1491: The Untold Story of the Americas Before Columbus EPISODE 103 – Agriculture and Hunting

Opening Title Sequence - Narrator - 00:13

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.

Throughout history, people in every part of the world hunted, fished, and gathered wild plants for survival. Over time, these foods became a central part of the cultural identity of each Nation.

In the Americas, our ancestors harvested fish, seals, and whales, and hunted mammoth, bison, and other animals and we adapted more species of wild grasses, vegetables, and fruit than anywhere else on earth. But no singular food has had a greater influence on the history of our ancestors than maize. For thousands of years, maize has permeated every aspect of Maya culture, from the practical to the spiritual. Not only is maize the foundation of their creation stories, it is the heart and soul of the Maya civilization.

In Maya oral and written history, the gods created the first humans from corn meal after attempts to make people out of mud and wood failed. The maize god was referred to as the "First Father," and the maize goddess is associated with fertility, the moon, and new corn. Maize appears in the most sacred of Maya ceremonies and in the simplest acts of everyday life. Maize has nourished and inspired the Maya People for close to 4,000 years.

Dr. Lorenzo Magzul – 03:51

It really is a very integral part of people's lives, everyday life, from, you know, again, providing them with nutrition, but also, spiritually, it's really important. I mean, this is what has shaped people's lives and the history of people's culture. Not only does it include, you know, our beliefs about creation, for example. It has allowed people to survive to this day.

Narrator – 04:19

The Maya people didn't actually develop the maize plant. That honour goes to the Indigenous farmers in the Balsas River valley in Mexico, who initiated one of the world's earliest forms of agriculture by cultivating a wild grass known as Teosinte, which became the maize we know today. After each growing season, farmers selected the plants with the most desirable attributes, and planted their kernels.

Dr. Ruben Mendoza - 04:46

In looking at the evolution of maize, we have a history here, beginning with Teosinte, that extends back some 8,000 years.

Narrator - 04:54

Maize could well be the first act of genetic engineering in human history. Between six- and seven-thousand years ago, maize had travelled to the Andean and Amazonian regions of South America.

Dr. Ruben Mendoza 05:07

We begin to find maize moving over these ancient routes early on, so we know that foodstuffs were critical.

Narrator - 05:14

Maize was also easy to transport and store, which the Maya used to their advantage.

Dr. Lorenzo Magzul - 05:20

Considering the importance of corn for people's diet, I'm sure it was a valuable commodity, valuable food to trade.

Dr. Ruben Mendoza - 05:31

How do you get those products when you yourself don't grow maize? You trade beads. You trade shell. You trade obsidian, and you get the product.

Narrator - 05:40

As the Mayan population grew, so did the need to generate food on an industrial scale. One method used by the Mayans to mass-produce maize was known as "slash and burn."

Dr. Lorenzo Magzul - 05:54

So that would mean that, you know, you live in an area, you cut down the forest, you grow corn, and then, after a while, that soil might not be able to provide for you anymore, so you move on to another place, and you cut it down and you do the same thing.

Narrator - 06:10

Other agricultural methods were adopted as well, including stepped terrace farming along hillsides and raised farm beds in marshes.

Dr. Lorenzo Magzul - 06:20

They would take weeds or plants grown in the water. They'd mound them, as a source of nutrients.

Narrator - 06:29

Crop diversification was also essential to the health of both the people and the land itself, and maize was grown alongside chili peppers, squash, and beans.

Dr. Lorenzo Magzul 06:39

Corn is, it requires a lot of nutrients, and so beans is actually a plant that provides nitrogen into the soil, so the beans help the corn to grow. You obviously need to have the scrubs grow together so they provide for each other or help one another to grow better.

Narrator - 07:02

By using a variety of methods for growing maize, the Maya developed intricate agricultural infrastructures in Mesoamerica.

As maize spread throughout the Americas, it contributed to the development and growth of the Inca, Aztec, Ancestral Pueblo, and many other indigenous civilizations.

