

## **1491: The Untold Story of the Americas Before Columbus**

### **EPISODE 101 - ORIGINS**

#### **Opening Title Sequence - Narrator - 00:11**

We are the First Peoples of the Americas. We have been here from the beginning. Our ancestors navigated by the wind and stars crossing vast oceans and mountain ranges, searching for new lands. Over thousands of years, our ancestors became astronomers and architects, philosophers and scientists, artists and inventors. We created distinct societies and built vast trade systems that covered two continents. In 1492, our world was changed forever, but we did not disappear. Today, the languages and teachings of our ancestors remain, and these are the untold stories of the Americas before Columbus.

#### **Narrator - 01:30**

When did the First People arrive in the Americas? Indigenous creation stories tell how our ancestors emerged as humans from the earth, the water, the sky, and the land below. Some people believe that we walked into the Americas on foot, across an ancient land bridge that once connected Asia and North America. Others say we paddled here in ocean-going canoes along the Pacific coastline. There's one thing that all of these views of arrival have in common - they all begin with a journey. By 1491, tens of millions of Indigenous People were living in every part of the Americas, from the High Arctic to the southern tip of South America. There were countless Indigenous Nations, each with their own distinct language and ways of life, but this didn't happen overnight. It took thousands of years to build this diverse world from a very small founding population. Since 1492, we've shared our traditional territory with people from every part of the world. Today, we continue our search for the origins of our ancestors and the roots of our cultural identity as Indigenous People.

#### **Dr. Joe Watkins - 03:04**

We have two different kinds of dates. We have the archaeological date that says probably somewhere between 18,000 to 20,000 years ago, the first non-native-born human came into this hemisphere. In terms of Indigenous perspectives, we've always been here. Philosophically, we've never been anywhere else.

#### **Narrator - 03:28**

Every Indigenous Nation has its own creation story. These stories have been passed down from generation to generation for thousands of years. Creation stories form a powerful part of each Nation's identity and our sense of who we are as a people.

#### **Narrator – 03:52**

In the beginning, there was a great flood. A few animals and birds survived by clinging to a log. Among them was the tiny muskrat. The creatures decided they needed to find land, but the world was covered in water. One by one, they took turns diving deep into the water, looking for some dirt to bring back to the surface. But each animal came back empty-handed. Finally, the tiny muskrat dove under the water. When he came back, he had a paw full of earth. He placed it on the back of a turtle's shell. This is how North America became known as "Turtle Island."

**Narrator - 04:39**

In the beginning, there was only the sea and the sky. The gods created the earth and populated it with animals and birds. But the animals couldn't worship them, so they decided to make humans. The first humans were made from mud, but they fell apart too easily. Then the gods made humans from wood, but they had nothing in their minds, so they destroyed them in a flood. Finally, the gods made humans out of maize dough. They had intelligence and knowledge and could worship the gods, so they became The First People.

**Narrator - 05:24**

In the beginning, people lived in the sky and the only creatures they knew were birds. A young hunter set out one day to find a rare and beautiful bird. When he finally found it, he shot his arrow. and when he went to retrieve it, he discovered a hole in the bottom of the sky. Looking through it, he saw forests and rivers and wild animals. other hunters to travel to this world with him, but they refused, so he made a rope, and lowered it down the hole, and climbed down to the world below. He shot a deer and brought it back to the sky world. The others wanted to hunt deer, too, so they climbed down the rope. The last person to go through the hole in the sky was a woman, and she became stuck, preventing the people from returning to their home. She can still be seen in the sky as the morning star.

**Narrator – 06:27**

Historians have long supported a theory that our ancestors walked into the Americas across an ancient land bridge that connected Asia and North America during the last ice age. about 13,000 years ago, great sheets of ice, kilometers thick, covered much of the northern sections of North America, Europe, and Asia. But there were some ice-free regions in the Northern Hemisphere, where people lived. One of these regions was known as "Beringia." This 1,000-kilometre expanse of land emerged when glaciers locked up vast quantities of water, causing sea levels to fall more than 100 meters.

**Dr. Eldon Yellowhorn – 07:16**

You see evidence that people came across a land bridge. You see evidence that a land bridge did exist in the past.

