met Seth and Lavina. We have no family stories about them handed down, no photographs. But a look at what we can learn about them through history tells us a lot about their character, resourcefulness and sense of adventure.

Certainly Seth saw the elephant.

^{25 1930} U.S. Census as cited in number 14. That \$5 in 1930 is the equivalent of about \$138 in 2008 should give us an idea of the circumstances they were living in.

²⁶ Death Certificate, Mendocino County Recorder-Clerk

Barack Obama Is The Democratic Nominee

by Sam Dunnam



Senator Barack Obama

In the January 2007 issue of the DSFC Newsletter, I published the lineage of Senator Obama from Jonathan Dunham alias Singletary and Richard Singletary down through his maternal grandfather to him. "Singletary Dunhams" are related to Barack, as indeed is the whole Singletary clan.

In that January '07 issue I was able to include the announcement that Senator Obama had filed, on January 16, 2007, the necessary papers with the Federal Election commission to open a presidential exploratory committee, the first step Usually taken by politicians who intend To run for President. And on February

10th, in Springfield, Illinois, Senator Obama did follow through and make his formal announcement to seek the presidency. On that date he became our most famous and newsworthy relation.

Now, after a long and grueling primary season, Senator Obama has become the Democratic nominee, finally overcoming the strong and initially favored bid of Senator Hillary Rodham Clinton. While the primary season has seemed almost endless, Barack Obama's rise on the American political scene has been breathtakingly rapid. He first came to national attention on July 27, 2004, when he gave the keynote address at the Democratic National Convention. At that time, he was not yet a United States Senator but was heavily favored to win his race for the Senate in Illinois against a much weaker opponent. He did win that race and was sworn in as the junior senator from Illinois in January 2005.

When I go back now and read that keynote address to the Democratic Convention, it reads as a good and appropriate speech for the occasion but not a great or historic one. Rather, there was something about *the man* and his delivery of the speech that captured everyone's attention. From that point on, Obama began to be regarded the foremost rising star of the Democratic party, Senator Clinton's fame and ambitions notwithstanding. In the Congressional elections of 2006, he was the most sought-after speaker for other Democrats running for national office that year. And at his book-signing events—when he was

on tour promoting his second book, *The Audacity of Hope*—he was met and cheered by overflow crowds. It is clear by now that Barack Obama is the kind of political phenomenon not seen in America since John F. Kennedy.

I suppose I can claim to be one of those who saw something special about Obama early on. As you know, I read both his books and published in the April, July, and October 2007 newsletters a three-part, lengthy review of his first book, *Dreams From My Father*, which he wrote and published in 1995, following his graduation from the Harvard Law School, where he was the first African-American president of The Harvard Law Review. I hope that those of you who read my reviews in those three issues feel today that you have a better knowledge and deeper understanding of Barack Obama than most of your friends and neighbors.

It is not my purpose here to promote or advocate the presidential candidacy of Barack Obama. For those of you who, like me, are Singletary Dunhams, you should not vote for him just because he is a distant cousin. And for you 'Deacon John' Dunhams, certainly sharing a surname is not reason enough for political support. Not all spell binding politicians or impressive orators are public benefactors. (Huey Long here comes to mind.) Sharing, at least in part, the same political convictions and the same national vision are the valid reasons we vote for the candidates of our choice. Yet, at the same time, whether we are Democrats, Republicans, or Independents, and whether we support him or not, I think that as extended family we can all be proud that one of our relations has accomplished so much at 46 years old and is now a presidential candidate.

From Barack's side, his mother's heritage and devoted contribution to his upbringing are extremely meaningful to him. His father left his mother and him when he was two years old in Hawaii and went off to study at Harvard. He did not come back. He returned rather to Africa after his studies and Barack did not see him again for ten years. Ann Dunham obtained a divorce, though remained on civil terms with Barack, Sr., with whom she corresponded. The result was that Barack was raised by his single mom and his Dunham grand-parents. Ann did marry again—to an Indonesian named Lolo Soetero. And while Lolo was a decent and benevolent step-father, it was Ann who tended to Barack's upbringing during the four years they were in Indonesia. In a recent talk show appearance, Barack spoke quite movingly of his mother's loving and dedicated nurture of him. He credits her with much of what he is today.