As Mesoamerican civilizations rose and fell over the millennia, there is one thing that remained constant—the central role that maize held in the diet, traditions, and mythology of the people. Today, maize is one of the world's most widely-grown crops. Its development remains one of the most impressive acts of agricultural achievement.

Potatoes - Narrator - 09:08

The potato is to the Andean region of South America what maize is to Mesoamerica - a stable source of food and essential to the cultural identity 1 of the people. 1 Unlike corn, the potato grows at high altitudes and can be left in the ground for a year or more. The potato was first cultivated between eight- and ten-thousand years ago near Lake Titicaca, which straddles the borders of Peru and Bolivia. Over time, indigenous farmers created more than 5 varieties of potato, each with its own unique flavour and colour.

Dr. Henry Tantalean - 10:10

From the Andean point of view, colour is also important for these people, because each kind of potato has a social role. It is a powerful ritual. It's very entangled with many things that they are doing all the time.

They don't get that distinction between the ritual, political, or economic things.

Narrator - 10:53

The planting of the potato each season was accompanied by prayers performed by priests. Farmers carried out a planting ritual that involved the men breaking the ground and the women planting the potatoes. The potato is especially adaptable to the climates of the Andes, as it grows well in the cooler, higher mountain ecosystem. Using the agricultural process of terrace farming, the Andean people sculpted the sides of mountains to create flat sections of land to grow potatoes and other crops.

Like maize, potatoes were hardy and easy to transport, but unlike maize, which travelled from Mesoamerica to South America soon after its development, the potato did not arrive in Mexico until about years ago. From there, it was traded with other Indigenous communities, and eventually made its way to the Northwest Coast of North America, and as far north as Alaska.

James Crippen - 12:00

Cultures in Mexico along the, along the western coast of Mexico all had potatoes in some way or another. It's only when you get into the United States region that potatoes start to completely

disappear, and yet, they reappear up in Washington and in Oregon. It's simply called Tlingit K'nts', or Tlingit potatoes.

They're our old potatoes. They're the ones that everybody used to have before we got these big ones. A potato research lab in Wisconsin sequenced the genes of the Kasaan potato and the Tlingit Maria's Potato, and they found that the nearest relatives of them were the Ozette potato that was known from the Makah area in Ozette, on the outer coast of Olympic Peninsula in Washington. Then the next nearest relatives are in Mexico.

Narrator - 12:53

It remains a mystery as to how long potatoes have been grown along the Northwest Coast of North America.

James Crippen - 13:01

The earliest explorers said explicitly that they saw people with gardens in the northern Northwest Coast. It could have been the very earliest Spanish ships that introduced this, but it's hard to see because the Spanish didn't spend very much time up in Tlingit country. They came, they named things, they stopped, said hello in Yakutat, and then left. I'm of the opinion that these are probably pre-European.

Narrator - 13:30

If potatoes that originated in Mexico reached the West Coast of North America before the arrival of European seafarers, how did they make the journey to Alaska?

James Crippen - 13:44

If we know that Tlingit. A couple of young Tlingit men could paddle all the way down from Wrangell in South-east Alaska to Fort Vancouver on the Columbia River, there's no reason that people wouldn't have travelled as far south as California to pick up potatoes and bring them north, and what's more extraordinary is that in the intervening centuries, we've maintained the exact same potato line, and I have it growing back at home.

Narrator – 14:10

Maize and potatoes were integral to the ancient economies of the Americas, and are still vital components of the world's food supply today.

Narrator - 14:41

The population in Amazonia Before 1491 numbered in the millions. People lived in small coastal villages as well as large cities along the tributaries of the Amazon River. The wild plants and small game that were harvested from the rainforest could not sustain this growing population. Indigenous people needed to find a way to produce high-yield plants.

