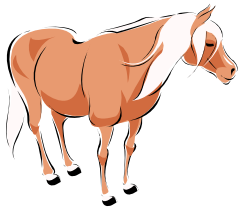


THE COLUMBIAN EXCHANGE

Can you imagine life today without orange juice, without milk, without bread, and without hamburgers? If you lived in Florida in 1491, you would not have had any of these foods, or many others. Florida and the United States are part of the New World, also known as The Americas (North, Central and South America and the Caribbean). In 1491, no one living in the New World had ever seen oranges, cows, or wheat. These were all products of the Old World (Europe, Africa and Asia). If you had lived in the Old World in 1491, you would not have known tomatoes, corn, or chocolate since these products only existed in the New World. Today you can find any of these products in either the Old World or the New World because of a phenomenon known as the Columbian Exchange. This phenomenon takes its name from Christopher Columbus, who sailed from the Old World to the New World in 1492 and back to the Old World the next year. This was how people of the Old World and the New World not only met one another, but also began to make each other's plants, animals, and germs part of their daily lives. Life changed dramatically and forever after 1492 for both the New World and the Old World. Some of these changes were good, and some were bad. All of them affect the way we live today anywhere in the world, Old or New.



The first Old World settlers in The Americas brought horses with them. The New World did not have horses before Christopher Columbus arrived. Just think, if horses had not arrived in The Americas, we would not have had the plains Indians in the North American Southwest, and that in turn, would have prevented us from having popular western movies. Upon returning home, the early explorers and settlers took tomatoes with them that were new to the Old World. Tomatoes were native to The Americas. If tomatoes had not been transferred to the Old World, we may never have had the popular Italian dishes of pizza and lasagna, which are both made with tomato sauce.

Perhaps the most dramatic example of The Columbian Exchange at work is the transfer of disease from the Old World to the New World. Between the late fifteenth and the late seventeenth centuries, about thirty to ninety percent of Native Americans died from diseases such as: chicken pox, malaria, measles, pneumonia, scarlet fever, smallpox, and typhus. Before the Spanish explorers came to the New World, Native Americans had none of these diseases. People in the Old World, however, had suffered and died from these diseases for many centuries. As time went on, these diseases remained deadly in the Old World, but some people in the Old World built up a natural immunity to some or all of these diseases, having suffered and survived them in the past. Native

Americans did not have this biological resistance, making these diseases far more deadly in the New World. They had never been exposed to these diseases and the onset of them in the New World was devastating. Many Native Americans died from the exposure of these diseases. This natural immunity is seen today. A present-day example of this is chicken pox. People may get sick with chicken pox early in their lives, but they will rarely die from it. After being inflicted, most will develop a biological resistance to the disease.

Two major consequences resulted from the transfer of Old World diseases to the New World. First, the Columbian Exchange made the Spanish Conquest of the New World much easier. The Spaniards were able to take over large empires, such as the Aztec of Mexico and the Inca of Peru. The odds seemed against the Spaniards because both empires far outnumbered them. However, disease killed off and weakened Native Americans, making military and political resistance much more difficult. In addition, conquests led to the mixing of the people of the Old and New Worlds. After the conquest, many Native American women had children with the early Spanish explorers from the Old World. Children of Spanish and Native American parents were known as “mestizos,” which is a Spanish word meaning “mixed.”

Later, Spaniards imported African men and women to the New World as slaves. As a result, the New World saw offspring with Spanish and African backgrounds. These children were called “mulattoes.” Native Americans and Africans mixed in the New World and produced children. These children were called “zambos.” Mestizos, mulattoes, and zambos grew quickly in number after 1492. Today, African, Spanish and Native American influences are present in many Latin American cultures in the New World.

The history and culture of both the Old World and The New World have been influenced greatly by plants and animals. Unlike disease, their introduction has been deliberate. Bread and wine were part of the Spaniards’ daily diet. Moreover, the Spaniards were Catholic and were required to take bread and wine as part of their Holy Communion. The New World did not have wheat to make bread, or grapes to make wine. The early Spanish explorers and settlers brought the seeds from Spain. Today, wheat is a staple of the American diet and excellent wines are produced in Argentina, California, and Chile.



Sugar was introduced to the New World in the same way. Spaniards were also accustomed to riding horses, eating beef, goat and pork, and wearing clothes made from wool. These habits led to the importation of cows, goats, horses, pigs, and sheep. Traditionally, these animals were

domesticated, but oftentimes they reproduced in the wild. An example of this is on the Argentine Pampas, where cattle reproduced quickly and continue to do so. To this day, cattle ranching is an important industry in Argentina. This was also the case in the North American Southwest, where wild horses reproduced rapidly. Eventually, the Apache domesticated them. The Apache became formidable warriors, due to the mobility the horses gave them. This proved to be very important to the Apache, as early American settlers in the United States moved westward in the nineteenth century.

