
History of the People

Module 4 - Akshayuk Pass Expedition



WHERE ARE WE FROM?

The i2P expedition team is made up of 14 individuals. These fourteen people claim a broad variety of national and cultural heritages. They speak a host of different languages and are a variety of different shapes and sizes. Ray Zahab is Lebanese Canadian; Kevin Lin is from Taiwan; Jen Seger is of British Heritage; Thomsen D’Hont is Metis. Despite these different cultural heritages and appearances, what the team members may not know is that they are all in fact originally from the same place.

Kathleen Merritt is the only expedition team member who claims Inuit heritage. She hails from Rankin Inlet on the shores of Hudson Bay and is fluent in Inuktitut. In passing through the Akshayuk Pass she will be traveling on land that has been home to her people for countless generations.

Yet, as we learned in the previous module a good proportion of North America and virtually all of the traditional land of the Inuit was covered by a giant sheet of ice making it uninhabitable to human beings. So how did the Inuit come to be living in their current location? In other words, where did Kathleen’s relatives come from?

Video Link:
Video of Kathleen Merritt Throat Singing
[Kathleen](#)

The term Inuit describes the native people of Alaska, Northern Canada and Greenland that share a common ancestry and cultural heritage. Due to the wide dispersal of Inuit people over a vast region, over time they have developed regional linguistic and cultural variations. Nonetheless there remains among all groups a strong common linguistic and cultural base.

Establishing just where the Inuit came from has proven a challenging task, made more so because until 1856 the Inuit had an oral tradition, with no written language or written record of their history. Inuit history was oral, passed down from one generation to the next in the form of stories. These stories form the basis of a rich Inuit mythology filled with spirits that controlled the animals, the weather, and other natural elements (see: [Inuit mythology](#)).

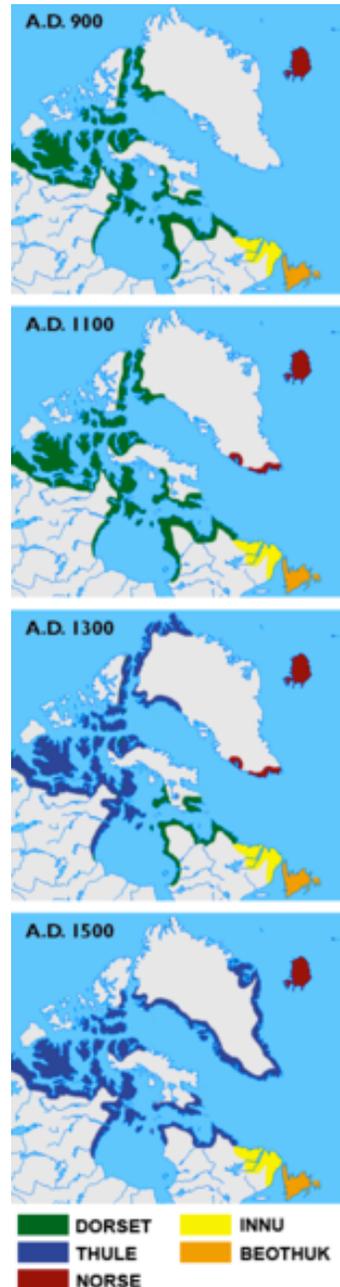


Figure 1: The history of migration of different cultures to the Canadian north (Image: courtesy Masae)

ARCHEOLOGICAL MAP

Other techniques have been enlisted to map out the origin of the Inuit. Archeologists have traced the history of the Inuit by discovering and analyzing old abandoned encampments and settlements. By looking at the layers of refuse and artifacts left behind in old Inuit settlements and camps, archeologists can reconstruct the life that was led at the time the camp was used. By comparing similarities between camps across the north they were able to build a history of the people. Using this technique it has been established that the Inuit are the descendents of a group called the Thule people that found their origins in Alaska about 1000 years ago and spread across the north as far as Greenland (Figure 1).