Dr. Eduardo Neves - 15:16

Plant domestication is as old here as it is in places like China, or Mesopotamia, but these guysthese people here in the New World-- they were domesticated with squash very early, chili peppers, then maize--corn.

Narrator - 15:39

For thousands of years, people living in the Amazon River basin have practiced a form of agriculture that led to the development of dozens of varieties of vegetables and fruits. Unlike potatoes and maize, this type of plant cultivation didn't involve the intensive clearing of traditional-style farming. Instead, they practiced agroforestry, which is the mixing of wild and cultivated fruits, vegetables, and nuts in a forested environment.

Dr. Eduardo Neves - 16:11

These people, they were eating a lot of corn, for instance, but they're also eating palms, and brazil nuts. Technically, they're wild plants, they're not domesticated. But, I mean, they didn't become farmers. They were generalist hunter-gatherers that had domesticated plants in their backyards for thousands of years.

Narrator - 16:30

Unlike the farming practices in Mesoamerica and the Andes, agroforestry required less-intensive labour to prepare the land and harvest the crops.

Dr. Eduardo Neves - 16:39

So traditionally, how would archaeology look at this? That archaeology would say, 'Well, these people, they were incipient farmers.' Traditionally, how scientists would look at that 'Oh, these guys are backwards, they are not farmers. They haven't achieved' like, they haven't climbed to another step, or another layer in cultural evolution. But that's a false premise. If you look at the evidence today, we see that, you know, these were stable lifestyles.

Narrator - 17:02

Agroforestry was as innovative and productive as farming methods used elsewhere in the Americas. Each type of environment demanded different approaches to agriculture.

Caral - Dr. Eduardo Neves - 17:12

Normally, places where farming becomes more important in the beginning were places where there was scarcity of resources. Places like Caral, for instance, it's a small river valley, surrounded by desert, very dry desert, and the mountains. Whereas, if you look at places where resources were abundant, like the Amazon, or the Northwest Coast. There's no pressure for these people to become farmers. And that idea that farming necessarily is a change for the better is a modern idea that's been applied from Western Europe. But in areas which are covered by tropical rainforest. I think we're dealing with different strategies.

The Amazonian record really helps us to rethink things that we take for granted. In the Amazon we see this contrast of abundance. So much protein in the waters and the reivers, but also lots of plant diversity. Better strategies work based on diversification. Better strategies work based on diversification. If you look at the biological data, it's one of the most biologically diversified places in the world. So it's only natural the people who were living there were aware of that.

Narrator – 18:12

Fruits, vegetables, and grains such as squash, beans, and quinoa, cultivated in South America thousands of years ago, are now widely distributed throughout the world.

Dr. Eduardo Neves - 18:22

You can look at the forest as a library. There's so much information there, and to be able to classify, understand, and actually find a way to use all those resources, it's a very sophisticated knowledge.

Narrator - 18:40

A constant source of abundance, the Amazon remains one of the most biologically diverse places in the world.

Camas - Narrator - 19:13

Thousands of kilometres north of the Amazon is another major rainforest, the Pacific Northwest. Like the Amazon, the vegetation and waterways provide such a diversity of flora and fauna that Indigenous people had little need to engage in large-scale farming. One of the few exceptions is camas. The nutritious bulb of this purple-flowered plant was a significant part of the Coast Salish diet. While it grows wild, it became an important food source and trade item through long-term cultivation.

Cheryl Bryce - 19:51

The women who had the role and responsibility to manage these food systems, they knew all the different things that needed to be done, the burning that had to take place in the fall, and managing the areas where the Camases could be harvested-- all the different other plants that needed to be taken care of throughout the year and harvested as well.

Narrator 20:09

The process of cultivation used by Coast Salish women to grow Camas was a hybrid between farming techniques seen in Mesoamerica and the Andes, and agroforestry found in the Amazon.

Cheryl Bryce - 20:23

It's not running lines and dropping seeds in a row. It's harvesting the Camas when they're in seed, and turning the soil, selecting the bulbs you're going to take, putting them back, the ones you're not going to take. You're dropping the seed just before you're putting the final bits of soil back down.