One thing that I hope my review gave you was a true account of Barack's life, upbringing and career, told largely in his own words from *Dreams*. There are already circulating on the Internet a large number of vicious and untrue fabrications about Barack's background, education, and religion. An unfortunate characteristic of American political culture, especially in recent presidential elections, is the use of unsavory and malicious "attack" accounts fabricated by shadowy "527" groups that are, officially anyway, unassociated with the opposing candidate's campaign. The most egregious example of this tactic was the "Swift-boating" of Senator John Kerry in the 2004 campaign. The derogatory claims made by the group that attacked Senator Kerry were later proved to be unture, but not until after the election was over and they had done their damage.

Some of the claims now circulating about Barack is that he is, or was, a Muslim, that he was raised a Muslim or attended a Muslim school (a "madrassa") in Indonesia, that he is part Arab or of Arab heritage (because his middle name is Hussein), that his mother was a "loose woman," and many other claims that have no basis whatever in fact. There is usually some shred that these claims fix upon and are spun from. In Barack's case, as we know from *Dreams*, his black African grandfather was a Muslim in the rural village in which he was raised in Kenya. But Barack never saw or knew much about this grandfather until after he was a mature young man and made a trip to Kenya after graduating from Columbia and working in New York and Chicago. This distant grandfather was a village elder and medicine man, well-off by rural Kenyan standards, highly respected, and a Muslim in the same sense in which, say, an upper middle-class citizen of Dallas might be a Methodist: it was the ambient faith of his fellow villagers and neighbors. In fact, there was no mosque in Alego (the ancestral village) and thus no 'practice' of the Muslim faith in the sense in which urban adherents of the faith might practice (e.g., with daily prayers). Likewise, Barack never attended a madrassa in Indonesia, just a regular government public school. There are far too many of these malicious fabrications now circulating to mention, and we shall doubtless see a great many more as the campaign progresses. I shall not write of them again here, but I am glad to have published my review for you and other friends to see. I do believe that to know something about Barack's life and career is to admire him. Whether or not you agree with him politically and decide to support him is quite another matter

Meanwhile, we and all Americans have now a five months' long, interesting presidential campaign ahead of us this summer and fall. At the conclusion of it in November, our extended family group may be able to claim a president among us. If so, I can say I am proud to have seen him coming.

NATIONAL GEOGRAPHIC SOCIETY GENOGRAPHIC PROJECT:

An Update on the Project and the Results as they Pertain to DUNHAMS

by Gratia Dunham Mahony

The genographic project that launched in 2005 has produced enormous results to date, but the amount of knowledge that we have gained so far is still small in relation to what will be learned as this study continues. In 2005 National Geographic Society, IBM, geneticist Spencer Wells, and the Waitt Family Foundation formed a partnership to analyze the DNA samples as they relate to human migration patterns. The Genographic Project's goal is to assemble a comprehensive database of human genetic variation.

THE STUDY OF OUR DEEP ANCESTRY

All humans are descended from a common African ancestor 60,000 years ago. Today the knowledge of the human genome, the ability to sequence DNA, and the study of DNA from samples gathered world wide show the story of the human migrations from Africa to the rest of the world. Studies show that humans settled the world in stepping stone fashion after leaving Africa. As each small group of people moved further away to settle a new

region, that group took only a sample of the parent population's genetic diversity. Thus, less variation appears in samples the further groups went from Africa.

A particular pattern of genetic markers can tell us about one haplogroup's relationship to other haplogroups. A haplogroup is an ancestral clan—the descendants of one man who had a particular set of genetic markers on his Y chromosome. Identifying haplogroups involves a string of letters which broadly define affiliation to a group, with numbers and other letters which define subgroups within the broad group.

Mapping of the world's haplogroups, and thus the migration patterns, has been done and can be viewed at various web sites. The web site of the National Geographic Society which illustrates this migration pattern, and those of each haplogroup, can be viewed at www3.nationalgeographic.com/genographic/atlas.html To view the different haplogroups and their migration patterns click on "Atlas of the Human Journey", then go to genetic markers, and find the haplogroup of interest.