**Dr. Rudy Reimer – 07:23**

In the northern parts of North America... Alaska, the Yukon, even northern British Columbia, we have a collection of some of the most ancient sites across the continents, and of course, that would be up in an area that archaeologists refer to as Beringia.

**Dr. Eldon Yellowhorn – 07:39**

I mean, any of those people who made it across the land bridge, all they had were their wits and a few stone tools, and yet, they managed to explore, discover, and colonize two continents, so that's a pretty amazing achievement in the annals of human history, and they did this by being very aware of their environment, being able to manipulate their environment to their own benefit.

#### **Narrator - 08:04**

The water between the two continents dropped so low, it exposed the bottom of the sea. This arid, prairie-like landscape remained ice-free, and the abundant birds and mammals provided people with food and materials for clothing and shelter. But Beringia was a temporary landscape. Around 20,000 years ago, the world's climate began to warm and the glaciers started melting. By 15,000 years ago, the rising sea levels had covered up the Beringia land bridge, and people living there either had to return to Siberia or stay in North America. The melting glaciers and rising sea levels created major environmental changes in the Northern Hemisphere. The land between the two North American ice-sheets widened about 12,000 years ago, offering an ice-free corridor for people to travel through.

#### **Dr. Rudy Raimer – 09:02**

Historically, in archaeology, it was believed that the spread further south into the continent was between the Laurentide and Cordilleran ice sheets, and this is known as the ice-free corridor hypothesis, and so, many researchers saying this was the gateway into the Americas.

#### **Narrator – 09:24**

But taking this route south through such a harsh terrain would have involved a tremendous risk.

#### **Dr. Eldon Yellowhorn - 09:32**

If they had a people who were up in Alaska, and they see this opening between two ice sheets, they're taking a big leap of faith to say, "Well, maybe we go a thousand miles south of here, we'll find better land." The ice-free corridor would have been a very dynamic landscape. It would have had terrible winters, like, harsh, cold winters, and not much better in the summer. The summers would have been cold and rainy, so there wasn't a lot of opportunity for people to find stable land that they could colonize.

#### **Narrator – 10:08**

The end of the last ice age set the stage for the movement of people over land into North America. The Indigenous people who travelled into the continent on foot from Beringia could not have known it at the time, but they were not the first people to settle south of the ice-sheets. In fact, humans had already been living in both North and South America for thousands of years before the glaciers melted and opened up routes south through the ice-free corridor.

#### **Narrator #2 – 10:49**

Glaciers covered much of the Northern Hemisphere until about 12,000 years ago. As temperatures warmed worldwide, ice melted and sea levels began to rise. These changes to the environment led to animal, bird, and human migration throughout North America, Asia, and Europe.

Tens of thousands of years ago, the climates in parts of the Asian sub-continent was much wetter than it is today. In India, the Thar desert was once a vast fertile grassland. Hunters following the herds eventually settled permanently in the region. As the glaciers retreated, the warming climate created new agricultural zones in the Northern Hemisphere. Early agriculturalists cultivated new food resources in the fertile soils of the Middle East, and this led to the formation of farming settlements and eventually cities.

During the last ice age, sea levels were 100 metres lower than they were today, and this created a thousand-kilometre land bridge to appear between Siberia and Alaska. This became one of the migration routes that humans took into the Americas. Changes in climate over the millennia has influenced the migration paths and hunting practices of humans throughout the world.

**Dr. Eldon Yellowhorn – 12:33**

When they first started doing their surveys in the... what would be the ice-free corridor, the observation they made was that the sites were getting younger as they went north, which is counterintuitive. You'd expect that the oldest sites would be in the north, and they'd get progressively younger in the south, so it looked like people were moving north instead of south. So this has always been very paradoxical, and the only way you can explain it is that there were people already living south of the ice sheets, and where did those people come from?

**Narrator – 13:04**

The recent discovery of an ancient village and campsites in the Americas that are more than 14,000 years old supports a new theory that people first arrived by boat along the Pacific coastline of North and South America.