Narrator - 20:38

They maintained their plots through regular clearing and controlled burns. Camas was cooked for 24 hours or more to break down the bulbs' crystalline fibres into a digestible sugar. Once cooked, Camas was mixed with berries, flattened, and dried into a fruit leather. It was cooked with other foods or dried and ground into a flour.

Cheryl Bryce - 21:01

I would say, if anything, it might be close to a parsnip, but have the consistency of a sweet potato. They wouldn't be here if the women didn't manage these food systems in a way that sustained the community.

Narrator – 21:14

Like the maize of Mesoamerica and the potatoes of the Andes, Camas holds practical, spiritual, and cultural significance for the Coast Salish peoples.

Cheryl Bryce – 21:24

I know when me and my family go out, we harvest Camas, and we do pit cooks. It's a whole different kind of conversation that takes part. We're talking in a different way that you normally wouldn't be at your dinner table. We're connecting to the land, we're connecting to the food, and all of these memories come up of our... what we've been taught about our history. We start talking about the history of the area we're harvesting. We're talking about the food. We're talking about the stories that come within our ancestral lands and within the food system as well. I imagine, when I'm there, how it must have been for our ancestors to have that kind of conversation and to connect to the food, and remind everyone that we're still a part of this food system.

Seal Hunting - Narrator - 22:22

In addition to their agricultural achievements, Indigenous People throughout the Americas developed innovative ways to fish and hunt, The Arctic region of North America has been home to a succession of Indigenous cultures over the past 5,000 years. They found ways to survive the harsh winter climate without the advantage of wood, stone, or clay to build houses. The primary source of food for the Thule, Dorset, Inuit, and other Northern Peoples was the sea.

Michael Kusugak - 23:03

Inuit all across the North survived mainly because of one animal, and that animal is the seal. We would travel mostly out on the sea ice, hunting seals all winter, because that's what we lived on, seals. The traditional way was to use a harpoon, because, you know, the seals are very wary. But apparently, they don't see very well, you know, when they're out of the water, and they have to come up, you know, because, you know, they have to breathe, and they come up, and they have these holes. They sun themselves really close to their holes, so they can just dive down when... you know, when we or polar bears come.

Narrator - 23:55

A successful seal hunt depended on patience, skill, and cunning.

Michael Kusugak – 24:00

In the spring, when all the snow was gone from, you know, the ice, we would have to crawl, basically, on the sea ice, pretending to be a seal, you know, until we got close enough to go and harpoon it. We had all these implements that we used to detect when they were coming up, to see when the water was going up, you know, up and down when the seals swam under, or came up, you know, and took a breath. We used dogs to sniff them out, and then we would use a harpoon to catch a seal, We study the animals that we hunt, so that we can outsmart them, but we're also very grateful to them for supplying us with, you know, what we eat.

Narrator - 24:49

In region where people lived off the land for months at a time, hunters used every part of the animal.

Michael Kusugak - 24:56

Every part of the seal was used. We ate the meat, of course, and then we used the skins, you know, mostly for what we call kamik, which are sealskin boots, and they're warm, they're waterproof, and they're very comfortable to wear. We use the fat to burn in our qulliqs, which are like half-moon shaped lamps, you know, to cook with and to heat our igloos with, and the fat from the seal was pounded to, you know, release all the oil, and that's what we burned. We eat seal. We ate... eat whale. We eat caribou. We not only hunt them, but we also thank them for supplying us with all this food and our survival.

Whaling - Narrator - 26:19

Weighing more than 30 tonnes, and measuring 15 metres, the largest animal in the sea would be a formidable challenge for any fisherman. For the Makah and Nuu-chah-nulth nations in the northwest region of North America, the hunting of whales was more than an exercise in man's superiority over animals. It was a way of life.