DUNHAM HAPLOGROUPS

If we refer to the DNA test results on Paul Dunham's web site for the Dunham-Singletary Family Connections, we see that the Dunhams belong to three main haplogroups: R, I, and G. We can than follow the breakdown of individuals who belong (for instance) to Rlb, or to Ila. The migration routes of these subgroups follows.

ANCESTORS OF THE SINGLETARY-DUNHAM LINE

Haplogroup R—This clan spent considerable time in central Asia and then a group began to head west toward the European subcontinent. A man in this group carried the M207 mutation on his Y chromosome. His descendants split into two distinct groups, one continuing westward onto the European subcontinent, the other going south to the Indian subcontinent.

The Rl subgroup-- (defined by marker M173) arrived in Europe around 35,000 years ago. Their journey was shaped by the preponderance of ice that occurred around 20,000 years ago when they were forced to southern Spain, Italy, and the Balkans. Then years later when the ice retreated, they moved northward and left a concentrated trail of the M173 marker in their wake. This marker's frequency remains very high in Spain and the British Isles.

The R1b subgroup—(defined by marker M343) developed around 30,000 years ago and is now found at a very high frequency in western Europe. In some populations, for instance the Irish, nearly every man is carrying marker M343. This frequency drops as we move eastward in Europe and tests of men near Poland and Hungary show it in only about one third of the men. The R1b subgroup were the Cro-Magnon who are responsible for the famous cave paintings located in southern France.

ANCESTORS OF THE DEACON JOHN DUNHAM LINE

Haplogroup I—This clan (defined by marker M89) was part of the Middle Eastern group that continued to migrate more directly northwest into the Balkans and spread into central Europe. This clan may have brought the Gravettian culture to western Europe about 21,000 to 28,000 years ago. Gravettian culture (named after a site in La Gravette, France) represented a new technological and artistic phase in western Europe. Archaeologists have discovered tools that differ from those of the preceding era. These stone tools had a distinctive pointed blade used for hunting big game. Gravettian culture is also known for figure carving, creation of shell jewelry, and they may even have discovered how to weave cloth using natural plant fibers as early as 25,000 years ago.

The Ila and Ilb subgroup—are major lineages. Ila appears with highest frequency in Scandinavia and appears with lower frequency throughout the Atlantic fringe of Europe. Ilb is found more frequently in the Balkans and is common in central and eastern Europe. The most recent common ancestor (defined by marker M170) was born about 25,000 years ago.

As the ice sheets began to retreat, a distinctive gene marker (M253) appeared on one of the males of the Ila subgroup. His descendants moved north from the Iberian Peninsula and likely played a central part in colonizing central and northern Europe. Because of the high frequency of this marker in western Scandinavia, it is likely that many Vikings descended from this line. Viking raids into the British Isles may account for the high prevalence of the subgroup I1a there.

Haplogroup Ilb subgroup is further defined by a marker known as P37.2 which appeared in the Balkan people about 15,000 years ago. Members of this group spread northward and eastward into Europe. This marker's presence in central and eastern Europe is prevalent there today.

Haplogroup Ilc subgroup is defined by marker M223 which occurred with a genetic mutation in a man living in southern France around 14,000 to 18,000 years ago. Members of this group were hunters who used teamwork to hunt large game. This subgroup is most common in Germany.

ANCESTORS OF AN UNIDENTIFIED DUNHAM LINEAGE

Haplogroup G—This clan (defined by marker M201) arose around 30,000 years ago along the eastern edge of the Middle East, possibly near the Himalayan foothills. Members of this clan are relatively few in comparison with Haplogroup R or I. DNA studies now show that despite living at high altitudes, individuals from haplogroup G were able to survive by learning to farm and by adopting the Neolithic culture. Their spread westward through modern Turkey and into southeastern Europe was at least partially due to the expansion of agriculture.

Much more will be learned about the human genome as time passes and more DNA samples are studied.