**Dr. Rudy Reimer – 13:20**

In the '70s, the researchers proposed an alternative hypothesis to say that the coastal route was also viable, and this sparked a huge debate in archaeology, that it had to be one or the other. Which one was it? We're now coming to an understanding that it was likely both happened. However, archaeologists are more leaning towards the coastal route as the earlier alternative.

**Narrator – 13:48**

Any journey along the Pacific Coast during the Ice Age would have been treacherous.

**Dr. Eldon Yellowhorn – 13:54**

Keep in mind that the West Coast at that time would have been choked with icebergs and lots of ice floes, so for people to travel that way, they would certainly require some good ocean-going skills, and that's not out of the question, because we do know from the archaeological record in East Asia that, as early as 40,000 years ago, people were able to make open ocean voyages. When people go on journeys like this, their destination is usually unknown to them.

**Narrator – 14:33**

We may never know what compelled Indigenous People to embark on this treacherous journey by sea.

**Dr. Joe Watkins – 14:40**

What is the history of humanity in North America? We have indications that humans were here. They were producing culture, they were burying their dead, they were becoming a part of the landscape. They were taking... taking ownership of the landscape in their own way.

**Narrator – 15:00**

Once arriving on land, these seafarers would have found themselves in a strange and foreign world, filled with unknown peril and promise.

**Dr. Eldon Yellowhorn - 15:10**

When people are travelling into unknown countries, they really have to rely on the skills that they bring with them, so if they know how to live off the land, if they know what seafoods they can consume, this will give them a better than average chance of surviving any new country or new terrain that they're starting to settle in.

**Dr. Joe Watkins - 15:32**

The idea of where we come from is extremely important. It gives us that sense of place. It tells us the locations that we are tied to, both as a people, as individuals. It's the part of the landscape that continues to reside in our bones, in our blood, but particularly in our minds.

**Narrator – 15:56**

It's not known how many Indigenous People arrived in the Americas by water, but evidence suggests this was not an isolated occurrence.

**Dr. Joe Watkins - 16:06**

Archaeology keeps finding more and more localities which add pieces to the puzzle. When we look at them all in a very broad picture, it does give us that story, that deeply complex story, about the first people to come into North America.

**Narrator - 19:01**

Whether our ancestors arrived by land from Beringia or by water along the Pacific Coast in every corner of the Americas.

**Dr. Katrina Klaw 19:13**

Native Americans were at the southern tip of South America more than 14,000 years ago, so the hypothesis is that they took a coastal route just because travelling over land would have been very difficult at the time.

**Dr Rudy Reimer - 19:31**

We have a much greater understanding of the fluctuation in sea levels, so it's easier for us to locate those most ancient sites along the coast, spreading all the way down to California and, of course, all the way down to places like Monte Verde in South America.

**Narrator – 19:47**

Monte Verde is an ancient village site located in Chile, about 50 kilometres inland from the Pacific Coastline, that was occupied at least 14,800 years ago. The village was discovered in the 1970s beneath a creek, and was largely preserved within the wet environment. The village

consisted of 12 small huts that would have supported about 20 or 30 people. The huts were made from wood, animal hide, and woven rope. There were two large and several smaller hearths in the village. The people at Monte Verde collected plants in the mountains, grasslands, and coastal regions of Southern Chile, suggesting that they travelled widely to collect food and building materials. Along with the remains of mammoth and llama, ten types of seaweed and the shells of crabs and clams were found at the site. The marine-based diet of those who lived at Monte Verde points to a people who were well-adapted to a marine lifestyle.

**Dr. Eldon Yellowhorn - 20:53**

Over the course of many thousands of years, when you're doing things such as experimentation of new life ways, or trial-and-error in new food types, all of this accumulates over many generations and gives us what we call traditional knowledge.

**Narrator – 21:12**

Since first arriving in the Americas, Indigenous People have hunted wild game for food, shelter, tools, and clothing. The type of tools used by these ancient hunters are often used to define their cultures. One of the most important discoveries of ancient stone tools in the Americas was made at Clovis, New Mexico, in the early 20th Century. The distinct way of manufacturing these spearheads led to the "Clovis First Theory," which suggested that the earliest people in the Americas arrived shortly after the glaciers melted and used the same tool technology.