Dr. Charlotte Coté - 26:45

Whales are central to our identities as Nuu-chah-nulth and Makah Peoples. In our oral traditions, we say we were whalers from the day we were created. The archaeological evidence in both Nuu-chah-nulth and Makah territory demonstrate a connection to whaling for over 5,000 years. That's from the whale bones they've collected, from whale in the middens, showing that it was a major food product. The whale bones were used as part of the equipment and tools that we utilized.

Narrator - 27:19

The whaling culture permeated every part of these nations' lifestyles, from trade to ceremony to art.

Dr. Charlotte Coté - 27:26

You grow up knowing that you come from whaling, from Tiick'in, from the Thunderbird, who gave lihtuup, the whale, to us, with the Itl'ick, with the sea serpent, and you see it everywhere. I mean, it's in our songs. It's in our dances. It's in our artwork. That's how we keep that whaling culture alive. In the springtime, when our foods were being depleted, that's when we would hunt the whales, in the early spring, when they were going up through the migration pattern up to Alaska. Whales contributed to over 70% of the food in our diet, especially in our early spring, because whale meat, oil, and fat had major nutritional benefits.

Narrator - 28:11

Within the Nuu-chah-nulth and Makah nations was a distinct hierarchy that dictated the role of each person in the whale hunt.

Dr. Charlotte Coté - 28:20

The chiefs were the people who whaled, so the chiefs were the ones who basically had the rights to the whale products, to the whale meat, oil, and fat. The oil itself was a very highly prized trade item. It was traded up and down the coast, and to some interior communities as well. The Tyee Ha'with, which is the highest chief, would ultimately oversee the distribution. He and his family would keep the choice pieces of the whale, and the chakwasi, which is the dorsal fin, which is where the spirit of the whale lives. They would have prayers conducted for four days after that to show the respect of that spirit, and when the spirit left, the chakwasi, the dorsal fin, would stay with that chief. The

rest of the whale would be distributed according to status in that community, so to the next chief in line, and the next chief, or it would be distributed in this larger potlatch to invited guests from other communities.

Narrator – 29:24

But for the Nuu-chah-nulth and Makah peoples, the whale hunt represented far more than a source of food.

Dr. Charlotte Coté - 29:30

A lot of people don't understand this when they look at whaling, especially in the idea of what it meant to kill something, the killing of a whale, because they miss and they misconstrue that spiritual, emotional, psychological connection that we have to whales. We wouldn't put whales on our walls if we didn't revere them, if we didn't respect them, if they weren't essential to who we were, if it was just a matter of killing something for food.

It went beyond that, and how you understand that is by looking at the prayers, the certain rituals that were conducted... not just by the whaler, by the entire whaling crew, but especially the whaler's wife. Many people say, and it's passed down through the oral record as well as anthropological research conducted on whaling... the whaler's wife, the haquum, which is a woman of high status in our language, she had a special and intimate connection to the whale, the whale that was being sought, and it was believed that if that whale came to the boat and gave itself, which is ultimately what we believe... that we're not killing the whale, it's provi-- That spirit of the whale is giving itself to those whalers, to that whaling chief. It's giving itself to her... so she has some of the most important rituals to observe, and especially when the whaling crew leaves, she cannot move, because it believes that her spirit is connecting to the whale spirit, so if she moves, she could make that whaling spirit unruly. She could cause the whale to leave.

She could cause the whale to hurt the whaling crew. So she lays very still in her home, in her longhouse, while the crew is out seeking the whale, and even after they catch the whale, the whale will calm if it is connected to her spirit. The whaler's wife, even though she is not out on the water, she is ultimately the most important and central figure in that whale hunt, because that whale is connecting to her.

Narrator - 32:16

Another of the largest land mammals to be hunted by our ancestors was the buffalo, also known as the American Bison. In the central region of North America, the buffalo has been an important source of meat, hide, and fat for Indigenous People for more than 10,000 years.