The Thule People (modern Inuit) are thought to have displaced a series of previous and distinct cultural groups that had lived in the Arctic dating back 4500 years. Evidence suggests that the early Inuit started in Alaska and migrated across the Arctic from West to East. The question then arises, how did they come to be in Alaska?



Figure 2: The beringian land bridge between the modern coastlines of Siberia & Alaska (image: United States Geological Survey)

Evidence suggests that at various times over geological history North America and Asia have been attached by a land bridge across the Bering Strait. This land bridge has been called Beringia, and has occurred during times in history when global sea water levels drop. This occurs during periods of global cooling when large amounts of the world's water supply becomes trapped in ice caps in Antarctica and the northern hemisphere. We learned of such an episode in the previous module, when the Laurentide Ice Sheet covered half of North America. All this ice trapped almost 30% of the world's water, causing the sea to drop by as much as 120 meters, exposing the shallow seabed between Alaska and Siberia and creating a land bridge. At its greatest width this land bridge, called the Beringian land bridge, is thought to have been 1000 kilometers wide.

The Beringian land bridge existed between 38,000 and 34,000 years ago, and again from 30,000 to 15,000 years ago. Archeological evidence supports that there were waves of migration of people from Siberia to Alaska during the existence of the land bridges. These migrants spread across North and South America. The migration of the Thule people, the ancestors of the Inuit, was one of the last waves of migration.

GENETIC MAP

Yet another remarkable means of mapping ancestry developed after the discovery in 1953 of the molecular structure of DNA – the 'stuff of life'. It was established that DNA from a mother and a father was mixed together and passed in almost equal parts to form the genetic code for a child, and that this DNA dictated what characteristics the child inherited from their parents. What was also discovered is that there are two packets of

DNA that are not mixed together between a mother and father but are passed on unchanged to the child. These two packets are:

- mitochondrial DNA which all children inherit from their mother
- The Y chromosome which all boys inherit from their father

Did You Know?

Syllabics, the Inuit written script was first introduced in 1856 by John Horden, an Anglican Missionary at Moose Factory, Ontario.

What this means is that the mitochondrial DNA in your cells is identical to the mitochondrial DNA in your mother's cells, and your mother's-mother's cells, and so on. Similarly if you are a boy, the DNA in your Y chromosome is the same as the DNA in your father's Y chromosome, and your father's-father's cells, and so on. This would then mean that the first pair of human beings on earth (assuming there were just two) would have the same Mitochondrial DNA as everyone alive today, and the first father would have the same Y chromosome as all male humans alive today.

However there is one problem. The DNA in mitochondrial DNA and Y-chromosomes does change, but only by random mutations that occur very, very rarely. These mutations also tend to occur at a fairly steady rate over time. The fact that it changes very slowly over time opens up a remarkable opportunity.

By mapping the number of changes in mitochondrial or Y-chromosome DNA between two people, scientists can estimate how closely they are related, or how far back in time they shared a common mother or father. By mapping patterns of changes in mitochondrial and Y chromosome DNA from around the world scientists have been able to estimate how closely related different people are. In turn, one can establish how closely related groups of native people (indigenous groups) are, and where they trace their ancestry from. Which leads us back to our original question: Where did Kathleen Merritt's people, the Inuit, come from?

OUT OF AFRICA



The Genographic Project is a National Geographic Society study that has used the principles of Mitochondrial and Y chromosome DNA to take on the ambitious task of mapping genetic links, and the ancestry of all people in the world. This genetic 'map of ancestry' has revealed the gradual migration route of human history. The five-year Genographic Project, now nearing completion, has revealed that all human beings can trace themselves back to a common ancestry in one location in the world. In other words all human beings are descendants of the same original people.