Animals were often the first Old World settlers to reach a region. The Spaniards traveled in small numbers during their initial exploration of the Caribbean. Frequently, they left pigs and other animals on individual islands so that there would be a food supply for future explorers and for future settlements. This worked well for the Spaniards, but it also proved invaluable for other Europeans who began to prey on the Spanish trade as privateers, pirates, corsairs, and buccaneers. This meant they no longer had to get supplies from Europe. The word “buccaneer” comes from the French word “boucan,” which refers to the large wooden pits French pirates used to grill the wild cows they found on deserted islands.

The Columbian Exchange has had an equally profound influence on the Old World and indeed on the entire world. As one studies history, one can see how quickly the New World grew as immigration from the Old World took place at a rapid pace. One might wonder why the population in the Old World did not decrease, if so many people were leaving the Old World to join those in the New World. The answer to this mystery is “New World crops.” New World crops such as: beans, corn, manioc, and potatoes, grew remarkably well in the Old World. In fact, the Old World found that many of these crops grew far better than the traditional crops that had been raised for centuries by Old World farmers, because the soil proved to be better suited for the new seeds from the New World. The Old World welcomed these new crops.

The Columbian Exchange greatly increased the food supply in the Old World. An increased food supply, in turn, increased the human reproductive rate. More food meant more people survived to the reproductive age, thereby increasing the population in the Old World. The population increased swiftly enough so that immigration to the New World did not reduce the population in the Old World. Both Africa and Ireland are good examples of how The Columbian Exchange moved the world. Because of the potato, the population in Ireland grew overwhelmingly. Also, from 1650-1850, the



world's population doubled. In less than half that time, from 1754-1845, the population of Ireland boomed from 3.2 million to 8.2 million. If one considers the two million Irishmen who immigrated to the United States during this time, the population explosion is even more impressive. However, in 1846, life in Ireland took a dramatic turn. The "potato blight" hit Ireland, devastated the potato crops, and left millions of people starving.

Africa has a similar story. The trans-Atlantic slave trade drained Africa of millions of its people. Astonishingly, the African population reproduced quickly enough that it almost kept pace with the slave trade. From 1650-1850, Africa's population decreased from approximately 100 million to 95 million. This decrease seems very small, when one considers that between 20-50 million Africans had been forced into slavery during these same years. As the slave trade ended in the 19th century, Africa's population exploded. By 1950, one hundred years later, Africa's population grew to 198 million. Without New World crops, Africa's population would have been almost completely devastated by the slave trade. Without New World crops, Africa's population would never have grown so quickly after the slave trade ended. Today, it is estimated that 490 of 640 crops (77%) grown in Africa are of American and Asian origin.

The examples presented clearly show how The Columbian Exchange transformed the demography of the world. It indeed made possible many historical events and trends. Little did Christopher Columbus know what an influence he would have on the world for centuries to come. Columbus not only showed humankind that the world was larger than imagined, but he also showed that it was smaller at the same time. The Columbian Exchange has permanently transformed the world, making it a more homogenous place. This phenomenon influences even small details of our daily lives. No other event has had such a widespread and lasting effect on the life of humankind and on the life of this planet.

DID YOU KNOW?

- The Old World consists of countries in Europe, Asia, and Africa.
- The New World consists of countries in North, Central and South America. All of these lands became known as The Americas in 1507, when a German mapmaker, Amerigo Vespucci, gave this name to the lands in the western Hemisphere that were new to the Europeans.
- The first inhabitants of the New World did not call these lands The Americas, nor did they call themselves Americans. These people were the indigenous people of these lands with their own names. Some established important civilizations well before Columbus' arrival.
- These societies had different names to distinguish themselves from one another. The largest civilizations were the Olmecs, Toltecs, and Aztecs of Mexico, the Maya of Central America and Mexico, and the Incas of Peru. Although these civilizations have all disappeared, descendants of all these civilizations still live in these lands today, and some now live in the United States.
- Christopher Columbus was the first European to see the New World and report extensively on it to the Old World. This was the year of 1492.
- After the Europeans began settling The Americas, the original inhabitants became known as Indians, Native Americans, and indigenous people. The descendants of these people today often prefer to be called by the name of their culture, for example Maya, Navajo, etc. The Spaniards, being the first Old World explorers and settlers in the New World, brought plants, animals, and germs with them when they came to The Americas. These plants, animals, and germs were new to The Americas.
- When the Spaniards returned to the Old World, they took plants, animals and germs with them from the New World. These new plants, animals and germs were then introduced to the Old World.
- The transfer of animals, plants, and germs (microbes) is referred to as The Columbian Exchange (because of Christopher Columbus).

COLOMBIAN EXCHANGE DISEASE

- Between the late fifteenth and the late seventeenth centuries, approximately 30 to 90 percent of the indigenous population of the New World perished from Old World diseases.
- People in the Old World died from the same diseases they transported to the New World, but not as often, because they had been regularly exposed to these diseases and over time developed a biological resistance to them.
- The indigenous people of the New World were extremely susceptible to Old World diseases because they had lived apart from the rest of the world for thousands of years. Consequently, they had not developed natural defenses to these diseases. The population of the New World had grown very large by 1492; therefore, the number that died from the Old World diseases was also very large.