Dr. Eldon Yellowhorn - 32:37

Right from the end of the Ice Age, people were already hunting bison, but they were extinct-- they were hunting the extinct forms of bison.

Narrator 32:44

At three metres tall and 1,000 kilograms each, these extinct bison would have towered over a hunter.

Dr. Eldon Yellowhorn - 32:52

Very early on, we see that people are already focusing a lot of their energies on this one species.

Narrator - 33:00

Thousands of years before the introduction of the modern horse to the Americas, the buffalo would have been an imposing target for even the hardiest of hunters on foot.

Dr. Eldon Yellowhorn - 33:10

Right after the Ice Age, the way that communal hunting worked was, you'd have a small group of hunters, for example, maybe six-- six or seven hunters-- and they'd ambush a small herd of bison, like perhaps a dozen. They did herd in small herds, but the large massive herds that you hear about in the historic period became more gregarious as they grew smaller in size.

Narrator - 33:36

About 2,000 years ago, bison hunting on the plains went through a dramatic transformation. Instead of small hunting parties going after a few bison, there were suddenly hundreds of people working together to chase herds of bison over cliffs, or into natural or manmade traps. This form of hunting required large numbers of people to hunt, process the meat and hides, and transport it all back to the settlements.

Dr. Eldon Yellowhorn - 34:05

They would get as much as they could as fast as they can, and then, of course, the carcasses will start to be less... good for human consumption, but they're still good for animals, such as plains grizzlies or wolves or coyotes. Even things such as turkey vultures and California condors would have a big feast at the buffalo jump after the people had taken their share and gone away. Rather than being a waste of a buffalo, it's a part of the food chain on the prairies. Besant Valley in south-central Saskatchewan was where the first site was discovered, and it looked like they lured a herd of bison into a corral, and then butchered them in there.

Narrator - 34:58

But the buffalo jump wasn't the only significant discovery made at the Besant Valley site.

Dr. Eldon Yellowhorn - 35:05

They also had created a structure that was in architectural form very similar to what we would later on recognize as a sun dance lodge, so this idea of the sun dance and the invention of the buffalo jump come together at the same time, almost. In fact, earlier archaeologists on the plains noted this connection and speculated that people congregated for the ritual, and that the buffalo jump was a by-product of that. Other people would say that. The buffalo jump brought people together, and the ritual context was a by-product of that.

Narrator - 35:53

There is another theory about the sudden increase in large-scale buffalo hunting. Several large cities on the Mississippi River, including the Cahokia, were important centres of continental trade. Indigenous People travelled thousands of kilometres from every part of North America to trade goods in these cities.

Dr. Eldon Yellowhorn – 36:12

The market for buffalo meat had expanded, and so it was an economic solution, was to import more buffalo meat from the plains, which meant that the people on the plains could harvest a whole herd of bison, take as much as they can for their own consumption, but also enough for a surplus that they could trade, and so this led to a cycle of dependence between those two communities.

Narrator - 36:53

Rivers, lakes and oceans have always been an important source of food for Indigenous Peoples throughout the Americas. The discovery of a stone fishing weir in Haida Gwaii, and a village site near Bella Bella, dating back more than 14,000 years, reinforces claims that our ancestors lived along the Pacific West Coast long before there was an interior route into the Americas after the Ice Age ended. Since that time, the waterways have provided protein in the form of fish, shellfish, and a variety of sea mammals.

The Fraser River in Canada is the largest single salmon run in the world, with millions of fish making their way from the Pacific Ocean up the Fraser's many tributaries to spawn each year. There was an understanding that the migrating fish would be shared by the many nations living along the ocean and interior rivers and lakes.

Dr. Nick Claxton - 37:54

The Saanich people were often called "The Saltwater People," because much of our traditional territory was marine environment. Salmon are still one of the most important foods. The salmon that we did catch, because we caught them in the marine environment, were much better quality than when they reached the river. Our salmon was prized, and we would often travel to the river to trade with those people for the things that we needed, so there was a traditional economy there as well.