**Dr. Rudy Reimer - 21:50**

When we look at the history of archaeology as a discipline, early on, say, in the early 1900s, scholars believed back then that North America had only been inhabited by Indigenous people for two to three thousand years. However, this changed, of course, with the findings of Folsom and Clovis points in association with what we call megafauna, or ice-age giant mammals and creatures that walked the earth along with the Indigenous People.

**Narrator - 22:19**

The discovery of mammoth bones alongside stone tools at the Clovis site revealed that Indigenous People were hunting megafauna with spearhead technology around 13,000 years ago.

**Dr. Eldon Yellowhorn – 22:33**

Clovis is the type site where the first stone tools were found, and so after that, kind of became the umbrella term for fluted-point technology.

**Narrator – 22:51**

This lethal tool was sharp enough to penetrate the thick hides of large game, such as bison and mammoth. Clovis points were made from jasper, chert, obsidian, and other brittle stones, and were eventually discovered throughout North America.

**Dr. Eldon Yellowhorn – 23:09**

The Clovis tool complex spread across North America very rapidly, so this has always given the impression that people were moving along and occupying new lands. And there was lots of... lots of variety across North America, the geographical variations.

**Dr. Rudy Reimer – 23:27**

And for many decades, it was believed that the Clovis culture was the first and only culture to be across all of North America. However, most recently, in the last 10 to 20 years, the Clovis First model has pretty much been thrown out the window, because we have ample evidence across North America, Mesoamerica, down to South America, sites that predate the Clovis time period, and this data and these sites are really interesting and pushing the boundaries of what we know about that distant time.

**Dr. Eldon Yellowhorn – 24:06**

Think of Clovis as an idea and that there was already a pre-existing population that was receptive to this new invention, so when the new invention came along, it was the idea of it that spread into a pre-existing population.

**Narrator – 24:23**

Although stone tools were widely used in the Americas for thousands of years, tools made from animal bones were also used for hunting and fishing.

**Dr. Eldon Yellowhorn – 24:33**

Before people had Clovis points, they actually used bone technology, and the bone tools were just as lethal as the stone tools. Now there's starting to be a whole series of sites that have been discovered, and one of the discoveries was actually made very early on, the Manis Kill site in Washington state. There was a bone tool that was embedded in the vertebrae of a mastodon, and it was actually made from another mastodon's bone. From that, you could get a radiocarbon date off the element of the tools, but you could also get a radiocarbon date off the kill that it was embedded in.

**Narrator - 25:13**

The remains found at the Manis Kill site date back 13,800 years, a full millennium before the glaciers melted enough to open up the ice-free corridor to the north.

**Dr. Eldon Yellowhorn - 25:26**

A hunter likely took down a mammoth once in his life and talked about it for the rest of his life.

**Narrator 25:31**

As the glaciers receded and the lands opened up, allowing migration across North America, hunting techniques changed based on the terrain and their prey.

### **Dr. Eldon Yellowhorn – 25:44**

There's certainly a long history of hunting as a way of life, going right back to the Ice Age, when humans first appeared on the scene, and of course, as people moved into the farther north regions, they started coming across animals like... such as reindeer and caribou, and these are herding animals, so they started hunting them communally.

Clovis tools were very lethal, and whatever they hit would have been injured, but of course, you'd have to be very close to that animal, and you'd bring them into natural traps, and then once they're in the natural traps, then you can use your stabbing spears to kill them.

### **World View - Narrator - 26:32**

Stones and animal bones were the first materials used by humans to craft tools for hunting. Some of the earliest tools to be discovered date back more than two million years. 20,000 years ago, nomadic hunter-gatherers lived in the Kebara cave region in Israel. They developed the Kebaran tool technology, using flint to make spear points and arrowheads. The Solutrean tool industry emerged in Western Europe around 19,000 years ago. The people of this region made tools by lapping tiny flakes off the flint core. Hunters also used heat to make the flaking more precise.

