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## The Columbian Exchange



Image source - <http://dmshistory8.weebly.com/the-columbian-exchange.html>

All readings adapted and edited from - <http://www.learnnc.org/lp/editions/nchist-twoworlds/1866>

Geologists believe that between 280 million and 225 million years ago, the earth's previously separate land areas became welded into a landmass called Pangaea. About 120 million years ago, they believe, this landmass once more began to separate. As this happened, the Atlantic Ocean formed, dividing the Americas from Africa and Eurasia (Europe and Asia). Over the course of the next several million years in both the Americas and in Afro-Eurasia, biological evolution followed individual paths, creating two primarily separate biological worlds. However, when Christopher Columbus and his crew made land in the Bahamas in October 1492, these two long-separated worlds were reunited. Columbus' voyage, along with the many voyages that followed, disrupted much of the biological segregation brought about by continental drift.

After Columbus' arrival in the Americas, the animal, plant, and bacterial life of these two worlds began to mix. This process, first studied comprehensively by American historian Alfred Crosby, was called the Columbian Exchange. The Columbian Exchange can be defined as the transfer of people, plants, animals, diseases, and knowledge between the Old World (Europe, Africa and Asia) and the New World (North and South America). The exchange began within the first few years of Columbus's arrival. By reuniting formerly biologically distinct land masses, the Columbian Exchange had dramatic and lasting effects on the world. New diseases were introduced to American populations that had no prior experience of them. The results were devastating. These populations also were introduced to new weeds and pests,

livestock, and pets. New food and fiber crops were introduced to Eurasia and Africa, improving diets and establishing new trade there. In addition, the Columbian Exchange vastly expanded the scope of production of some popular drugs, bringing the pleasures — and consequences — of coffee, sugar, and tobacco use to many millions of people. Within decades of Columbus' voyages, the transfer of culture, knowledge and trade goods had begun to show its impact on the entire world. The Columbian Exchange is still present in the everyday lives of all people on the planet, and continues to have a lasting effect.

## **Reading #1 - Disease**

The most disturbing and upsetting impact of the Columbian Exchange followed the introduction of new diseases into the Americas. When first peoples came to the Americas they arrived between 20,000 and 12,000 years ago by coming across a land bridge that connected present day Russia and Alaska (the Bering land Bridge). When they arrived they brought few diseases with them. Why could this be? One reason is that the earliest Americans did not have domesticated animals (like a present day cow or pig) which are the original sources of some human diseases like smallpox and measles. Additionally, when the first Americans came geographically they passed through an area (between Russia and Alaska) where they spent many years in the extreme cold, which eliminated [got rid of] many of the disease causing agents [germs] that may have traveled with them. As a result, the first Americans and their children, possibly totaling around 40-60 Million people by 1492, were free from most infectious diseases that plagued the people of Europe and Africa for millions of years. Meanwhile, in Asia and Africa the domestication of herd animals brought new diseases that were spread by cattle, sheep, pigs and some fowl (birds).

Soon after 1492, sailors accidentally brought diseases to the Americas which included smallpox, measles, mumps, whooping cough, influenza (the flu), chicken pox and typhus. The people who lived in Europe and Africa had developed some immunities [resistances] to these diseases because they had existed for a long time with their populations. In contrast, the natives of the Americas did not have these immunities [resistances]. Adults and children were subjected to wave after wave of epidemic [wide-spread disease] which would produce a catastrophic amount of death throughout the Americas. In the larger population centers of Mexico and Peru, many millions of people died. On some Caribbean islands, the Native American populations had completely died out. In all, between 1492 and 1650 about 90% of the first American's had died.

This loss is considered one of the largest human population disasters in history. By losing much of the population of the Americas, the Columbian Exchange rocked the region environmentally and economically. The balance of both was off. Ecosystems were upset as forests re-grew and previously hunted animal populations increased. Economically, the population decrease brought by the Columbian Exchange indirectly caused a shortage of labor (they were all dying!) in the Americas. Unfortunately, this created the need to import [bring in] slaves from Africa on a large scale. By 1650, the African slave trade brought even more and new diseases to the Americas such as malaria and yellow fever. This further plagued the peoples of the Americas killing many million more.

## **Reading #2 - Crops and Animals**

Europeans sent much more than disease westward. The beginning of new crops and domesticated animals to the Americas did almost as much to upset the region's balance biologically, economically, and socially as disease. Columbus wanted to establish a surplus [extra] of crops in the vast lands of the Americas. To do so Columbus would bring many crops on his later voyages with the hope that they would flourish. Columbus and his followers brought familiar crops to Europeans including wheat, barley and rye. They also brought Mediterranean plantation [large farms] crops such as sugar, bananas and citrus fruits which all originated in South and Southeast Asia.