Narrator - 38:27

Salmon is not only an important food and trade item. It's also part of the mythology, art and culture of the region's many nations. Indigenous Peoples in the Northwest had both personal and community ceremonies to honour the salmon that they harvested for food.

Dr. Nick Claxton - 38:46

When the first sockeye was caught, there was the first salmon ceremony. It was the children who greeted the salmon at the shore and brought the salmon back to the community. In our thinking, the children were very pure, so the most appropriate people to bring the salmon back, and they would carry the salmon back to the community, carrying it like a baby, I've been told... and we've started to bring that ceremony back as well over the last number of years.

Narrator - 39:17

While the tradition was different for each nation, in each case, the salmon was honoured for returning to spawn and feeding the people for another year. Of the many species of salmon found in the waterways off the Northwest Coast, one has always stood out from the rest.

Dr. Nick Claxton - 39:36

The most important salmon in our, in traditional times and even today, was the Sockeye Salmon. We don't have any Sockeye spawning rivers in our territory, but the Sockeye travel through our territory on the way to the Fraser to spawn, so we needed fishing technology that would be capable of catching those salmon in a marine environment.

Narrator - 39:56

Methods used by Indigenous Peoples to harvest salmon from the ocean and rivers included nets, traps, weirs, hooks, and harpoons. Some speared fish from platforms they built over the river. Others made conical fish traps, three-pronged spears, and dip nets made from willow and alder.

Dr. Nick Claxton - 40:17

One example of that is the development of the reef-net technology for the Strait Salish people. These reef nets were traditionally capable of catching, you know, thousands of fish, and I think the capability was there to catch them all, if we wanted to, but the idea of conservation was already part of that system. We would actually, in traditional times, would weave in a ring of willow in the end of the, in the bunt end of the reef net to allow some of the salmon to escape. Not because it was just an act of conservation, but it was also because of a belief and a world view that the salmon, that were our relatives, and that the salmon travelling together were family lineages.

Salmon had two names. They had a common name, and they also had a prayer name, and those prayer names referred to those salmon as... they were using kinship terms, praying and speaking to the salmon as if they're relatives. So if we allow some of the salmon to escape, then those families will continue to perpetuate themselves into the future, and that they would be able to come back to us year after year.

While our practices might've looked, primitive. That was only because we used everything that was found in our natural environment, but I think the key thing behind it was also the world view and the belief system that upheld all of those traditional technologies, and that's what really made it sustainable.

Narrator - 42:08

Over thousands of years, the First Peoples of the Americas developed techniques to hunt migrating animals and to fish from abundant oceans and waterways. Innovations in agriculture in the Americas, through the domestication of wild plants, was a turning point for our ancestors. We cleared forests and terraced mountainsides to grow crops. We built towns and cities near farmlands. And like the animals we hunted, the plants we cultivated influenced our traditions and beliefs. But the greatest impact of agricultural and hunting innovation was not realized until 1491, when the Indigenous population in the Americas was in the tens of millions. This was a feat that could only have been achieved by a people who had mastered the art and science related to fishing, hunting, and plant cultivation.

Credits

Dr. Eduardo Neves - 43:47

My name is Eduardo Neves. I'm an archaeologist, a Brazilian archaeologist. I'm based in São Paulo, University of São Paulo in Southern Brazil. And I do my work, my research, for more than 25 years in the Amazon Region of Brazil. I always enjoyed reading and to study. I never saw myself as

being someone spending my life in an office. I always like to travel, to be around, to camp so I thought archaeology could be an interesting way to really match the desire to do, you know, some scientific work, and then be away from my office as well. And then I found out later on, as I started working as a student, as a work-study position archaeologist, that if I do archaeology, I could actually try to understand the history of these people who were living here in the Americas before the arrival of the Europeans. So, in a way, it was a fortunate thing that I could match these two things together into my profession.

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