COLOMBIAN EXCHANGE

SLAVE LABOR

- The Spaniards had a large demand for forced labor. Overwork also contributed to the many deaths of Native Americans.
- The Spaniards began importing slaves from Africa to replace the loss of indigenous forced labor. This is why Latin American culture has such a strong African component, as well as European, indigenous and mestizo (mixed) components. Today, one sees the Latin American culture as a truly mixed one, with the causes dating back to Christopher Columbus' time.
- The Columbian Exchange made an overwhelming difference in the crops produced by both the Old World and New World. For example, sugar became a major crop in the New World. The sugar crop created a huge demand for slave labor. As a result, the African population continued to grow in the New World.



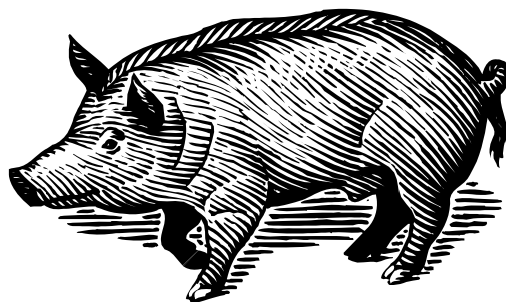
COLOMBIAN EXCHANGE PLANTS

- Plants and animals have had a tremendous influence on history and culture on both sides of the Atlantic. Their introduction, unlike disease, was deliberate. People on both sides of the Atlantic changed what they ate to a great extent.
- The Spaniards were Catholic and required wheat and grapes to make the two elements of Communion, as well as the bread and wine that were part of their daily diet. These did not exist in the New World; therefore, they imported them.
- Sugar was introduced to The Americas in much the same way. Sugar, in fact, was a major reason that the demand for slaves increased. Harvesting sugar cane was backbreaking work that required large amounts of low-wage labor in order to produce large quantities of sugar for the Old World.



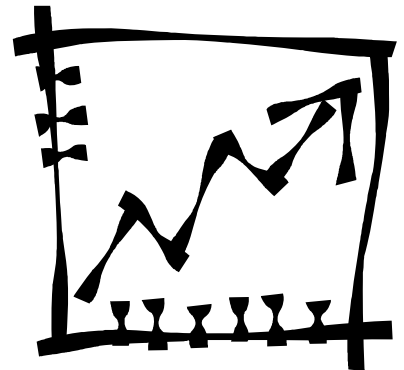
COLOMBIAN EXCHANGE ANIMALS

- The Spaniards brought horses to the New World. Edible vegetation was abundant for horses, and they had no natural predators such as lions, tigers, and wolves. These two factors allowed horses to reproduce at a fantastic rate, much more quickly than in the Old World.
- The pig is another animal that the early Old World settlers brought to the New World. Since pigs reproduced quickly and were very mobile, they were an important source of food.
- The West Indies imported the Indian Mongoose to assist them in eliminating the rat population. In the process of destroying the rat population, the mongoose also destroyed most of the small, ground-living native fauna.



COLOMBIAN EXCHANGE DEMOGRAPHICS

- The Columbian Exchange transformed the world's demographics. The world's population today is larger and more resistant to disease because of The Columbian Exchange.
- Ireland is one example of how dramatically. The potato was a new crop for Ireland in the eighteenth century and grew well there. In 1846, the potato blight struck and greatly reduced the available food, forcing many more Irishmen to emigrate. Poor and starving Irishmen provided cheap labor for major construction projects and contributed to the growth of cities like Boston, Chicago, and New York.
- Africa is another example of how The Columbian Exchange affected demographics and history. More Africans were born and lived to adulthood after New World crops were brought to Africa. On the other hand, although the population decreased in Africa, it did not disappear, as it might have if the New World crops had not become part of African life. It became even clearer just how much the rate of population growth had increased after the trans-Atlantic slave trade began to die out. From 1850-1950, Africa's population increased by more than 100 million people.
- Cultures were transplanted across oceans. Cultures changed and new cultures developed.



SUMMARY

- Consumption - the Spaniards and other early European settlers imported millions of African slaves to the New World. The sugar demand started quickly after Columbus arrived in the New World. Today, sugar is a major industry in Florida. We can credit this to The Columbian Exchange.
- Just as the Old World crops changed the New World, New World crops changed the Old World. The potato is a crop that was native to The Americas. The early settlers introduced the potato to the Old World. Ireland's population, for example, grew rapidly, due to the introduction of the potato. In one hundred years, Ireland's population boomed from 3.2 million to 8.2 million. Crops new to the Old World, in general, resulted in increasing the food supply, thereby increasing the human reproductive rate.

NEW WORLD CROPS = EXPANDED FOOD SUPPLY IN OLD WORLD
EXPANDED FOOD SUPPLY IN OLD WORLD = OLD WORLD
POPULATION
EXPLOSION

- Kudzu is a modern day example of vegetation that has been imported from one place to another. Kudzu originated in Asia. It has been transported across continents and is now everywhere. One could call it truly global. This plant is not a popular one because it smothers other foliage and is quite prolific. It is proving to be very destructive.
- Today, customs officials at U.S. airports, cruise ship lines, and shipping lines will not allow travelers to bring in fresh fruits, seeds or vegetables. This is to avoid the type of dramatic and sometimes catastrophic change that has occurred in the past.