One of the earliest stone tool technologies in North America was the Clovis point, named after the site in New Mexico where the spear points were first discovered. The people who created these tools hunted a wide range of megafauna; including mammoths. Throughout the world, the different styles of tools that people developed determined the type, and size, of the game they hunted.

### **Narrator - 28:09**

As our ancestors settled throughout the two continents, creating hundreds of Nations, languages evolved and diversified, and through these languages came stronger social and cultural identities. The Western Hemisphere is the most linguistically-diverse region in the world. It's estimated that there were as many as 2,000 distinct languages spoken in the Americas in 1491. Each of these languages are part of a language family, connected through common words, grammar, and diction.

Languages are more than a means of communication. For ancient societies, they contain the cultural, historical, and traditional knowledge of a nation. Many of the languages spoken before 1491 are still in use today.

Quechuan in South America... Mayan in Mesoamerica...

Pueblo in North America...

And Inuktitut in the Arctic.

Mesoamerican cultures like the Maya and Aztec had a complex writing system. But most Indigenous languages were based on an oral tradition.



### **Dr. James Crippen - 30:19**

Language doesn't leave marks on the land. Language isn't a thing that we can point to in the world. It's something that is done by people, and especially without writing, all you have are people as your evidence. In North America, there's a very complex tapestry of different language families that have crossed over each other, and there's probably about 30 families in North America. There's probably another 30 or so families in Central America, and maybe even 100 families in South America.

The original work on comparative linguistics was reconstructing languages that had long written histories, like English and the Romance languages like French and Italian, so it was early on believed, no, you simply couldn't do that in a language that didn't have a written history. The early anthropologist linguists in North America proved that yes, you could. You could reconstruct these languages and often could show materially that a language here was actually a close relative of a language that was quite far apart from it, separated by a number of others.

They applied these methods that had been developed in Europe and proved that they could be used for unwritten languages, and that opened the door for people to work on Native American languages and figure out where did they come from, which is always, you know, the question that presses a lot of people when they study us.

They also found sometimes that the Indigenous people themselves would tell you, "Oh, well, our language is actually related to those guys over there." I mean, you can ask, and you find out, "Oh, yes, we share a whole bunch of words in common, and if you go talk to them, you can tell," and although they can't really communicate in each of the person's language, they still find quite a large number of words that are similar.

### **Narrator – 31:59**

Indigenous languages carry deep cultural and traditional knowledge, but tracing their histories is a challenge to linguistic researchers.

### **Dr. James Crippen – 32:07**

Even though we have reconstructions, internally reconstructed and externally reconstructed language families, we can show that they're related, but we can't go back any further, and that's because, unlike biology, language doesn't have a constant rate of change. It changes in fits and starts with long periods of little change, sudden dramatic reconstructions of how the language works. It's not something that we can predict with any reliability. We can show that a language is internally related, but we can't tell you how long the connections are, and we rely almost entirely on archaeology to give us some sort of calibration to our guesstimate.

### **Narrator – 32:50**

Oral etymology is both fluid and fragile, and of the thousands of Indigenous languages that existed in the Americas in 1491, hundreds have been lost forever.

### **Dr. James Crippen 33:02**

The exact question of when all these languages came here... as far as linguistics can tell, they've just been here.

### **World View - Narrator – 33:19**

Archeological sites in every part of the world tell the story of ancient peoples, and the cultures and civilizations they created over thousands of years. Uruk is one of the first major cities in the world that featured monumental stone buildings. It was built at the center of a vast trade network in the Middle East. 5,000 years ago, Egypt was divided into upper and lower regions. A Pharaoh named Narmer created a unified kingdom, and there are sites throughout Egypt that represent the artistic achievements from this era. Cahokia was the largest urban center in North America a thousand years ago. It was part of an elaborate, inter-tribal trade network that connected people as far away as the Gulf of Mexico, and the great lakes.

The archeological record in every part of the world continues to inform us of the accomplishments and ways of life of our ancestors.

### **Population – Narrator - 34:56**

Indigenous People settled in every region of the Western Hemisphere, from the High Arctic, to the Caribbean Islands, to the southern tip of South America. Historians estimate that by 1491, the population of the Americas may have been as high as 100 million people. Population growth in societies worldwide can be traced to the advent of agriculture. As people began to grow annual crops, the need to travel to find food lessened. Villages grew into towns, and towns into cities, with the farmers providing a steady supply of food. The impact, over thousands of years, was a significant growth of population in the Americas.