At first, many of these crops did not grow very well but over time they would become very successful. After 1640, sugar became the center of the Caribbean and Brazilian economy as the biggest export item and leading to the largest need for slave plantations ever known. The production of rice, cotton and tobacco imported in the Columbian Exchange by the Europeans are reasons for the slave society that develops in the United States. Wheat which also grew in large amounts became the fundamental [basic] food crop for tens of millions of people in the Americas. Today, wheat exports from Canada, the US and Argentina are feeding millions inside and outside of the Americas.

The animals Native Americans would borrow from the Europeans were horses, cattle, sheep, goats, pigs and a few more. Before Columbus arrived, Native Americans only domesticated two animals, llamas and alpacas weighing over 100lbs. The other domesticated animals already in the Americas weighed less than 100lbs. and included dogs, turkeys and guinea pigs. Of the animals brought over by the Europeans the horse had the largest impact in the Americas. The Natives first encountered these fearsome beasts of war when the Spanish conquistadors arrived. Soon, the Natives would learn to ride and raise horses themselves. On the North American Great Plains, the arrival of the horse revolutionized Native American life, allowing the tribes to hunt buffalo far more effectively.

Cattle, sheep, pigs, chicken and goats also became popular in the Americas. Within 100 years after Columbus's arrival, huge herds of these animals roamed many of the lands in the Americas. These animals all menaced the food crops of the Native Americans, most notably in Mexico. In short time, ranching [farming animals] economies would develop based on various groups of cattle, goats and sheep. Native Americans used the livestock for meat, tallow, hides, transportation and hauling, affecting many aspects of their lives.

## **Reading #3 – Food and Culture**

The Americas large contribution to Afro-Eurasia (Africa, Europe and Asia) plants and food transformed life in various places, spanning great distances including Ireland, South Africa and China. Before Columbus arrived the Americas had a lot of domesticated plants and when he arrived dozens of the plants were regularly grown, consumed or used. The most important include maize [corn], potatoes, cassava, various beans and squashes. Other crops included sweet potatoes, papaya, pineapple, tomato, avocado, guava, peanuts, chili peppers, and cacao [the raw form of cocoa]. Within 20 years of

Columbus's last voyage maize had established itself in Europe, Asia and Africa as it was used to feed both animals and people. [It was used to make bread or cereal.]

The success of potatoes is also well known around the world as it had a strong impact in improving the food supply which helped increased populations in Eurasia [Europe & Asia]. In Africa, conditions did not suit the growth of potatoes and they were less successful, in contrast in Northern Europe the potato thrived. Ireland is where it had the most significant success, where it promoted a rapid population increase. After 1750, Scandinavia, Germany, Poland, Russia and some of the Southern European countries gradually accepted the potato, which helped drive a general European population explosion. This population explosion may have laid the future ground work for such events as the Industrial Revolution. The potato also could feed mountain populations around the world, most notably China, where this crop encouraged the settlement of mountainous regions.

Maize [corn] and potatoes had the greatest impact, but other crops from the Americas also had success. In West Africa, peanuts provided a nutritious surplus of food. Cacao [the raw form of cocoa] and rubber, two other South American crops became important export crops in West Africa that still connect to their economies today. In the 1560's the sweet potato became China's third most important crop after rice and wheat.

The introduction of livestock to the Americas has had a profound impact on the amount of beef, chicken and pork products consumed by people around the world. Due to the "discovery" of millions of new acres of fertile land not only for farming, but for animal grazing, livestock raising would increase dramatically. Meat is now common-place in most people's daily diet. Today, much of the world's beef is raised on the plains from Canada in the north to Texas in the southern US. In South America, millions of acres of rainforests have been, and are being, cleared for massive cattle ranches. This is leading to an ecological disaster by destroying rainforests and the production of excessive pollution in the form of methane gas coming from the waste of millions of cattle.

The interaction of various different groups of people led to the blending of different ways of life, which resulted in the creation of new cultures. Europeans brought to the Americas new languages which are widely spoken today (English in Canada and the US, Spanish in Central and South America). The introduction of the religion of Christianity replaced the older religions of the Native Americans who worshipped many gods. European clothing and technology, such as metal tools and weapons would improve the lives of the native people, while at the same time, make them increasingly dependent on the Europeans for these goods. The Native Americans introduced new hunting and farming techniques to the Europeans. Slaves from Africa also brought with them their farming techniques, as well as different types of music and dance. Europeans traded many of their goods for animal pelts, such as the beaver, with the various Native American tribes in North America in particular. The enslavement of the natives by the Spanish, and later, the importation of slaves from Africa created a culture of racism and a servant/master relationship between European groups and their Native American and African slaves.

**Directions:**

1) Read the following passages about the Columbian Exchange. You will then answer two key questions for each reading:

- What was being exchanged? Must list specifics.
- What type of impact did the exchange have on the people and the environment?  
List **BOTH** positive and negative impacts.

Reading	What was exchanged?	Positive impact?	Negative impact?
1) Disease			
2) Crops/Animals			
3) Food/Culture			