Web Link:

For more on the National Geographic Genographic Project see:

[Genographic](#)

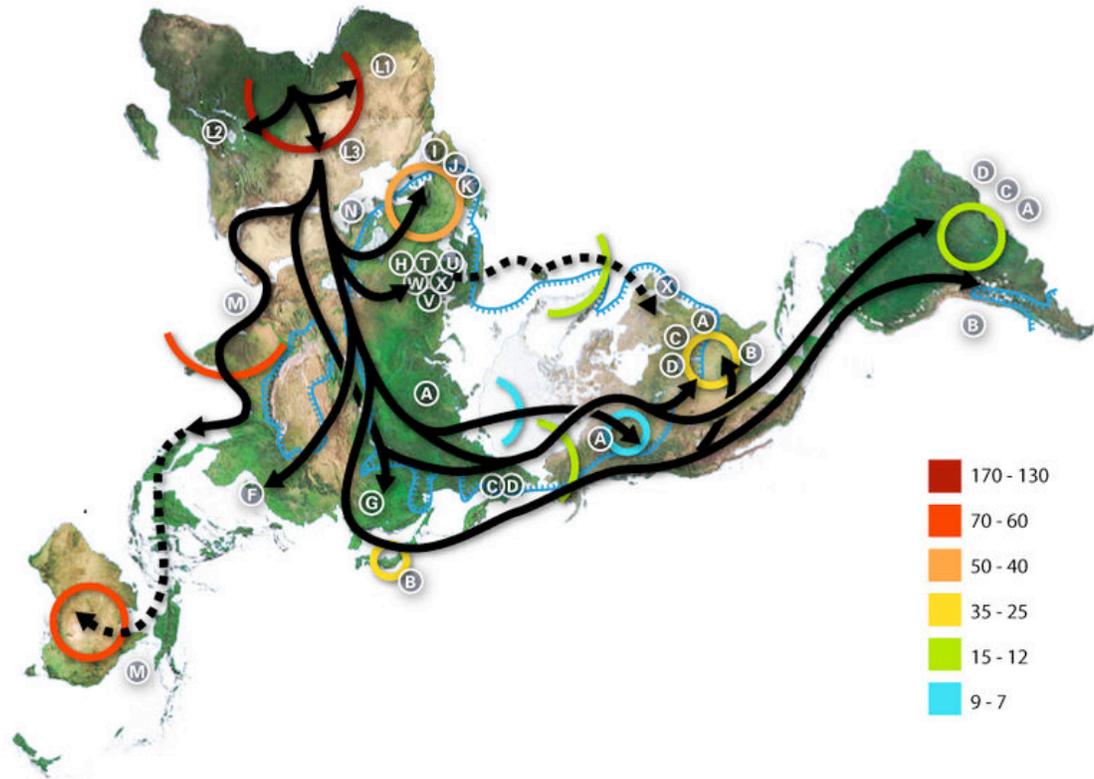


Figure 3: The world map of human migrations, with the North Pole at center. Africa, harboring the start of the migration, is at the top left and South America at the far right. Migration patterns are based on studies of mitochondrial DNA. Numbers represent thousand of years before present. The blue line represents area covered in ice or tundra during the last great ice age (image Courtesy: Wikimedia Commons).

The genetic map of human history that we all carry in our cells reveals that human beings lived exclusively in Africa until about 60,000 years ago when we first ventured outside the continent and began spreading around the globe. It also confirms the theory that the indigenous people of North America crossed from Siberia into Alaska. The lineage of these ancestors then traces back to central Asia and ultimately Africa.

Class Exercise:

Test your genetic heritage by participating in the National Geographic geographic project. For more information please see:

[Your Heritage](#)

So in the end the ultimate answer to our question, “Where did the Inuit come from”, is Africa. The Inuit trace their roots to Africa. In fact we are all of African heritage.

When we explained to Ray last week that he is African he was fascinated. “We’re all African – amazing!”, and ran off to call Nick the i2P webmaster in order to change the expedition title to the i2P African Akshayuk Pass Expedition.