### **Dr. Ruben Mendoza - 35:41**

Throughout the Americas, civilizations rose and fell like an oscillating frontier through time. Some of them had great periods of development, innovation. Their technologies were among the most incredible, Their populations were significant, and then they collapsed. Archaeologically, we're looking at a palimpsest. In other words, we're looking at layers and pieces and fragments. It's like looking at a wall of graffiti and seeing one layer on top of another on top of another on top of another, and when an archaeologist digs, he may be digging through 10 different layers, or she may be recovering the relics of maybe 10 civilizations.

### **Narrator – 36:16**

An example of a significant population surge was the Aztec city-state of Tenochtitlan. Founded in 1325 on a man-made island where present-day Mexico City now stands, it was the capital of the Aztec Empire. The city had a complex social strata that included the working class, military members, priests, and elites. It was a vibrant city with a bustling marketplace. At its peak, Tenochtitlan was home to more than 250,000 people and was the centre of an empire with a population of between two and three million. In 1491, Tenochtitlan was the largest city in the Americas.

### **Dr. Ruben Mendoza - 37:00**

The question then is, what about North America? The Mississippian side of Cahokia was a centre that maintained significant populations into the tens of thousands.

### **Narrator – 37:10**

Cahokia was arguably the largest and most influential urban centre in North America before 1491. At its peak around 800 years ago, Cahokia had a population of 40,000 or more. The city's strategic location, where the Mississippi, Missouri, and Illinois rivers meet made it a natural gateway for intertribal trade, but over time, like the major cities in Mesoamerica, Cahokia also disappeared.

### **Dr. Ruben Mendoza – 37:39**

We have factors like drought. We have warfare. We have invasion and conquest. All of these things factor into the variable landscape of demography and population in the Americas.

### **Dr. Joe Watkins - 37:52**

Indigenous archaeologists are much more adept at thinking about the who of the past and the why of the past rather than just the what of the material culture. It's not just the piece of pottery that happened here without humans being involved in either transportation, in breaking it, in moving it from one place to another, and I think that's what drives a lot of good archaeologists, is recognizing that we're not in it for the artifacts, we're in it for the stories that the artifacts can tell us. One of the most important things about being an Indigenous person involved in archaeology is knowing the importance of story, the importance of the individual, and knowing how these all fit within who we are today. There are so many tribal people involved in trying to relate the history of individual tribes, individual places. In the past, it has been perceived to be the role of the expert to tell what the history is, history of place, and it's... often, it's been based on someone else's stories, some written reports and such. Now it's extremely important that Indigenous groups have the authenticity, the authority, and the right to present the history as they know it. There's so many Indigenous people who are getting advanced degrees, who are getting recognized as authority, and so now, they're able to take that and tell the stories that their communities want them to tell, so that people outside of the community can really understand what has gone before.

### **World view - Narrator – 39:34**

The sequencing of the human genome has led to many significant discoveries about the migration, and ways of life, of ancient peoples throughout the world.

Ancient Egyptians believed that the soul remained with the human body after a person died. Egyptian rulers and their families were buried in tombs, with gold, tools, food, and animals to help them on their journey to the afterlife.

The Qafzeh cave in Israel is the site of the earliest known human burial. The remains of several adults and children were found, including a boy buried with a deer antler placed across his chest.

At the bottom of a cenote in Eastern Mexico, archeologists found the remains of a young woman who died more than 13,000 years ago. Her DNA is a close match to many Indigenous people living in Central and North America today.

For tens of thousands of years, people in every part of the world have been carrying out rituals and ceremonies as part of their burial practices.

### **Genetics – Narrator - 41:10**

While there were tens of millions living in the Americas in 1491, the population soon after people arrived would only have been in the thousands. It's not surprising that the discovery of an ancestor from this period is an extremely rare event. 13,000 years ago, a teenage girl in the Yucatan fell into a deep hole and died. Over the millennia, sea levels rose, and water filled the cave. In the 1990s, a group of underwater archaeologists found Naia, as they named her, in 40 metres of water, deep in a cenote near Tulum. Testing Naia's DNA confirmed that she is a direct ancestor of the Indigenous people living in North and Central America today. When the human genome was sequenced early in the 21st Century, it opened the door for geneticists to study the biological blueprint of human beings. The data collected from studying the DNA found in human cells can be used to trace a person's ancestry. By comparing the DNA of modern Indigenous people with that of ancient people, we can see how our ancestors migrated and settled down during the past several thousand years.

### **Dr. Katrina Klaw – 42:20**

It's using your DNA to look at similarities between different populations. So there are many different ways we can do it. We can look at your maternal lineage, we can look at your paternal lineage, or we can look at everything, which is the whole genome, and in that instance, we're sort of looking at the entirety of your father's contribution, your mother's, and all of your ancestors. This is just another way to think about our past and figure out how we were related to each other. We are all really connected, and our genetics is telling us that, too. To have a really rigorous study, you want to have ancient samples, because with the ancient samples, you can tell, date it back really accurately how long ago did they live, and what did they eat, and, also, where were they? If we're looking at ancient DNA, we're only looking at the people that they actually were able to extract DNA from. These are only 50 people, but there were thousands of people at that time, and there are very few samples that have been included from the United States, and also from Canada. The majority of them have been from South America and Central America.

### **Narrator – 43:38**

What does DNA from the ancient ancestors we've discovered tell us about our own origins?

### **Dr. Katrina Klaw – 43:45**

Actually, the closest relations to Natives in the Americas is from sort of Central Asia. So we know that we migrated in, but a lot of people have questions about... was it just one big migration? Did it happen at multiple times? Did we actually migrate and stay in one spot, or did we just spread all over the Americas, and how many migrations occurred? DNA can only tell us so much. We need to know actually when these occurred, where they occurred, so if a group split off from another group, just by looking at DNA, we can sort of make a guess, but we won't actually know where it occurred or when it occurred unless we have archaeological data.

### **Narrator – 44:34**

The study of DNA from ancient peoples requires a culturally-sensitive approach and ongoing consultation with Indigenous Communities. While archaeology and genetics may seem at odds with our Indigenous origin stories, they all contribute to the overall history of our peoples.

### **Dr. Katrina Klaw – 44:54**

Going back to my creation story that I grew up with, it was a journey, because I think a lot of creation stories are journeys, and that's how I sort of reconcile it with the genetics. We're talking about population migration. Our ancestors, they went on this huge, long journey for thousands of years, and I'm a product of that, so not only did they have to journey across continents and oceans, but they also had to fight disease, and once European contact came, so many of our people died, our ancestors, but we here as living people are actually the products of all of that, that long journey.

### **Narrator – 45:48**

When Christopher Columbus first encountered Indigenous people in our traditional territory more than 500 years ago, he mistakenly called us "Los Indios." He thought he'd found a new route to India, but he'd actually arrived in a world unlike anywhere else on Earth, a world that was home to thousands of distinct Nations and millions of people. Today, we keep our histories alive through our stories and traditional knowledge, and we stay connected to our ancestors through the material culture they left behind, before 1491.

### **Credits**

### **Dr. Katrina Klaw – 47:09**

As a child, I was always a little bit interested in archaeology. I had a teacher who gave me a book, and said, "Here, look at this," and that got me interested in archaeology. And then I initially wanted to study archaeology in the Near East, and I didn't want to do anything with North America because of the politics, and I don't want to be excavating-- digging things up-- digging up our ancestors-- or even associated with that field. But then as time went on, that somehow managed to grab me and pull me in, and get me really interested in something that really matters for our people. I think it was talking with some of our elders one day. Everyone was around for a powwow, and they were introducing me, and saying, "You know, she's an archaeologist," and whatnot, and I remember having this moment of saying, "but I'm not one of those kind of archaeologists," you know, "I want to do something for our people." And this elder said, "Like what?" And I just thought to myself, "Yeah, like what? What do I want to do with this?"